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Automotive network for innovation

# STUDY OF EU POLICIES AND BUSINESS STRATEGIES ON THE DEVELOPMENT OF THE AUTOMOTIVE INDUSTRY IN SOUTH EAST EUROPE

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SOUTH EAST EUROPE TRANSNATIONAL COOPERATION PROGRAMME

# AUTOCLUSTERS

**„The international cooperative network of educational and research institution with subcontractors and other bodies active in Automotive Industry" - SEE/A/594/1.2/X**

# STUDY OF EU POLICIES AND BUSINESS STRATEGIES ON THE DEVELOPMENT OF THE AUTOMOTIVE INDUSTRY IN SOUTH EAST EUROPE

## WP.3.1

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

**Szombathely, September 2009.**





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# I. INTRODUCTION

In this study we would like to summarize and present past and current Community and other initiatives in the EU in the area of autocluster development. Our aim is to analyze mainly programmes and its results which could help us to put the Autoclusters activities in wider context and eventually identify sources of information. The key point is to determine and define other activities in clustering, networking or policies related to Automotive industry running currently or have been realized in Europe, as many Partners in our Partnership do not have the full knowledge on activities such EASN, PRO INNO Europe initiatives ( including some of networking projects).

After a short summary about the projects of participants in the chapter 2 will be shown the past initiavies of partners, and in the chapter 3 will shown the current/future initiatives. The next stage (chapter 4) take a short look into the work of European Comission DG Enterprise and Indusrty. Here will be listed Green and White Papers published By the EC and other EU policies and strategies related to the automotive industry. Last chapter (5) describes many different transnational networks in the automotive sectors.

## SUMMARY ON EUROPE AUTOMOTIVE SECTORS: A COMPANY AND INDUSTRY ANALYSIS (MARCH 2008)

### Current Environment - Key Points

- Restructuring efforts were once again the primary focus for European automakers in 2007, as they struggled with high raw materials costs and a flat European market
- Leading European automakers continued to face major challenges, particularly from foreign competition and stringent environmental regulations
- Many actively engaged in recovery plans to boost sales, improve product quality and reduce costs to close the gap with Asian automakers
- The DJ Euro Stoxx Auto index, which tracks 13 of the largest auto companies, rose 1.6% between June and September 2007, following a 33.5% gain in the first half
- During the third quarter of 2007, the turnaround at European automakers appeared to be gathering steam, led by Volkswagen (FSE: VOW) and Fiat (ITL: F)
- European automakers were heavily getting involved in emerging growth markets, targeting new segments that are forecast to grow significantly in the next few years

### Industry Profile - Key Points

- The European automotive industry in 2006 built 21.29 million vehicles and accounted for 30.8% of global production and 7% of employment in the manufacturing sector, making it the second largest automotive sector in the world
- Top European automakers have reported substantial increases in capital spending after committing large sums of money into product development, powertrain technology and new facilities in emerging markets to ensure future growth and stability



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- Although new European Union (EU) member states account for the lion's share of foreign direct investment, global auto giants have continued to invest in Western Europe in new product and capacity, reaffirming their commitments to existing investments
- For automotive companies, R&D is the key to success for new generation of products and to maintaining market share
- The European Commission (EC) reported that in 2006 the ten largest investors accounted for 63.8% of total R&D spending in the automotive sector
- European automakers, some of which are already under pressure from thin margins, now face a further threat to their financial performance - new EU legislation designed to further cut greenhouse gas emissions and meet Kyoto Protocol targets

**Market Trends and Outlook - Key Points**

- In the tight race for market share, leading European players are aggressively scaling up their activities in emerging growth markets, investing billions of dollars in new and existing facilities
- A surging euro and high labor costs are prompting European automakers to consider building new plants in the US
- A big priority for the industry at present is to achieve independence from fossil-based resources
- To this effect, and in a bid to cut emissions, automakers in Europe are developing new engines
- The short-term outlook for the European automotive market in 2008 remains weak, with no signs of a swift revival, due to challenging market conditions including severe competitive pressures and unpredictable fuel and raw materials prices
- Competition between automakers should remain intense in 2008, stimulated by new product introductions and incentives in the form of discounts and rebates.

The Directorate-General for Enterprise and Industry works to ensure that EU policies contribute to the sustainable competitiveness of EU enterprises and facilitate job creation and sustainable economic growth. It has the task of ensuring that the single market for goods runs smoothly and is a major contributor to the implementation of the Lisbon strategy for growth and jobs.
DG Enterprise and Industry pays particular attention to the needs of the manufacturing industry and to those of small and medium-sized enterprises. It manages programmes to encourage entrepreneurship and innovation, and ensures that EU legislation takes proper notice of businesses' concerns.





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# SUMMARY TABLE OF ALL PAST INITIATIVES

| | Name of Partner | No. of Project | Name of Project | Funding Authority | No. of Partners | Total Budget (thousand EUR) |
|---|---|---|---|---|---|---|
| LP | Automotive Cluster – West Slovakia (Slovakia) | *No Data* | | | 0 | 0 |
| PP1 | Comunimprese Scarl (Italy) | 1 | REGINS | INTERREG 3C | 5 | 7 035 |
| | | 2 | Automotive Regions - Network of automotive regions | INTERREG 3C | 17 | 1 546 |
| | | 3 | BELCAR | FP6 | 8 | 0 |
| PP2 | "George Asachi" Technical University of Iasi (Romania) | 4 | HY-CO | FP6-Coordination | 24 | 2 700 |
| | | 5 | VITRUAL POWER-TRAIN SYSTEM | FP6-Mobility | 2 | 476 |
| | | 6 | CREATING | FP6-SUSTDEV | 29 | 4 450 |
| | | 7 | ASSET-ROAD | FP7-TRANSPORT | 19 | 8 110 |
| | | 8 | SUPER-SME | FP6-SME | 7 | 495 |
| | | 9 | EUROPEER SME | FP6-SUPPORT | 14 | 800 |
| | | 10 | ROMANIAN IRC4D | FP6-INNOVATION | 3 | 1 030 |
| PP3 | West-Pannon Regional Development Company (Hugary) | 11 | CAR-COMM-NET | Phare CBC Small Project Fund | 1 | 0 |
| | | 12 | REGINS | Interreg IIIC East Zone | 4 | 7 000 |
| | | 13 | RICARDA | FP6 - Research and Technological Development („Knowledge Regions 2") | 5 | 500 |
| | | 14 | BeLCAR | FP6 - Europe Innova | 6 | 988 |
| | | 15 | GVOP | Local program | 1 | 89 |
| | | 16 | HEFOP | Local program | 2 | 19 |
| PP4 | Technical University of Gabrovo (Bulgaria) | 17 | BG 2003/004-937.02.03 | Local program | 6 | 800 |
| | | 18 | BG2005/017-586.04.02 | Local program | 6 | 600 |
| PP5 | Center for Research And Telecommunication Experimentation for NETworked communities (Italy) | 19 | WATCH-OVER | FP6 - IST | 13 | 5 915 |
| | | 20 | AIDE | FP6 - IST | 9 | 12 400 |
| | | 21 | COOPERS | FP6 - IST | 39 | 16 800 |
| | | 22 | I-WAY | FP6 - IST | 12 | 4 656 |
| | | 23 | FESTA | FP7 - ICT | 21 | 0 |
| PP6 | Slovak Technical University (Slovakia) | | *No Data* | | 0 | 0 |
| PP7 | Business interest association ACS, Automotive Cluster of Slovenia (Slovenia) | 24 | PTC | Local program | 13 | 7 000 |
| | | 25 | AUTO IN | FP7 - AUTO-IN | 5 | 245 |
| | | 26 | SENAI | Austrian Research Promotion Agency | 7 | 0 |
| | | 27 | NEAC | INTERREG 2C | 11 | 1 900 |
| | | 28 | TCAS | FP6 | 8 | 988 |
| PP8 | Croatian Employers' Association (Croatia) | *No Data* | | | 0 | 0 |
| PP9 | Automotive Cluster Serbia (Serbia) | *No Data* | | | 0 | 0 |

Partition of projects by fund:

| | |
|---|---|
| INTERREG 2C | 1 |
| **INTERREG 3C** | **3** |
| **FP6** | **14** |
| **FP7** | **3** |
| Local (national) program | 6 |
| Phare CBC | 1 |





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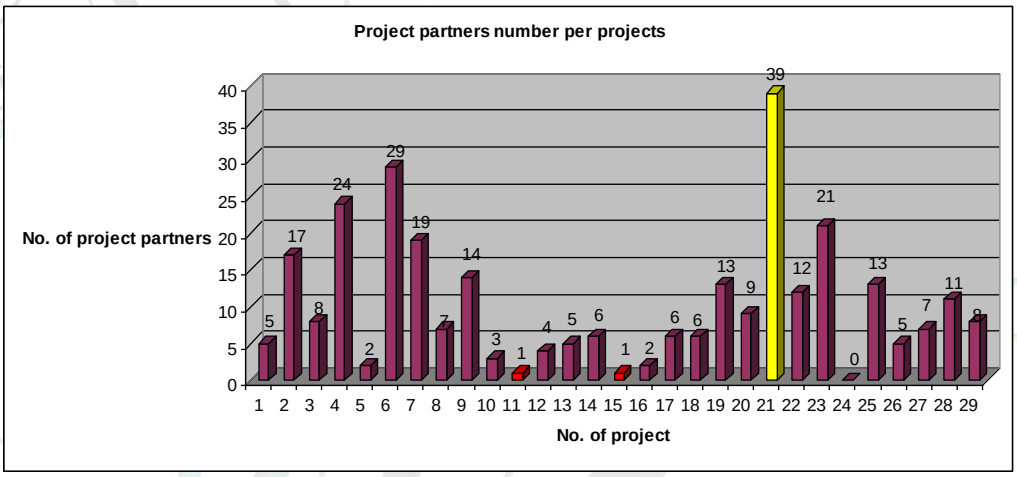


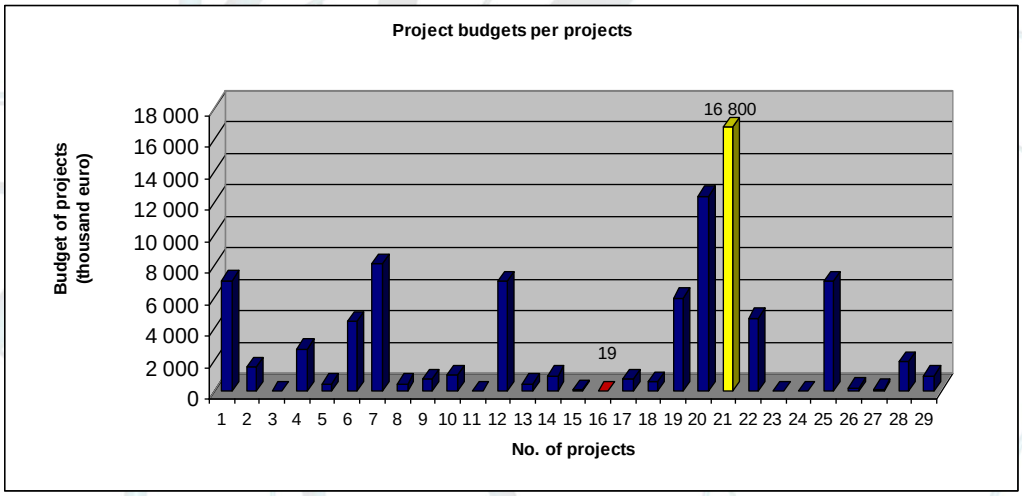


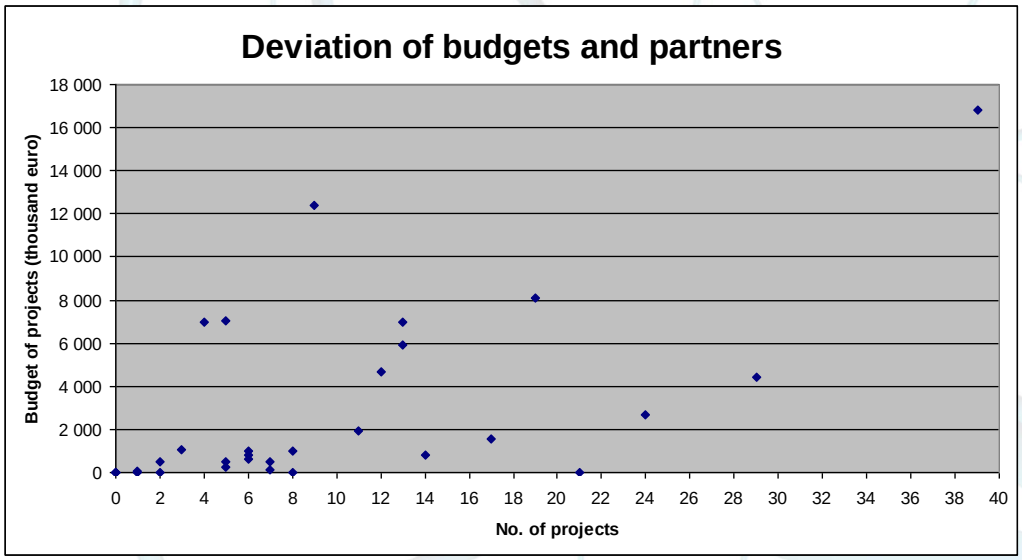


As it can be seen, the tendency is twofold: small-budget projects involving several partners; and medium-size projects with variable budget and partners. The total budget is usually below 10 MEUR. The partner number above 20 is quite rare.



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# SUMMARY TABLE OF ALL CURRENT INITIATIVES

| | Name of Partner | No. of Project | Name of Project | Funding Authority | No. of Partners | Total Budget (thousand EUR) |
|---|---|---|---|---|---|---|
| LP | Automotive Cluster – West Slovakia (Slovakia) | 1 | AC Centrope | INTERREG IV | 3 | 910 |
| | | 2 | Autoplast border cooperation SR - CR. | INTERREG IV | 4 | 309 |
| | | 3 | AUTOCLUSTERS Project | INTERREG IV | 12 | 1 645 |
| | | 4 | AutoNet | INTERREG IV | 10 | 2 407 |
| | | 5 | Framework Project Laboratory & SIEMENS VÚJE | *No Data* | 6 | 0 |
| PP1 | Comunimprese Scarl (Italy) | *No Data* | | | 0 | 0 |
| PP2 | "George Asachi" Technical University of Iasi (Romania) | 6 | ARCHIMEDES | FP7 | 16 | 26 000 |
| | | 7 | ASSET-ROAD | FP7 | 19 | 8 110 |
| | | 8 | ICPE-HYFC | FP7 | 1 | 819 |
| | | 9 | EE-VERT | FP7 | 9 | 6 470 |
| | | 10 | WESTEER | FP7 | 4 | 190 |
| PP3 | West-Pannon Regional Development Company (Hungary) | 11 | CoSpaces | FP6 - IST CWE | 21 | 11 840 |
| PP4 | Technical University of Gabrovo (Bulgaria) | *No Data* | | | 0 | 0 |
| PP5 | Center for Research And Telecommunication Experimentation for NETworked communities (Italy) | 12 | SAFESPOT | FP6 - IST | 51 | 38 000 |
| | | 13 | MOTUS | Italian Industry Ministry, Industry 2015 Sustainable Mobility | 24 | 19 000 |
| | | 14 | SMART-VEI | FP7 | 13 | 5 450 |
| | | 15 | ARTIC | FP7 | 10 | 466 |
| | | 16 | EUROFOT | FP7 | 27 | 21 570 |
| | | 17 | teleFOT | FP7 | 24 | 14 440 |
| | | 18 | PRE-DRIVE C2X | FP7 | 23 | 8 520 |
| PP6 | Slovak Technical University (Slovakia) | 19 | AC Centrope | INTERREG IV | 3 | 910 |
| | | 20 | Professional MBA Automotive Industry | INTERREG IV | 3 | 1 256 |
| PP7 | Business interest association ACS, Automotive Cluster of Slovenia (Slovenia) | 21 | MAGFORGE | FP6 | 18 | 1 400 |
| | | 22 | Facilitating International Market Access for Manufacturing Suppliers in the Automotive Component Industry in the Samara Region of Russia | United Nations Industrial Development Organization | 5 | 800 |
| | | 23 | Facilitating international market access for manufacturing in the automotive component industry in Serbia | United Nations Industrial Development Organization | 5 | 400 |
| | | 24 | COIN | FP7 | 24 | 14 400 |
| | | 25 | STAR NET | FP7 | 15 | 1 100 |
| | | 26 | SID Loan for SME's in Automotive Sector | EIB | 0 | 0 |
| PP8 | Croatian Employers' Association (Croatia) | 27 | "FIREROB, the Autonomous Fire-fighting Robotic Vehicle" | FP7 | 4 | 800 |
| | | 28 | Automotive Clusters - Network of South-East Europe | Open Regional Funds for Foreign Trade Promotion | 5 | 1 645 |
| | | 29 | CEE ClusterNetwork | FP6 - Research and Innovation | 12 | 1 934 |
| PP9 | Automotive Cluster Serbia (Serbia) | 30 | UNIDO project | Government Republic of Slovenia | 5 | 300 |
| | | 31 | Automotive Clusters - Network of South-East Europe | GTZ WBF Project – German Organization for Technical Cooperation | 4 | 300 |
| | | 32 | USAID Competitiveness Project – GTZ WBF Project | GTZ WBF Project – German Organization for Technical Cooperation | 3 | 300 |

Partition of projects by fund:

| | |
|---|---|
| **INTERREG IV** | **6** |
| **FP7** | **13** |
| FP6 | 4 |
| EIB | 1 |
| Local (national) program | 7 |



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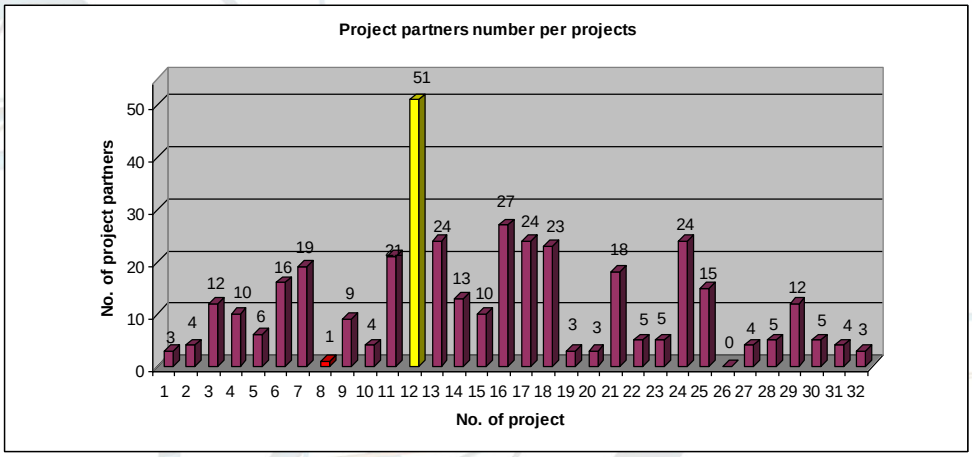


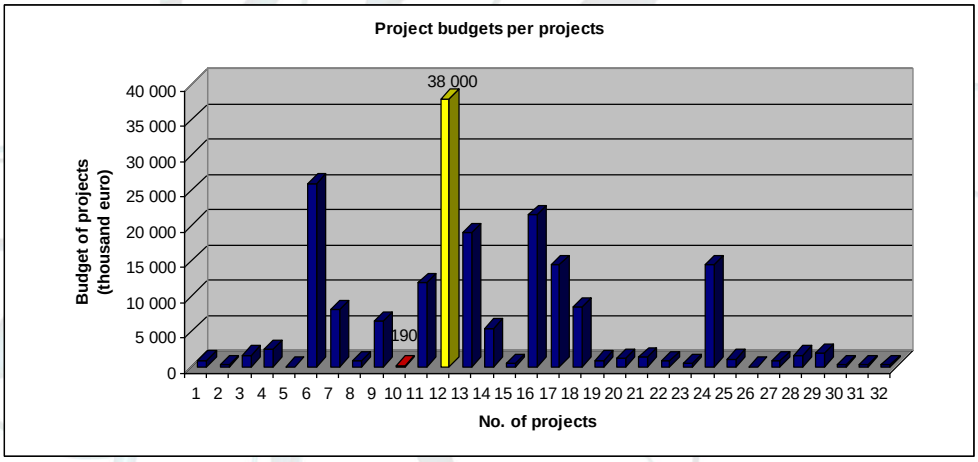


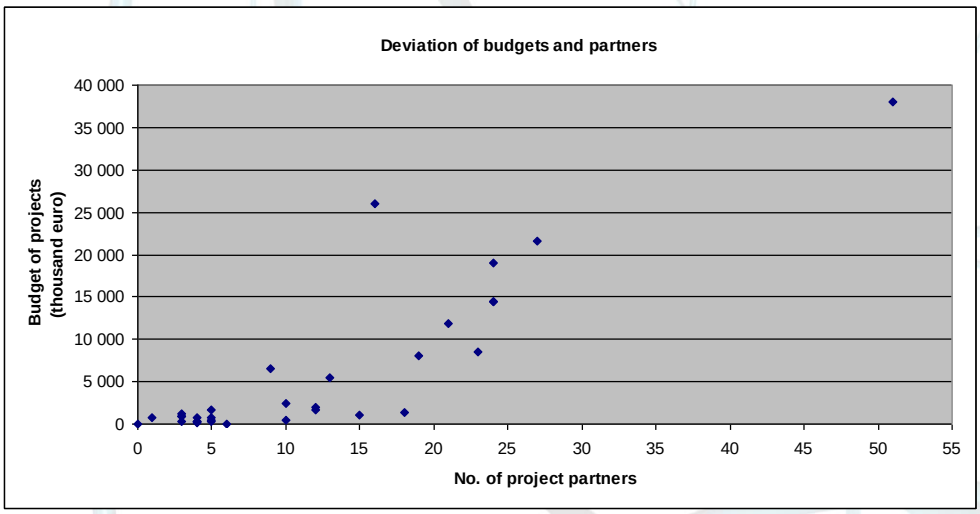


As it can be seen, the tendency is more having small-budget projects involving several partners. The total budget in average is around 5M-15M EUR; the ~40 MEUR project is an exception.



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**As it can be seen in the above tables, Framework Programme and Interreg Program are often used to involve financing in the project realization. Therefore we have made a brief summary of these 2 programmes, including introduction in the actual and the previous EU programming (budget) period.**

## SIXTH FRAMEWORK PROGRAMME

**The Sixth Framework Programme** (abbreviated **FP6**) was the Framework Programme for Research and Technological Development from 2002 till 2006 set up by the European Union (EU) in order to fund and promote European research and technological development and demonstration. It was a collection of the actions at EU level level to fund and promote research. The main objective of FP6 was to contribute to the creation of the European Research Area by improving integration and co-ordination of research in Europe, which is so far largely fragmented.

**FP6 projects**
The research projects funded and supported in this framework had to be transnational, in other words managed by consortia of partners from different countries, and interdisciplinary: gathering research centers, innovative companies, in particular small or medium-sized enterprises (SMEs), and public administrations. Moreover, the funded projects had to be focused on one of the seven thematic priorities defined by the Programme.

**Thematic priorities:**

- Life sciences, Genomics and Biotechnology for Health
- Information Society Technologies
- Nano-technologies and nano-sciences, knowledge-based multifunctional materials, new production processes
- Aeronautics and Space
- Food Quality and Safety
- Sustainable Development, Global Change and Ecosystems
- Citizens and Governance in a knowledge-based society

**Types of projects**
FP6 was funding different types of projects. The majority of projects were Specific Targeted Research Projects. Integrated projects were focusing on coordination and support in critical aspects of research. Networks of Excellence aimed to strengthen research technological and scientific on a specific topic. Projects dealing with the same domain could coordinate their efforts through specific initiatives, such as the European Semantic Systems Initiative.

**Funding**
Projects funded were selected through Calls for Proposals, each call corresponding to a specific domain of priority. The budget of FP6 was 17.5 billion euros for the years 2002 - 2006.


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# SEVENTH FRAMEWORK PROGRAMME

The **Seventh Framework Programme for research and technological development (FP7)** is the European Union's chief instrument for funding research over the period 2007 to 2013. It brings together all research-related EU initiatives under a common roof playing a crucial role in reaching the goals of growth, competitiveness and employment. **CORDIS** is the official portal for participating in FP7 and following related developments in European science and technology. As was the case for FP6, its main objective is to further the construction of the **European Research Area (ERA)**.

Its specific goals are fourfold:

- To gain leadership in key scientific and technology areas
- To stimulate the creativity and excellence of European research
- To develop and strengthen the human potential of European research
- To enhance research and innovation capacity throughout Europe

The total budget for FP7, including the non-nuclear research of the Joint Research Centre, is 51 Billion euros over 7 years. The overall budget is fixed, and the split of it along thematic priorities and the content of those priorities was decided in November 2006.

**Vocabulary**

Trying to understand how the Framework Programme works requires a bit of vocabulary understanding. Here are some useful definitions (the indent reflects the increasing level of granularity):

- **Framework Programme:** this is the umbrella of the Programme. The acronym is "FP", usually followed by the edition: "FP7" in this case.
- **Specific Programme:** This is the first layer of breakdown of FP7. There are 7 Specific Programmes under FP7: Cooperation, Ideas, People and Capacities, Euratom and two Specific Programmes for the Joint Research Centre (see below). Specific Programmes are sometimes referred as Activities.
- **Non-nuclear vs. nuclear research:** The nuclear activities under FP7 are somewhat different from the non-nuclear. Like all EU nuclear issues, FP7 nuclear research is guided by the EURATOM-treaty (instead of the Treaty on European Union). FP7 nuclear research receives € 2.7 billion spread over 4 years (2007-2011).
- **Theme:** This is the second layer of breakdown for the Cooperation Specific Programme of FP7. There are 10 Thematic Priorities in the Cooperation Specific Programme of FP7 (see below)
- **Challenges:** This is the third layer of breakdown for the ICT Theme.
- **Work Programme:** For every Thematic Area, the European Commission publishes an annual work programme. This document provides in detail the research topics that will be
-



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subject to the call for proposals, as well as providing an indicative budget and a timetable for calls for proposals.

- **Call for Proposals:** The publication of a call for proposals on the CORDIS website is the official trigger for the preparation of applications, by the research community, to the research topics included in the work programme. Calls cutting across more than one Theme, with a single budget, are termed 'joint calls', calls cutting across more than one Theme with separate budgets for each Theme, are termed 'coordinated calls'. Calls may also be coordinated with calls from other research organisations in countries outside the EU.
- **'Topics':** this is the term used to describe a research question which needs to be addressed by the submission of proposals from consortia.

**Timeline**

FP7 was only launched at the end of 2006 with the first Calls for Proposals published 22 December 2006. Annual work programmes are now issued in each summer, including calls which will be funded from the following years' budget, for example, the 2010 work programmes were adopted by the Commission on 29-30 July 2009 and the first calls for proposals from these work programmes were published on 30 June 2009. A detailed and updated list of FP7 past and upcoming milestone is linked below.

**FP7 Specific Programmes**

Four Specific Programmes were created to address the corresponding objectives. In addition, 3.5% of the budget are dedicated to the non-nuclear activities of the Joint Research Centre.

**Cooperation (64% of the non-nuclear budget)**

Any transnational research activities can be funded within this programme. The following ten thematic priorities have been defined (part of Cooperation budget):

1. Health- 19%
2. Food, Agriculture and Fisheries, Biotechnology - 6%
3. Information and Communication Technologies - 28%
4. Joint Technology Initiative, Nanosciences, Nanotechnologies, Materials and new production technologies - 11%
    1. Fuel Cells and Hydrogen Joint Technology Initiative (FCH JTI)
    2. Aeronautics and Air Transport (Clean Sky)
    3. Innovative Medicines Initiative (IMI)
    4. Nanoelectronics Technology 2020 (ENIAC)
    5. Embedded Computing Systems (ARTEMIS)
5. Energy - 7%
   The IEA noted that FP7 was drafted before energy emerged as a critical issue on the EU's agenda. This, and also that Nuclear Fusion consumes more than half of the Communities' energy research funding, although it won't address any energy issues before 2050, triggered the IEA to advise the EC to consider a recasting of FP7 before it expires to ensure a sufficient volume of energy R&D.



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6. Environment (including climate change) - 6%
7. Transport (including Aeronautics) - 13%
8. Socio-economic sciences and Humanities - 2%
9. Security
10. Space

This programme also includes cooperation between the EU and third countries.

**Ideas (15% of the non-nuclear budget)**

Ideas will, similarly to Cooperation, finance directly scientific research. However, it will differ on the following aspects:

- It will not be linked to the thematic priorities of FP7 and will include engineering, social sciences and the humanities.
- It will not be managed by the European Commission, but by an autonomous entity: the European Research Council.
- It will focus on research at the "frontier of knowledge", where risks are higher. The expected fields of research are therefore expected to be more fundamental.

**People (9% of the non-nuclear budget)**

This Specific Programme is focussed on supporting the training, the mobility and the career development of European researchers, mainly through the expansion of Marie Curie actions.

**Capacities (9% of the non-nuclear budget)**

The Capacities specific programme is targeted at enhancing research infrastructures and improving its usage, promoting "Regions of Knowledge", supporting regional research-driven clusters, and stimulating the research potential in the EU's "convergence" regions.
Additionally, this part of FP7 will contain some budget dedicated to policy development, e.g. coordination of research policies.

**Funding Schemes**

These were known as Financial Instruments in the Sixth Framework Programme (FP6). Funding schemes describe the nature of funding open to participants in FP7. Not all funding schemes will apply to all programme areas. The applicable funding schemes will be published in the Work Programmes and the Calls for Proposals. Partly as a result of simplification measures to be implemented in FP7, funding schemes have been rationalised, although there is some element of continuity from FP6. The funding schemes are:

**Collaborative Research Projects**

These fund projects on the basis of innovative research outputs described in the form of project deliverables. In FP7 there will be small and large Collaborative Research Projects. The equivalent FP6 Financial Instruments were Integrated Projects (IP) and Specific Targeted Research Projects (STREP).



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**Networks of Excellence**

As with FP6, the main aim of a Network of Excellence is to integrate research at a European level. Thus, participants are paid on the basis of degree of integration achieved and the number of researchers actively participating in the network rather than research outputs.

**Support and Coordination Actions**

Support Actions (SA) fund studies or other measures in support of the relevant Work Programme. Coordination Actions (CA) fund networking research that previously was primarily carried out at national level. SA and CA were separate actions in FP6.

**Marie Curie Actions**

The People Specific Programme refers to the Marie Curie actions ('Mobility' in FP6). These fund research training and mobility of researchers. The main actions are individual fellowships for post-graduate researchers (three categories: Intra-European Fellowships, Incoming International Fellowships and Outgoing International Fellowships) and Marie Curie Networks, where institutions cooperate to provide joint training programmes for researchers. There is also an action to support cooperation between industry and academia, and reintegration grants aimed at previous Marie Curie fellows.

**An FP7 project will:**

- Carry out innovative Research & Development
- Address a specific Call within a Theme's Work Programme
- Have an impact that aligns with the aims of the Work Programme
- Involve at least 3 countries from Member States, Associated States and even third countries.
- Normally contain 4 (very small) to 20 (very large) partners
- Last approximately 2 to 4 years
- Receive 50% funding (SMEs, Academics & Research Institutes will get 75%)

**What are the opportunities for the automotive sector in FP7?**

| Activity | Scope |
|---|---|
| **Greening of Surface Transport** | Developing technologies and knowledge for reduced pollution (air including greenhouse gases, water and soil) and environmental impact on such areas as climate change, health, biodiversity and noise.<br>Research will improve the cleanliness and energy-efficiency of powertrains (e.g. hybrid solutions) and promote the use of alternative fuels, including hydrogen and fuel cells as mid- and long-term options, taking into account cost-efficiency and energy efficiency considerations.<br>Activities will cover infrastructure, vehicles, vessels and component technologies, including overall system optimisation. Research in developments specific to transport will include manufacturing, construction, operations, maintenance, diagnostics, repair, inspection, dismantling, disposal, recycling, end of life strategies and interventions at sea in case of accident. |



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| Activity | Scope |
|---|---|
| **Encouraging and increasing modal shift and decongesting transport corridors** | Developing and demonstrating seamless door-to-door transport for people and goods as well as technologies and systems to ensure effective intermodality, including in the context of rail and waterborne transport competitiveness.<br>This includes activities addressing the interoperability and operational optimisation of local, regional, national and European transport networks, systems and services and their intermodal integration in an integrated approach.<br>The activities will aim at European-wide strategies, optimised use of infrastructure including terminals and specialised networks, improved transport, traffic and information management, enhanced freight logistics, passenger intermodality and modal shift strategies to encourage energy efficient means of transport. Intelligent systems, new vehicle/vessel concepts and technologies including loading and unloading operations as well as user interfaces will be developed. Knowledge for policy-making will include infrastructure pricing and charging, assessments of Community transport policy measures and trans-European networks policy and projects. |
| **Ensuring sustainable urban mobility** | Focusing on the mobility of people and goods by research on the 'next generation vehicle' and its market take-up, bringing together all elements of a clean, energy efficient, safe and intelligent road transport system.<br>Research on new transport and mobility concepts, innovative organisational and mobility management schemes and high quality public transport will aim at ensuring access for all and high levels of intermodal integration. Innovative strategies for clean urban transport will be developed and tested.<br>Particular attention will be paid to non-polluting modes of transport, demand management, rationalisation of private transport, and information and communication strategies, services and infrastructures. Tools and models supporting policy development and implementation will cover transport and land use planning including the relationship with growth and employment. |
| **Improving safety and security** | Developing technologies and intelligent systems to protect vulnerable persons such as drivers, riders, passengers, crew, and pedestrians.<br>Advanced engineering systems and risk analysis methodologies will be developed for the design and operation of vehicles, vessels and infrastructures. Emphasis will be placed on integrative approaches linking human elements, structural integrity, preventive, passive and active safety including monitoring systems, rescue and crisis management. Safety will be considered as an inherent component of the total transport system embracing infrastructures, freight (goods and containers), transport users and operators, vehicles and vessels and measures at policy and legislative levels, including decision support and validation tools; security will be addressed wherever it is an inherent requirement to the transport system. |


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| Activity | Scope |
|---|---|
| **Strengthening competitive-ness** | Improving the competitiveness of transport industries, ensuring sustainable, efficient and affordable transport services and creating new skills and job opportunities by research and developments.<br>Technologies for advanced industrial processes will include design, manufacturing, assembly, construction and maintenance and will aim at decreasing life cycle costs and development lead-times.<br>Emphasis will be placed on innovative and improved product and system concepts and improved transport services ensuring higher customer satisfaction. New production organisation including the supply chain management and distribution systems will be developed. |



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# INTERREG

**Interreg** is a Community initiative which aims to stimulate interregional cooperation in the European Union. It started in 1989, and is financed under the European Regional Development Fund (ERDF). The current programme is Interreg IV, covering the period 2007-2013.

**Aims of the programme**

Interreg is designed to stimulate the cooperation between the member states of the European Union on different levels. One of its main targets is to diminish the influence of national borders in order to attain equal economic, social and cultural development of the whole territory of the European Union.

The Interreg initiative is designed to strengthen economic and social cohesion throughout the European Union, by fostering the balanced development of the continent through cross-border, transnational and interregional cooperation. Special emphasis has been placed on integrating remote regions and those which share external borders with the candidate countries.

**Organization**

Interreg was launched as Interreg I for the programming period 1989-93, and continued as Interreg II for the subsequent period 1994-99. It moved on to Interreg III for the period 2000-2006. Projects from that closed by the end of 2008. Interreg IV is currently operational, covering 2007-2013.

Interreg differs from the majority of Cohesion Policy programmes in one important respect: it involves a collaboration among authorities of two or more Member States. Interreg measures are not only required to demonstrate a positive impact on the development on either side of the border but their design and, possibly, their implementation must be carried out on a common cross-border basis.

Once the Operational Programmes have been approved by the European Commission, the implementation of the programmes is co-ordinated by Steering Committees, which consist of representatives of the authorities responsible for Cohesion Policy measures in each Member State. These can be both central state agencies and regional agencies. Like almost all Cohesion Policy measures, Interreg projects require co-funding to be provided by Member States, regional authorities or the project leaders themselves. The amount of co-funding required differs by region, ranging from 50% down to 0% in the poorest regions.

The final beneficiaries of Interreg funds are usually public authorities, interest associations and non-profit organisations, such as chambers of commerce, employer organisations, unions or research institutes. *Under Interreg IV, private firms are only eligible if they apply through a consortium of several firms; in previous programme periods, they were not eligible at all.*



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**Strands**

Interreg is made up of three strands: Interreg A, Interreg B and Interreg C. They are described in more detail below:

**Strand A: cross-border cooperation**
Cross-border cooperation between adjacent regions aims to develop cross-border social and economic centres through common development strategies. The term cross-border region is often used to refer to the resulting entities, provided there is some degree of local activity involved. The term Euroregion is also used to refer to the various types of entities that are used to administer Interreg funds. In many cases, they have established secretariats that are funded via 'technical assistance', which is the component of Interreg funding aimed at establishing the administrative infrastructure for the local deployment of Interreg.

Interreg A is by far the largest strand in terms of budget and number of programmes.

**Strand B: transnational cooperation**
Transnational cooperation involving national, regional and local authorities aim to promote better integration within the Union through the formation of large groups of European regions. Strand B is the intermediate level, where generally non-contiguous regions from several different countries cooperate because they experience joint or comparable problems.

**Strand C: interregional cooperation**
Interregional cooperation aims to improve the effectiveness of regional development policies and instruments through large-scale information exchange and sharing of experience (networks). This is financially the smallest strand of the three, but the programmes cover all EU Member States.

## INTERREG III

**Strand A: cross-border cooperation**

Priorities for action in strand IIIA were:

- Promotion of urban, rural and coastal development
- Strengthening the spirit of enterprise
- Developing small and medium-sized enterprises, including those in the tourism sector
- Developing local employment initiatives
- Assistance for labour market integration and social inclusion
- Initiatives for encouraging shared use of human resources, and facilities for research and development, education, culture, communication, health and civil protection
- Measures for environmental protection, improving energy efficiency and renewable energy sources
- Improving transport, information and communication networks and services, water and energy systems


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- Increasing cooperation in legal and administrative areas
- Increasing human and institutional potential for cross-border cooperation

**Examples of Interreg IIIA programmes:**

- Alcotra, a French-Italian cross-border programme in the Alps
- Italia-Malta, an Italian-Maltese programme

**Strand B: transnational cooperation**

Proposals for transnational cooperation under IIIB had to take account of:

- Experience from previous Interreg programmes;
- Priorities for Community policies, especially trans-European transport networks;
- Recommendations made in the European Spatial Development Plan (ESDP).

Within this context, the priorities for action were as follows:

- Drawing up regional development strategies at transnational level, including cooperation between towns or urban areas and rural areas
- Promoting effective and sustainable transport systems, together with better access to the information society. The aim here is to facilitate communication between island or peripheral regions.
- Promoting protection of the environment and natural resources, particularly water resources.

In the specific case of ultra-peripheral regions, transnational cooperation encourages the following initiatives:

- Economic integration and improved cooperation between these regions and regions in other Member States
- Improved links with the countries of their wider geographic area (Caribbean, Latin America, Atlantic Ocean, North West Africa and the Indian Ocean)

**Examples of Interreg IIIB projects:**

- HST Connect, an INTERREG IIIB North West Europe Programme project on high speed train connections

**Strand C: interregional cooperation**

INTERREG IIIC promoted interregional co-operation between regional and other public authorities across the entire EU territory and neighbouring countries. It allowed regions without joint borders to work together in common projects and develop networks of co-operation.





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Co-operation under INTERREG IIIC gave access to experience of other actors involved in regional development policy and created synergies between "best practice" projects and the Structural Fund's mainstream programmes. The overall aim was to improve the effectiveness of regional development policies and instruments through large-scale information exchange and sharing of experience (networks) in a structured way.

Priorities for action included research, technology development, enterprise, the information society, tourism, culture and the environment.

**Examples of Interreg IIIC projects:**

- Best4VarioUse, Best Practices and Technologies to Develop Green Wastes and Residues as Raw Materials for Variants of Utilization
- Adriatic Action Plan 2020, on sustainable development
- Connected Cities, on sustainable mobility and spatial development
- TranSUrban, on urban regeneration and public transport
- Urbike, on cycling in cities
- Wireless cities, which aims to increase ICT usage in some cities

## INTERREG IV

*Interreg IV has a budget of almost 7,8 billion euro (2006 prices), up from 4,9 billion euro in Interreg III (1999 prices).*

**Strand A: cross-border cooperation**

The A strand of INTERREG IV covers 52 programmes, which use up to 74% of all resources (some 5,6 billion euros).

**Strand B: transnational cooperation**

The 13 transnational cooperation programmes cover larger areas such as the Baltic Sea, Alpine and Mediterranean regions with an ERDF contribution of 1.8 billion euros.

**Examples of Interreg IVB projects:**

- COLLABOR8, a transnational programme involving nine partners in five different North West European countries that aims to contribute to the economic prosperity, sustainability and cultural identity of North West Europe in increasingly global markets.
- SmartCities, creating an innovation network between 8 municipal governments and 4+ academic partners in six countries, leading to excellence in the domain of the development and take-up of e-services. Funded by the North Sea Region Programme.
- SoNorA, on improving transport infrastructure and services across Central Europe





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**Strand C: interregional cooperation**

Strand C covers the interregional co-operation programme INTERREG IVC and 3 networking programmes (URBACT II, INTERACT II and ESPON). Each programme covers all 27 Member States of the EU. They provide a framework for exchanging experience between regional and local bodies in different countries. Strand C has an ERDF contribution of 445 million euros.

**Examples of Interreg IVC projects:**

- Regioclima, on adaptation to the new climate conditions





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# II. PAST INITIATIVES

## 1. REGINS - TRANSFERS KNOWHOW ON CLUSTERMANAGEMENT AND INITIATES JOINT RESEARCH AND DEVELOPMENT

**Concerned partner(s)**:

- PP1 – Comunimprese Scarl (IT)
- PP3 - West-Pannon Regional Development Company (HU)

REGINS
North EAST South West INTERREG IIIC

**Project full name and acronym:** REGINS - REGional standardized INterfaces for a better integration of regional SME's in the European Economy
**Funding authority:** Interreg IIIC East Zone
**Project partners:** Clusterland Öberösterreich GmbH (Oberösterreich, A); Stuttgart Region Economic Development Corporation (Baden-Württemberg, DE); Government of Lombardy Region (IT); West Pannonian Regional Development Agency (Nyugat-Dunantul Region, HU).
**Total Budget**: EUR 7,035,223.56
**ERDF Budget**: EUR 3,667,611.78
**Western-Danubia Region budget:** EUR 350.000
**Duration:** February 2004 - January 2007

**REGINS** Interreg IIIC East Zone aims to seek out and support innovative technology-oriented projects in the fields of Automotive Industry, biotechnology and logistics.

As a result of the project, **27 sub-projects were completed in the four participating regions**, 17 of which in the field of Automotive Industry, 3 in logistics and 7 in biotechnology.
**8 projects of Hungarian relevance were completed** in the Western-Danubia Region.

### Background

Since competitiveness in most industries is now determined on a global scale, companies need to continuously develop their products and production processes to stay ahead of the game. However, innovation and development processes are becoming more and more complex, calling for resources and competences often beyond the reach of an individual company, especially if that company is small. Cooperation with other companies and also with research institutions within regional clusters is, therefore, key for small and medium sized companies to stay innovative and competitive in today's industrial markets. From the side of the local and regional organisations this raises the need for proactive consultancy and a supervisory role to encourage building of trust and inter-firm collaboration.

### Objectives

The overall objective of REGINS is to stimulate know-how-transfer on cluster management, regional innovation and SME support policies between the partners, laying the foundation for



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a long-term and strategic co-operation. Sub-objectives of the whole Regional Framework Operation are: (1) fostering public-private-partnership; (2) stimulating the experience of exchange and know-how-transfer on specific themes; (3) establishing Regional Network Offices to support networking between partners in the region; (4) assessing the state of the art with regard to cluster management in the participating regions; (5) enabling standardized interfaces to numerous SMEs via existing regional networks within the participating regions.

**Results**

REGINS provides a comparative overview of the partner regions' cluster-management policies and instruments as well as their effectiveness. A mentoring scheme supports the integration of results into regional support policies and networking instruments. Common networking activities and structures (standardised interfaces) enable interregional cooperation of cluster management structures leading to a reduction of project initiation and transaction costs, a shortening of reaction times and improved matching of project content with SME-targets. Sub-projects within the selected thematic priorities automotive, biotechnology and logistics develop know-how that will help regional businesses to exploit growth opportunities.

Subprojects selected so far focus, among others, on exploring future technologies for the automotive sector, promoting spin-offs in the biotech sector, transferring the concept of Logistics Competence Centres and scientific research to support innovation and new product development in the three target sectors.





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## 2. AUTOMOTIVE REGIONS - NETWORK OF AUTOMOTIVE REGIONS

**Concerned partner(s)**:

- PP1 – Comunimprese Scarl (IT)

**Project Full Name and Acronym:** AUTOMOTIVE REGIONS - Network of automotive regions
**Funding Authority:** EUROPEAN UNION – PROGRAMME INTERREG 3C
**Project partners:** Limburg Economic Council (LP), Lower Normandy Development Agency, Regional economic development agency of Castilla y Leon, Department of innovation, industry and commerce. galician government, Comunimprese scarl, European Association of Development Agencies – EURADA, Stuttgart Region Economic Development Corporation (WRS), Economic Development Agency of Pays de Montbéliard, City of Leipzig, Luton-Borough Council, Regional Development Agency for East Flanders, City of Gent (Economic Service - Employment and Economic Department), City of Genk, Regional Development Authority Antwerp, Limburg Development Company LIOF, Province of Turin, City of Antwerp
**Total Budget**: EUR 1,546,382.94
**ERDF Budget**: EUR 856,498.74
**Duration:** JULY 2005 – DECEMBER 2007

**Problem description**
The European car industry is facing challenges such as overcapacity at existing plants and growing global competition from new plants in emerging non-EU markets. Downsizing or closure of European plants can lead to unemployment and negative effects on local companies that supply the car industry. Many regions examine ways of encouraging the car industry (and related jobs) not to move away. Local authorities can also support the car industry by providing training schemes and local expertise. Regional decision-makers need to work with industry to adopt approaches to prevent or alleviate the harmful effects of car plant closures or downsizing.

**Overall objective**
AUTOMOTIVE REGIONS aims to help different regional decision-makers work together to design policy when anticipating or facing the closure or downsizing of a car plant. This involves formulating measures to ease the social and economic effects of such an event and the development of approaches to strengthen the competitive position of the existing automotive industry. In the long term, regions should strive for diversification of the regional economy and learn from one another.

**Expected results**
AUTOMOTIVE REGIONS is providing information to regions on social issues, such as determining the most effective ways of finding job opportunities for unemployed people (as a result of job losses in the car-industry or its suppliers) and proposing useful training schemes.


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Furthermore, it is helping regions to understand the critical factors that influence the competitiveness of a local plant by monitoring economic and innovation trends in the industry. The network is helping regions to react to requests from industry for value-added services to maintain their competitiveness in the region and to assess the skills required by local plants. Regions are also being encouraged to offer diversification opportunities for local suppliers. Finally, AUTOMOTIVE REGIONS is examining how Structural Funds can help to improve the attractiveness of regions for the automotive industry and ultimately provide incentives for the industry not to relocate.

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**Activities / achievements so far**
The Network of Automotive Regions has now been running well for 2,5 years and has come to an end. Project activities have contributed to achieving the objective of capitalising on know-how and good practices developed by the partner regions concerning private and public sector policies as well as initiatives related to attracting, retaining, extending, diversifying and promoting the automotive industry and supply chain clusters. All partner regions now have sustainable networks of clusters, key policy-makers and stakeholders and these are involved in studying the replicability of the identified good practices and in some instanced have started the implementation. In total 67 network events (49 events (seminars, working group meetings and large conferences), 16 studyvisits and 2 Steering Committee meetings) were organised with all or part of the project partners in the partner regions. Each workgroup produced 2 ‚Thematic Papers' based on shared experiences around the working group's themes: supply chain, product innovation, process innovation, intelligence on policy and diversification, and labour market issues and training.The first large conference was organised in May 2006 in Genk (B) around ‚Future perspectives for the automotive industry in Western Europe'. The second large conference was held in December 2006 in Montbeliard (F) in the framework of the annual event ‚Mobilis'.The 3rd and final large conference was organised in November 2007 in Turin (I).The studyvisits and seminars have highlighted examples of good private and public sector practices and policies throughout the network, eg. Dedicated competence and innovation centres in Stuttgart Region (D), promotion and internationalisation of (car)design in Turin (I), supplier parks and dedicated logistics infrastructure in Flanders (B), strong regional cluster and technology centre in Galicia (E), a new competitivity pole as well as diversification into ICT in Montbeliard (F).Expert consultants produced a benchmark report and SWOT analyses for all the partner regions.The


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conclusions have been translated into concrete regional (policy) initiatives. The network has selected opportunities for practical cooperation between companies and support organisations from the partner regions in topics including virtual reality and cooperative enigineering, bio fuel, design, cluster management, etc. ,The network has produced a Position paper and joined forces with similar networks in the field of regional policies for supporting the automotive industry and cluster management. A Memorandum of Understanding was signed between these projects and this has led to the founding of the European Automotive Strategy Network.

More information: http://www.automotive-regions.org





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# 3. BELCAR - BENCH LEARNING IN CLUSTER MANAGEMENT FOR THE AUTOMOTIVE SECTOR IN EUROPEAN REGIONS

**Concerned partner(s)**:

- PP1 – Comunimprese Scarl (IT)
- PP3 - West-Pannon Regional Development Company (HU)

**Project Full Name and Acronym:** BELCAR - Bench learning in cluster management for the automotive sector in Europe
**Funding Authority:** European Union's Sixth Framework programme
**Project partners:** Wirtschaftsförderung Region Stuttgart GmbH (LP), East of England Development Agency, Clusterland Oberösterreich GmbH, Centro Lombardo per lo Sviluppo Tecnologico e Produttivo dell'Artigianato e delle Piccole Imprese, Centre d'Innovació i Desenvolupament Empresarial, West-Transdanubian Regional Development Agency - Pannon Automotive Cluster Division, Logotech SA, Cranfield University, Comunimprese Scarl (IT)
**Total budget:** EUR 988.000
**PANAC budget**: EUR 94.000
**Duration:** October 2005 - April 2008

**Action Line**: INNOVATION-2004-1.2.1.3 Entrepreneurial innovation and clusters, INNOVATION Research and Innovation

The main objective of the project is to **establish and maintain a joint European platform**, in order to improve products and processes, as well as structural innovation among regional automotive clusters.
In the scope of the project several **international businessman and partner meetings** were organised for the participants of the Automotive Industry, research istitutes and universities, enabling them to share best practices and establish new contacts. One of the most important events was a two-day International Meeting of Businessmen on 19-20 February 2008, organised by PANAC.

With the participation and professional support of the partners an **Automotive Industry Study** was carried out in the scope of Europe INNOVA.

**Project description:**

BeLCAR will establish and run a European platform improving product, process and organisational innovation in and across regional automotive clusters. Starting from the analysis of six European automotive clusters the BeLCAR co-operation platform will be designed and established. The partners will develop and implement joint innovation strategies and exchange knowledge and best practice between the regions. Other European automotive clusters will be associated to BeLCAR through the organisation of visiting schemes. New





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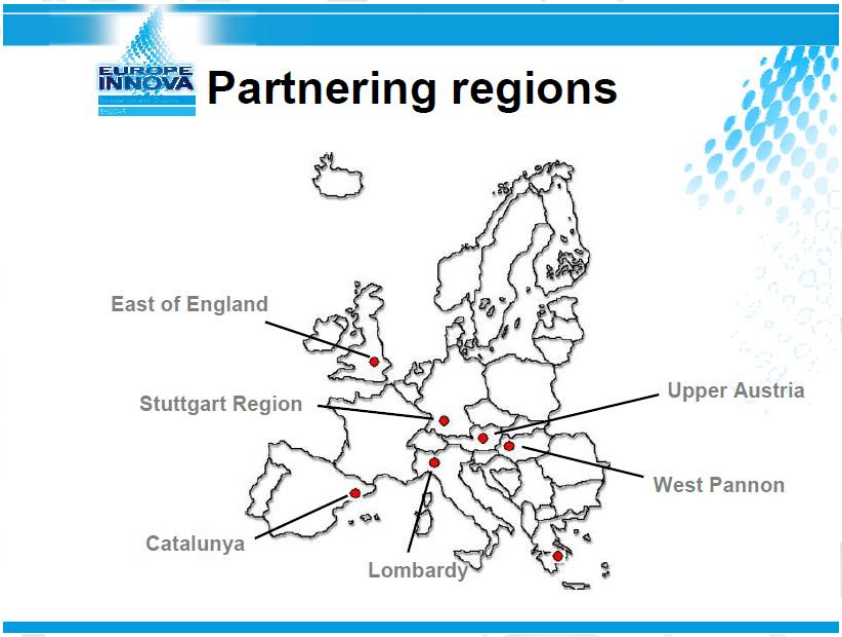
innovation projects will be stimulated facing recent developments in the automotive sector regarding power train and full service solutions.

The consortium consists of 6 regional partners (Stuttgart Region (D), East of England (UK), Upper Austria (A), Lombardy (I), Barcelona (E) and West-Transdanubia (HU)) and a consulting company (Logotech (GR)). Companies and stakeholders are involved through regional advisory boards and round tables. Cluster theory experts and academics will be subcontracted by the partners for specific activities contributing to 7 workpackages.

The European Commission benefits from policy recommendations, prepared by BeLCAR activities as well as from cluster management tools and regional policy measures, ready to be transferred to other European regions and sectors through guidelines and the best practice manual delivered by BeLCAR.
Regional authorities will gain insight in strategies and methods allowing to improve regional innovation policy through improved cluster formation and performance.

Cluster managers will profit from practices and tools already validated in other automotive clusters and improved through BeLCAR activities.

Companies of the automotive clusters participating in BeLCAR will be able to improve their innovation capacity through definition of co-operation projects across the clusters. Special focus will be given beyond product innovation to projects in process and organisational innovation.





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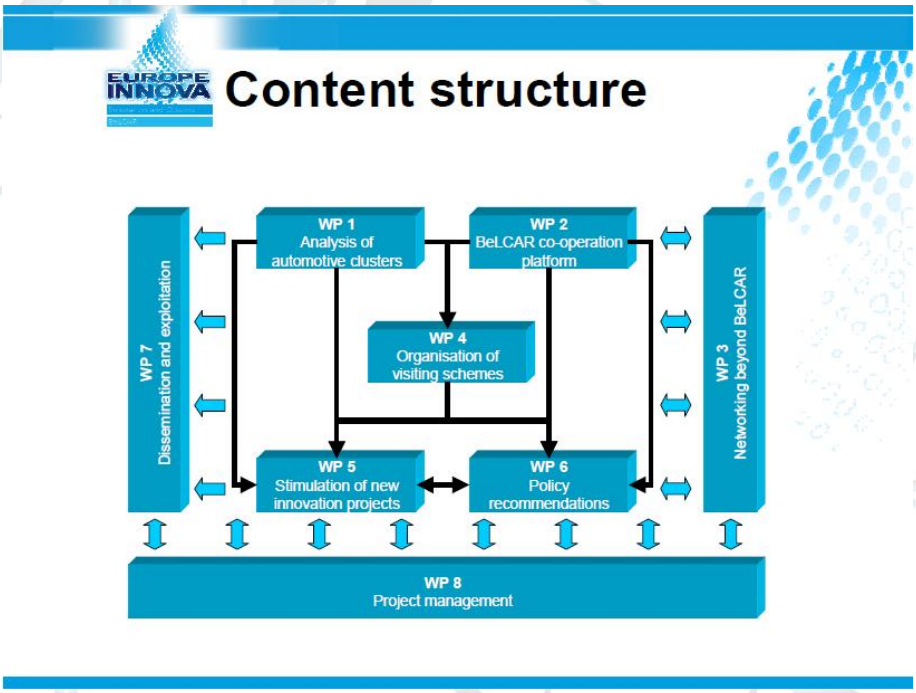
**Project ambition**

BeLCAR aims to improve the performance and innovativeness of automotive European industry by:

- reinforcing regional innovation systems
- optimising resource allocation of the regional supporting activities and structures
- establishing a European communication platform to assist product, process and organisational innovation in and across regional automotive clusters
- delivering practice based inputs to policy making mechanisms of European Union

**Objectives**

- Mobilisation of existing automotive clusters in Europe to collaborate and exploit synergies Fostering exchange of knowledge and effective practices between automotive clusters and beyond
- Better understanding of the success factors and identification of areas of improvement in automotive clusters
- Launch of joint projects and business strategies among
- automotive clusters in Europe



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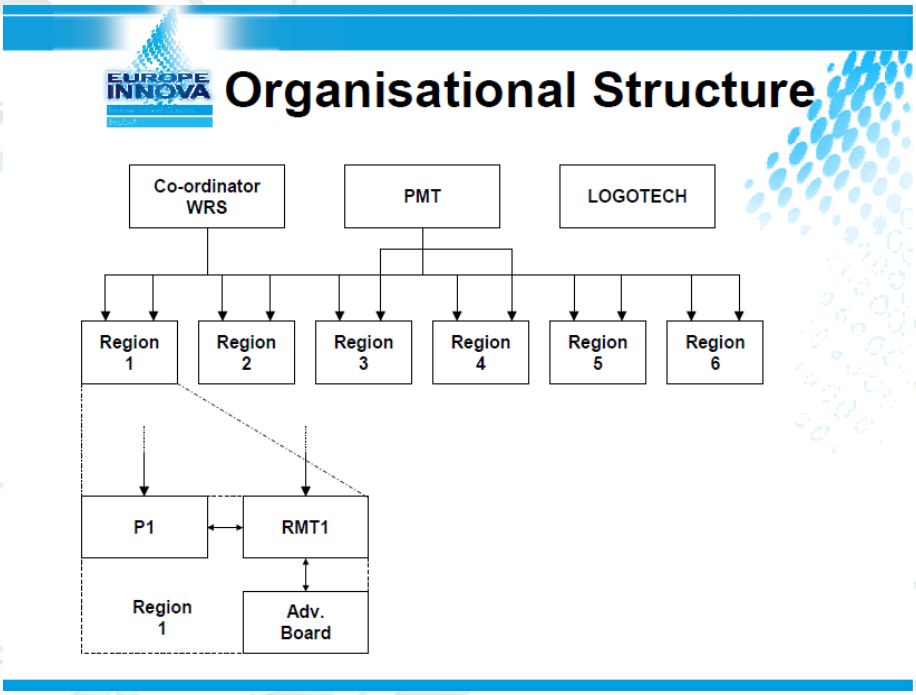


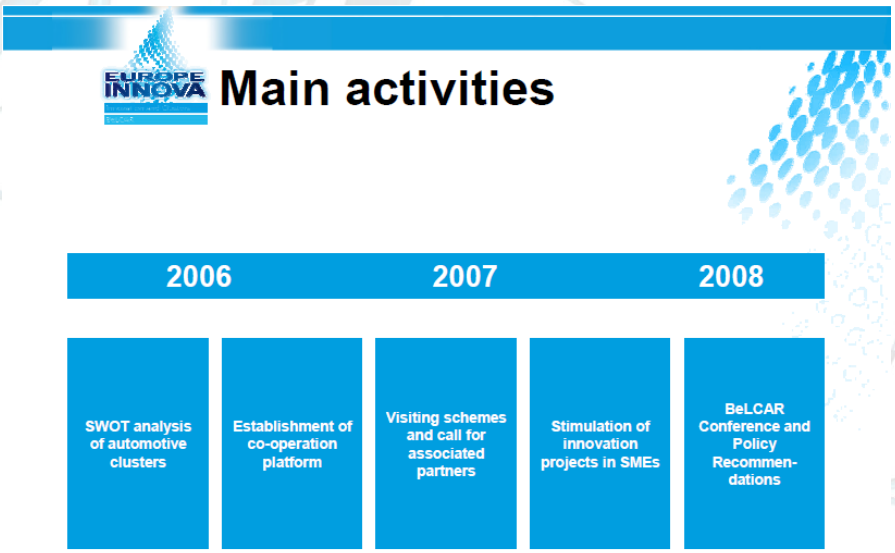


**Contacts**

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## 4. CO-ORDINATION ACTION TO ESTABLISH A HYDROGEN AND FUEL CELL ERA-NET, HYDROGEN COORDINATION

**Concerned partner(s)**:

- PP2 - "George Asachi" Technical University of Iasi (RO)

**Programme Acronym:** FP6-COORDINATION
**Project Reference:** 11744 **Project Acronym:** HY-CO

**Status:** ***Completed*** **Duration:** 48 months

| Record Control Number | Quality Validation Date | Update Date |
|---|---|---|
| 74836 | 2009-10-23 | 2009-10-26 15:35:15.0 |

| | |
|---|---|
| **Subject Index Codes:** | Education, Training; Coordination, Cooperation; Evaluation; Forecasting |

**Objective:** The aim of the Co-ordination Action "HY-CO" is to establish an ERA-Net to cover the most important aspects of research, development and demonstration in the comprehensive fields of hydrogen and fuel cells (H2/FC) and to set the basis to establish mutual opening up of national funding programmes in hydrogen and fuel cells at EU level. Hydrogen and fuel cells are considered an important long term technology contribution to a sustainable energy economy. The importance is based on scenarios of primary energy consumption growth for the period 2000 - 2030, concerns about diminishing reserves of conventional energy resources, and on the environmental impacts of CO2 emissions which are associated with fossil fuels. Worldwide, there are major efforts to advance H2/FC technology through R&D programmes, and to develop market and deployment strategies at the same time. In order to overcome the fragmentation of European R&D programmes and activities in the area of hydrogen and fuel cells and in the context of a coherent strategy towards a sustainable hydrogen economy in the long term, a coalition of European partners, responsible for national and regional H2/FC programmes, will establish mutual exchange of information, analysis of existing programmes and activities, leading to joint programmatic activities. HY-CO is closely linked to the European Hydrogen and Fuel Cells Technology Platform and will, in addition to providing an interface with the Member States Mirror Group, closely interact with the Advisory Council. The partners of the HY-CO consortium are represented by senior policy makers and programme managers. The consortium consists of 21 participants from 16 countries and one region and is open to additional participants representing substantial national programmes or activities on hydrogen or fuel cells.

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| **Start Date:** 2004-10-01 | **End Date:** 2008-09-30 | **Duration:** 48 months |
| **Project Status** | Completed | |
| **Project Cost** | 2.7 million euro | |



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| **Project Funding** | 2.7 million euro |
| **Programme Type** | 6th FWP (Sixth Framework Programme) |
| **Programme Acronym** | FP6-COORDINATION |
| **Subprogramme Area** | COOR-1.1 Networking of national or regional programmes or parts of programmes; actors: public authorities, research agencies, open call for proposals (ERA-NETs) |
| **Project Reference** | 11744 |
| **Contract Type** | CA ... Coordination action (Coordination action) |

**Prime Contractor**

**Organisation:** **FORSCHUNGSZENTRUM JÜLICH GMBH**

**Department:** PROJEKTTRÄGER JÜLICH (PTJ)

GERMANY

**Other Contractors**

**Organisation Name:** **MINISTRY OF EDUCATION AND RESEARCH - NATIONAL AUTHORITY FOR SCIENTIFIC RESEARCH**

**Department:** NATIONAL R&D INSTITUTE FOR CRYOGENICS AND ISOTOPIC TECHNOLOGIES - ICIT RM. VALCEA

ROMANIA

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**Organisation Name:** **THE DEPARTMENT FOR BUSINESS, ENTERPRISE & REGULATORY REFORM**

**Department:** DEPARTMENT FOR BUSINESS, ENTERPRISE & REGULATORY REFORM

UNITED KINGDOM

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**Organisation Name:** **ASOCIACIÓN EUROBULEGOA - AGENCIA VASCA PARA EL DESARROLLO DE LA I+D INTERNATIONAL**

**Department:** DEPARTMENT OF INTERNATIONAL PROJECTS

SPAIN

**Organisation** **COMMISSARIAT A L´ENERGIE ATOMIQUE**



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**Name:**

**Department:** DRT
FRANCE

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**Organisation Name:** **MINISTERIO DE CIENCIA E INNOVACION**

**Department:** INNOVATION STATE SECRETARY
SPAIN

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**Organisation Name:** **MINISTERO DELL'ISTRUZIONE, DELL'UNIVERSITA' E DELLA RICERCA**

**Department:** DIREZIONE GENERALE PER LE STRATEGIE E LO SVILUPPO DELL´INTERNAZIONALIZZAZIONE DELLA RICERCA SCIENTIFICA E TECNOLOGICA (D.G.S.S.I.R.S.T.) UFFICIO III
ITALY

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**Organisation Name:** **TEKES, FINNISH FUNDING AGENCY FOR TECHNOLOGY AND INNOVATION**

**Department:** ENERGY AND ENVIRONMENT
FINLAND

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**Organisation Name:** **VLAAMSE OVERHEID - DEPARTEMENT ECONOMIE, WETENSCHAP EN INNOVATIE**

**Department:** DIVISION ACADEMIC POLICY
BELGIUM

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**Organisation Name:** **ÖSTERREICHISCHE FORSCHUNGSFÖRDERUNGSGESELLSCHAFT MBH**

**Department:** AUSTRIAN RESEARCH PROMOTION AGENCY (FFG)
AUSTRIA

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**Organisation Name:** **REPUBLIC OF SLOVENIA, MINISTRY OF HIGER EDUCATION, SCIENCE AND TECHNOLOGY**

**Department:** SERVICE FOR INTERNATIONAL COOPERATION AND EUROPEAN AFFAIRS
SLOVENIA

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**Organisation Name:** **FUNDAÇAO PARA A CIENCIA E A TECNOLOGIA**

**Department:** ENGINEERING SCIENCES RESEARCH COUNCIL



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PORTUGAL

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| **Organisation Name:** | **MINISTÈRE DÉLÉGUÉ À L´ENSEIGNEMENT SUPÉRIEUR ET À LA RECHERCHE** |
| **Department:** | DIRECTION GÉNÉRALE DE LA RECHERCHE ET DE L´INNOVATION - DÉPARTEMENT A2<br>FRANCE |

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| **Organisation Name:** | **BUNDESMINISTERIUM FÜR WIRTSCHAFT UND TECHNOLOGIE** |
| **Department:** | REFERAT IIIA5<br>GERMANY |

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| **Organisation Name:** | **NORDIC ENERGY RESEARCH** |
| **Department:** | NORDIC ENERGY RESEARCH<br>NORWAY |

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| **Organisation Name:** | **ORKUSTOFNUN** |
| **Department:** | ORKUSVIO<br>ICELAND |

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| **Organisation Name:** | **MINISTÈRE DE LA RÉGION WALLONNE - D. G. DES TECHNOLOGIES, DE LA RECHERCHE ET DE L'ÉNERGIE** |
| **Department:** | DIRECTION GÉNÉRALE DES TECHNOLOGIES, DE LA RECHERCHE ET DE L'ÉNERGIE - DIVISION DE L'ÉNERGIE<br>BELGIUM |

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| **Organisation Name:** | **STATENSENERGIMYNDIGHET (SWEDISH ENERGY AGENCY)** |
| **Department:** | DEPARTMENT FOR ENERGY TECHNOLOGYFUEL AND TRANSPORT DIVISION<br>SWEDEN |

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| **Organisation Name:** | **DANISH ENERGY AUTHORITY** |
| **Department:** | ENERGY R&D AND JOINT IMPLEMENTATION<br>DENMARK |



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| **Organisation Name:** | **CESKA ENERGETICKA AGENTURA** |
| **Name:** | |
| **Department:** | CEA<br>CZECH REPUBLIC |

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| **Organisation Name:** | **BUNDESMINISTERIUM FÜR VERKEHR INNOVATION UND TECHNOLOGIE** |
| **Department:** | SEKTION III - BEREICH INNOVATION UND TECHNOLOGIE, ENERGIE UND UMWELTTECHNOLOGIEN<br>AUSTRIA |

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| **Organisation Name:** | **GENERAL SECRETARIAT FOR RESEARCH AND TECHNOLOGY, MINISTRY OF DEVELOPMENT** |
| **Department:** | CENTRE FOR RESEARCH AND TECHNOLOGY - HELLAS<br>GREECE |

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| **Organisation Name:** | **THE RESEARCH COUNCIL OF NORWAY** |
| **Department:** | DIVISION FOR STRATEGIC PRIORITIES<br>NORWAY |

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| **Organisation Name:** | **SENTERNOVEM** |
| **Department:** | SUSTAINABLE ENERGY DEPARTMENT<br>NETHERLANDS |





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# 5. RESEARCH WORK FOR A VIRTUAL POWER-TRAIN SYSTEM SIMULATION PLATFORM

**Concerned partner(s)**:

- PP2 - "George Asachi" Technical University of Iasi (RO)

**Programme Acronym:** FP6-MOBILITY
**Project Reference:** 29775 **Project Acronym:** VIRTUAL POWERTRAIN

**Status:** ***Completed*** **Duration:** 30 months

| Record Control Number | Quality Validation Date | Update Date |
|---|---|---|
| 84871 | 2008-02-05 | 2008-10-16 15:52:29.0 |

| Subject Index Codes: | Education, Training; Social Aspects |
|---|---|

**Objective:** The project relates to 1D system simulation and refers to the following key words: System simulation platform, Customized Simulations, Software engineering, Automotive engineering and Collaborative design. This project proposed by IMAGINE aims at investigating innovative solutions permitting the development of a Virtual Powertrain System Simulation Platform based on AMESim.

The Automotive Industry has a need for a platform to:
- increase exchanges between project teams actors;
- face exponential increase of systems complexity with growing integration of mechanics, hydraulics, electronics, embedded software components;
- cut development costs for current and future clean vehicles. On this basis, the original and innovative idea of the 'Virtual Powertrain' research work aims at:
- creating a single common model for system simulation supplying customized models;
- covering powertrain development needs from preliminary design, component detailed design, development of the control strategy and ECU validation phase.

The IMAGINE company, want to setup a partnership with the 'Energy and Environment Protection Research Centre' of the University 'Politehnica' of Bucharest to welcome three research fellows, for two years, who will explore key technologies for the success of the 'Virtual Powertrain'. Research work will focus on physical modelling, numerical and computer science issues.

For the research fellows, it will be the opportunity to acquire to acquire skills in domains other than their own speciality by being involved in a multi-discipline research project, interact with industry and apply their skills to complex industrial problem; publish scientific papers and being involved in a high tech SME with world wide profile.


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The ToK should enable IMAGINE to create a long term partnership with the Bucharest

University in order to create an external R and T team focused on medium term research topics, with potential application in system simulation.

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| **Start Date:** 2006-03-01 | **End Date:** 2008-08-31 | **Duration:** 30 months |

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| **Project Status** | Completed |
| **Project Cost** | .00 euro |
| **Project Funding** | 475970.00 euro |
| **Programme Type** | 6th FWP (Sixth Framework Programme) |
| **Programme Acronym** | FP6-MOBILITY |
| **Subprogramme Area** | MOBILITY-1.3.2 Marie Curie Host Fellowships - Transfer of knowledge (TOK) - Industry-Academia Strategic Partnership Scheme |
| **Project Reference** | 29775 |
| **Contract Type** | TOK ... Marie Curie actions-Transfer of Knowledge (Marie Curie actions-Transfer of Knowledge) |

**Prime Contractor**

**Organisation:** **IMAGINE S.A.**

**Department:** DEVELOPMENT DEPARTMENT
IMAGINE PARIS

FRANCE

**Other Contractors**

**Organisation Name:** **UNIVERSITY POLITEHNICA OF BUCHAREST - C.C.E.P.M.**

**Department:** POWER FACULTY, FLUID CONTROL LABORATORY
ROMANIA





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## 6. CONCEPTS TO REDUCE ENVIRONMENTAL IMPACT AND ATTAIN OPTIMAL TRANSPORT PERFORMANCE BY INLAND NAVIGATION (CREATING)

**Concerned partner(s)**:

- PP2 - "George Asachi" Technical University of Iasi (RO)

**Programme Acronym:** FP6-SUSTDEV
**Project Reference:** 506542 **Project Acronym:** CREATING

**Status:** ***Completed*** **Duration:** 36 months

| Record Control Number | Quality Validation Date | Update Date |
|---|---|---|
| 73954 | 2009-10-26 | 2009-10-26 14:06:59.0 |

| | |
|---|---|
| **Subject Index Codes:** | Energy Storage, Energy Transport; Other Energy Topics; Meteorology; Environmental Protection; Resources of the Sea, Fisheries; Innovation, Technology Transfer; Scientific Research; Energy Saving; Fossil Fuels; Policies; Renewable Sources of Energy; Social Aspects; Transport; Waste Management |

**Objective:** CREATING will boost the overall performance of inland navigation transport by multidisciplinary RTD activities and by integrating previous project results in innovative vessel concepts focused on logistics, emission reduction, safety and efficiency: New I ntermodal Concepts for innovative transport concepts, aiming at niche markets. RTD activities include innovative new vessel concepts with optimised logistic performance, with implementation of results from the supporting RTD on emissions, safety and effici ency. The new vessel concepts will be assessed on their logistic, economic, environmental and safety performance, including comparison to other transport modes. Emissions RTD concentrates on fuel economy by reduction of hull resistance, innovative propulsi on systems and energy management, including future application of fuel cells in inland navigation. Other topics include reduction of wastewater, dust and gasses. Safety RTD concentrates on safety analysis of external risk and causes of accidents, as well a s on safety measures aboard, including both innovative constructions and navigational and operational aspects. Integration and dissemination of results The results and potential improvements will be disseminated widely, not only by the great number of nat ional and international associations involved, but also by national authorities who expressed their interest in the CREATING approach. Recommendations will be made with regard to regulations, in order to facilitate the introduction of important innovations in European inland navigation.

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| **Start Date:** 2004-06-01 | **End Date:** 2008-02-29 | **Duration:** 45 months |



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| Prime Contractor | |
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| **Project Status** | Completed |
| **Project Cost** | 4.45 million euro |
| **Project Funding** | 2.65 million euro |
| **Programme Type** | 6th FWP (Sixth Framework Programme) |
| **Programme Acronym** | FP6-SUSTDEV |
| **Subprogramme Area** | SUSTDEV-2.2 Making rail and maritime transport safer, more effective and more competitive |
| **Project Reference** | 506542 |
| **Contract Type** | STREP ... Specific Targeted Research Project (Specific Targeted Research Project) |
| **Organisation:** | **STICHTING PROJECTEN BINNENVAART** |
| **Department:** | N.A.<br>STICHTING PROMOTIE BINNENVAART<br>NETHERLANDS |

| Other Contractors | |
|---|---|
| **Organisation Name:** | **VIA DONAU - ÖSTERREICHISCHE WASSERSTRASSEN-GESELLSCHAFT MBH** |
| **Department:** | VIA DONAU - ENTWICKLUNGSGESELLSCHAFT MBH FÜR TELEMATIK UND DONAUSCHIFFAHRT<br>AUSTRIA |
| **Organisation Name:** | **ENTWICKELINGSZENTRUM FUER SCHIFFSTECHNIK UND TRANSPORTSYSTEME - DEVELOPMENT CENTRE FOR SHIP TECHNOLGY AND TRANSPORT SYSTEMS** |
| **Department:** | ENTWICKLUNGSZENTRUM FUER SCHIFFTECHNIK UND TRANSPORTSYSTEME- DEVELOPMENT CENTRE FOR SHIP TECHNOLOGIES<br>GERMANY |
| **Organisation Name:** | **SCHEEPSWERF HOEBÉE B.V.** |
| **Department:** | SCHEEPSWERF HOEBEE (NETHERLANDS) |



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| **Organisation Name:** | **VIA DONAU - ENTWICKLUNGGESELLSCHAFT MBH FUER TELEMATIK UND DONAUSCHIFFAHRT** |
| **Department:** | VIA DONAU - ENTWICKLUNGSGESELLSCHAFT MBH FÜR TELEMATIK UND DONAUSCHIFFAHRT<br>AUSTRIA |
| **Email:** | Contact |

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| **Organisation Name:** | **HASKONING MAGYARORZÁG TANÁCSADÓ MÉRNÖC KFT.** |
| **Department:** | UTB ENVIROTEC KFT. HASKONING HUNGARY (IN CO-OPERATION WITH AND CO-ORDINATED BY ROYAL HASKONING NETHERLANDS)<br>HUNGARY |

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| **Organisation Name:** | **ENERGY RESEARCH CENTER OF THE NETHERLANDS** |
| **Department:** | BUSINESS UNIT ECN CLEAN FOSSIL FUELS<br>NETHERLANDS |

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| **Organisation Name:** | **BUDAPEST UNIVERSITY OF TECHNOLOGY AND ECONOMICS** |
| **Department:** | DEPARTMENT OF AIRCRAFT AND SHIPS<br>HUNGARY |

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| **Organisation Name:** | **DELFT UNIVERSITY OF TECHNOLOGY** |
| **Department:** | FAC. OF MECH. ENGG AND MARINE TECHNOLOGY, SECTION SHIPPPRODUCTION<br>NETHERLANDS |

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| **Organisation Name:** | **UNIVERSITE DE LIEGE** |
| **Department:** | ANAST - TRANSPORT SYSTEMS UNIT, UNIVERSITE DE LIEGE<br>BELGIUM |

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| **Organisation Name:** | **BUREAU VERITAS** |
| **Department:** | INLAND NAVIGATION DEPARTMENT |



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BUREAU VERITAS - RESEARCH DEPARTMENT
FRANCE

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**Organisation Name:** **IPA AUTOMATION ENGINEERING**

**Department:** SC IPA SA CIFATT CRAIOVA
ROMANIA

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**Organisation Name:** **VERENIGING NEDERLANDSE SCHEEPSBOUW INDUSTRIE**

**Department:** VNSI
NETHERLANDS

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**Organisation Name:** **JOH VAN DUIJVENDIJK BV SCHEEPSWERF**

**Department:** JOH VAN DUIJVENDIJK BV SCHEEPSWERF
NETHERLANDS

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**Organisation Name:** **EUROPEAN FEDERATION OF INLAND PORTS**

**Department:** EFIP
BELGIUM

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**Organisation Name:** **CENTRAAL BUREAU VOOR DE RIJN - EN BINNENVAART**

**Department:** N.A.
CBRB
NETHERLANDS

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**Organisation Name:** **DUNAFERR PORTOLAN FORWARDING LTD**

**Department:** PORTOLAN
HUNGARY

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**Organisation Name:** **NETHERLANDS ORGANISATION FOR APPLIED SCIENTIFIC RESEARCH (TNO)**

**Department:** TNO INRO
NETHERLANDS



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| **Organisation Name:** | **VERSUCHSANSTALT FUER BINNENSCHIFFBAU E.V. DUISBURG-EUROPAEISCHES ENTWICKLUNGSZENTRUM FUER BINNEN UND KUESTENSCHIFFAHRT** |
| **Department:** | VESUCHSANSTALT FUER BINNENSCHIFFBAU E.V. DUISBURG - EUROPAEISCHES ENTWICKLUNGSZENTRUM FUER BINNEN- UND KUESTENSCHIFFAHRT<br>GERMANY |

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| **Organisation Name:** | **IVR** |
| **Department:** | N.A.<br>IVR.<br>NETHERLANDS |

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| **Organisation Name:** | **IMTECH MARINE & OFFSHORE B.V.** |
| **Department:** | IMTECH MARINE & OFFSHORE<br>NETHERLANDS |

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| **Organisation Name:** | **B.V. SCHEEPSWERF DAMEN BERGUM** |
| **Department:** | DAMEN RESEARCH<br>DAMEN SHIPYARD<br>NETHERLANDS |

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| **Organisation Name:** | **SHIP DESIGN AND RESEARCH CENTRE** |
| **Department:** | SHIP HYDROMECHANICS DIVISION<br>RESEARCH AND DEVELOPMENT DEPARTMENT OF CTO<br>POLAND |

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| **Organisation Name:** | **LLOYD'S REGISTER OF SHIPPING** |
| **Department:** | LLOYD'S REGISTER EMEA MARINE SERVICES IN THE NETHERLANDS<br>LLOYD'S REGISTER MANAGEMENT CONSULTANTS<br>NETHERLANDS |



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| **Organisation Name:** | **EVO B.V.** |
| **Department:** | N.A.<br>EVO BUSINESS CONSULTANCY DEPT.<br>NETHERLANDS |

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| **Organisation Name:** | **DANUBE PROJECT CENTRE** |
| **Department:** | DANUBE PROJECT CENTRE<br>SERBIA AND MONTENEGRO |

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| **Organisation Name:** | **AVIV B.V.** |
| **Department:** | AVIV<br>NETHERLANDS |

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| **Organisation Name:** | **MARITIME RESEARCH INSTITUTE NETHERLANDS** |
| **Department:** | SHIPS POWERING<br>NETHERLANDS |

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| **Organisation Name:** | **VOPAK BARGING EUROPE** |
| **Department:** | TECHNICAL DEPARTMENT VOPAK BARGING EUROPE<br>NETHERLANDS |





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## 7. ASSET ADVANCED SAFETY AND DRIVER SUPPORT IN ESSENTIAL ROAD TRANSPORT

**Concerned partner(s)**:

- PP2 - "George Asachi" Technical University of Iasi (RO)

**Programme Acronym:** FP7-TRANSPORT
**Project Reference:** 217643 **Project Acronym:** ASSET-ROAD

**Status:** Execution **Duration:** 42 months

| Record Control Number | Quality Validation Date | Update Date |
|---|---|---|
| 90268 | 2009-10-02 | 2009-10-05 15:44:27.0 |

| Subject Index Codes: | Safety |
|---|---|

**Objective:** As the European objectives of integration and economic growth are achieved, there is a corresponding vigorous growth in road traffic volumes. This results in congestion and increased numbers of road fatalities. The objective of the ASSET project is to reverse these negative effects by developing a number of promising technologies and integrating them into a new holistic approach to road safety. The holistic approach will be at system and practical level. Integrated architectures will be developed to facilitate the exchange of secure information between road, vehicle and driver.

There will be a particular focus on the Human Machine Interface developing supporting systems which pass on safety-critical information to the driver. Driver monitoring technologies such as track and trace will use computer vision to identify abnormal driver behaviour (speed, gap, load) and inform driver and authorities. - Improving drivers knowledge and behaviour - Increased automation and traffic control for safety/efficiency - Innovative measures for safe and sustainable infrastructure A number of technologies will be developed and integrated into the holistic system like a thermal imaging tool to detect dangerous heavy goods vehicles, a new weigh-in-motion sensor which can detect critical tyres as well as overloaded.

The main theme is the integration of different information from different sources into a comprehensive system and the communication of the relevant information to where they are needed. Several application areas will be developed with concrete deliverables such as a safety station, crisis and dangerous goods management and an infrastructure life cycle optimisation system. Systems will be tested at a number of sites in different parts of Europe and results disseminated through seminars, workshops and demonstrations.

| Start Date: 2008-07-01 | End Date: 2011-12-31 | Duration: 42 months |
|---|---|---|



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| **Project Status** | Execution |
| **Project Cost** | 8.11 million euro |
| **Project Funding** | 6.15 million euro |

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| **Programme Type** | 7th FWP (Seventh Framework Programme) |
| **Programme Acronym** | FP7-TRANSPORT |
| **Subprogramme Area** | SST-2007-4.1-04 Integral system solutions for safety |
| **Project Reference** | 217643 |
| **Contract Type** | CP-IP ... Large-scale integrating project (Large-scale integrating project) |

**Prime Contractor**

**Organisation:** **PTV PLANUNG TRANSPORT VERKEHR AG.**
GERMANY

**Other Contractors**

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| **Organisation Name:** | **UNIVERSITE DE TECHNOLOGIE DE BELFORT MONTBELIARD**<br>FRANCE |
| **Organisation Name:** | **MTEL-KTEI TELEINFRA COMPANY INDIA PRIVATE LTD**<br>INDIA |
| **Organisation Name:** | **NATIONAL INSTITUTE OF TRANSPORT**<br>TANZANIA |
| **Organisation Name:** | **ADC-AFRIDEUT CONSULT LIMITED**<br>TANZANIA |
| **Organisation** | **CLARITY CONSULTING INFORMATION AND MANAGEMENT** |




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| **Name:** | **SERVICES LTD**<br>HUNGARY |
| **Organisation Name:** | **EMTELE OY**<br>FINLAND |
| **Organisation Name:** | **MANFRED HUEGEL**<br>GERMANY |
| **Organisation Name:** | **KRIA S.R.L.**<br>ITALY |
| **Organisation Name:** | **ROC BERNARD GMBH**<br>AUSTRIA |
| **Organisation Name:** | **BAYRISCHES INNENMINISTERIUM - POLIZEIPRÄSIDIUM OBERBAYERN**<br>GERMANY |
| **Organisation Name:** | **TECHNICAL UNIVERSITY 'GHEORGHE ASACHI' OF IASI**<br>ROMANIA |
| **Organisation Name:** | **STATENS VAG- OCH TRANSPORTFORSKNINGSINSTITUT**<br>SWEDEN |
| **Organisation Name:** | **GOTTFRIED WILHELM LEIBNIZ UNIVERSITAET HANNOVER**<br>GERMANY |
| **Organisation Name:** | **UNIVERSITAET STUTTGART**<br>GERMANY |
| **Organisation** | **VALTION TEKNILLINEN TUTKIMUSKESKUS** |


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| **Name:** | FINLAND |
| **Organisation Name:** | **UNIVERSITY COLLEGE DUBLIN, NATIONAL UNIVERSITY OF IRELAND, DUBLIN**<br>IRELAND |
| **Organisation Name:** | **UNIVERSITA DEGLI STUDI DI MODENA E REGGIO EMILIA**<br>ITALY |
| **Organisation Name:** | **THE UNIVERSITY OF NOTTINGHAM**<br>UNITED KINGDOM |





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## 8. SUPPORTING POTENTIAL AND EXISTING RESEARCH INTENSIVE SMES

**Concerned partner(s)**:

- PP2 - "George Asachi" Technical University of Iasi (RO)

**Programme Acronym:** FP6-SME
**Project Reference:** 30144 **Project Acronym:** SUPER-SME

**Status:** ***Completed*** **Duration:** 27 months

| Record Control Number | Quality Validation Date | Update Date |
|---|---|---|
| 81666 | 2009-09-01 | 2009-09-01 14:43:56.0 |

| | |
|---|---|
| **Subject Index Codes:** | Innovation, Technology Transfer; Coordination, Cooperation; Scientific Research; Evaluation; Policies |

**Objective:** The overall objective of SUPER-SME is to contribute to a quantifiable increase in research expenditure by the business sector in the participating regions within a 5-year period after the project. This will be done by promoting an improved integration of public and private research capacities through evaluating, rationalising and strengthening the know-how of regional systems of science and technology intermediaries. The project focuses on appraising and transferring experience in the field of science and technology intermediation services for research-intensive SMEs. The partnership is based around 3 EU15 mentor regions (Lorraine, Catalunya; Central Macedonia) and 4 mentee regions: 2 from new Member States (Prague; Tartu), and 2 from candidate countries (C luj/Huendoara; Adana). The specific objectives expected to lead to this overall objective are as follows: quantified increase in the level of contract research contracts between regionally based laboratories and scientific institutes and regional SMEs; quantified increase in the participation of regional SMEs to nationally funded R&D programmes and to the EU RTD Framework Programme; contribution to the implementation and updating of specific regional research, technological development and innovation policies (in the form of detailed plans for specific measures to improve the effectiveness of S&T intermediation services; transfer of at least one S&T intermediation methodology from each participating regions. The operational objectives of the project are as follows: methodological guide to the appraisal of the role and function of regional S&T intermediaries; analytical mapping of S&T intermediaries in each participating region.

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| **Start Date:** 2006-03-01 | **End Date:** 2008-05-31 | **Duration:** 27 months |
| **Project Status** | Completed | |
| **Project Cost** | 495250.00 euro | |



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| **Project Funding** | 495250.00 euro |
| **Programme Type** | 6th FWP (Sixth Framework Programme) |
| **Programme Acronym** | FP6-SME |
| **Subprogramme Area** | SME-1 Co-operative Research (all areas of science and technology) |
| **Project Reference** | 30144 |
| **Contract Type** | CA ... Coordination action (Coordination action) |
| **Prime Contractor** | |
| **Organisation:** | **CONSEIL RÉGIONAL DE LORRAINE** |
| **Department:** | REGIONAL COUNCIL OF LORRAINE- INNOVATION AND TECHNOLOGY TRANSFER DEPARTMENT<br>FRANCE |

**Other Contractors**

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| **Organisation Name:** | **ADANA USAM DERNEGI VE ISL.(UNIVERSITY INDUSTRY JOINT RESEARCH CENTER ASSOCIATION AND ENTERPRISE)** |
| **Department:** | TUBITAK ADANA UNIVERSITE SANAYI ORTAK ARASTIRMA MERKEZI (UNIVERSITY INDUSTRY JOINT RESEARCH CENTRE) ASSOCIATION<br>TURKEY |

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| **Organisation Name:** | **FILOZOFICKY ÚSTAV AKADEMIE VED CESKÉ REPUBLIKY** |
| **Department:** | CENTRE FOR SCIENCE, TECHNOLOGY, SOCIETY STUDIES<br>CZECH REPUBLIC |

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| **Organisation Name:** | **FUNDACION PARA EL DESARROLLO Y LA INNOVACION TECNOLOGICA** |
| **Department:** | FUNDITEC (FUNDACIÓN PARA EL DESARROLLO Y LA INNOVACIÓN TECNOLÓGICA)<br>SPAIN |

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| **Organisation Name:** | **INSTITUTE OF BALTIC STUDIES** |



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| **Department:** | IBS<br>ESTONIA |
| **Organisation Name:** | **ARISTOTLE UNIVERSITY OF THESSALONIKI** |
| **Department:** | URENIO RESEARCH UNIT - FACULTY OF ENGINEERING - ARISTOTLE UNIVERSITY OF THESSALONIKI<br>GREECE |
| **Organisation Name:** | **EWE SRL**<br>CLUJ-NAPOCA<br>ROMANIA |





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# 9. BEST PRACTICES TO BRING RESEARCH AND INNOVATION IN EUROPEAN SME THROUGH THE "PEER REVIEW" METHOD

**Concerned partner(s)**:

- PP2 - "George Asachi" Technical University of Iasi (RO)

**Programme Acronym:** FP6-SUPPORT
**Project Reference:** 43003 **Project Acronym:** EUROPEER SME

**Status:** ***Completed*** **Duration:** 26 months

| Record Control Number | Quality Validation Date | Update Date |
|---|---|---|
| 85145 | 2007-11-20 | 2009-02-03 10:09:30.0 |

| Subject Index Codes: | Innovation, Technology Transfer; Coordination, Cooperation; Policies |
|---|---|

**Objective:** Research and Technological Development is essential for the functioning and sustainability of the European economy and therefore in the center of EU's development agenda. Small and Medium Enterprises are, on the one hand, the economic 'backbone' of the EU. On the other hand it is more difficult for them to do research on their own or to get the necessary scientific input for innovation.

In order to strengthen the scientific and technological bases of the European industry and to encourage its international competitiveness it is indispensable to exchange on successful R&D policy approaches not only among Member States but also with states from the EU's new neighborhood and other countries that succeeded in having a competitive edge.

Therefore the main objectives of EUROPEER SME are:
- to foster mutual learning, elaborate best practices and improve impact of national and regional RTD support programmes to SMEs
- to optimize the exchange of best practices by identifying conditions for transferability and developing transfer schemes
- to diminish overlap and strengthen the co-ordination of RTD policies directed to SMEs

To foster mutual learning, to identify and evaluate best practices in the field of research policy making the peer-review method will be utilized. In order to improve the exchange of information and to analyze the transferability of best practices a systematic approach will be introduced. A continuous, dynamic and mutual learning process will on the one side provide insights into how existing RTD and innovation policies may be improved and made more effective.



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On the other side it will lead to a sustainable network which is self-supporting after the end of the project and remain open for new members. The network will thereby help to strengthen the co-ordination of RTD policies directed to SMEs on a European scale.

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| **Start Date:** 2006-12-01 | **End Date:** 2009-01-31 | **Duration:** 26 months |

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| **Project Status** | Completed |
| **Project Cost** | 800000.00 euro |
| **Project Funding** | 800000.00 euro |
| **Programme Type** | 6th FWP (Sixth Framework Programme) |
| **Programme Acronym** | FP6-SUPPORT |
| **Subprogramme Area** | SUPPORT Support for the coherent development of research and innovation policies |
| **Project Reference** | 43003 |
| **Contract Type** | CA ... Coordination action (Coordination action) |
| **Prime Contractor** | |
| **Organisation:** | **DEUTSCHE GESELLSCHAFT FUER TECHNISCHE ZUSAMMENARBEIT (GTZ) GMBH** |
| **Department:** | TWINNING OFFICE/ PROGRAMMES OF THE PUBLIC SECTOR - MR HAGEN ETTNER<br>GERMANY |

**Other Contractors**

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|---|---|
| **Organisation Name:** | **REGIONE LOMBARDIA** |
| **Department:** | DIRECTION GENERAL INDUSTRY, SME AND COOPERATIVES - OFFICE EU PROJECTS AND WORK COMMUNITIES<br>ITALY |

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| **Organisation Name:** | **UAB EKONOMINES KONSULTACIJOS IR TYRIMAI** |
| **Department:** | INSTITUTIONAL PROJECTS DIVISION<br>LITHUANIA |



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| **Organisation Name:** | **WIRTSCHAFTSFORDERUNG REGION STUTTGART GMBH** |
| **Department:** | R & D DIVISION<br>GERMANY |

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| **Organisation Name:** | **REGION OF WESTERN GREECE** |
| **Department:** | REGIONAL DEVELOPMENT FUND OF REGION OF WESTERN GREECE, SCIENTIFIC-TECHNICAL SUPPORT & PROGRAMMES IMPLEMENTATION DEPARTMENT<br>GREECE |

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|---|---|
| **Organisation Name:** | **RRA SEVENE PRIMORSKE REGIONALNA RAZVOJNA AGENCIJA D.O.O. NOVA GORICA** |
| **Department:** | RRA SEVERNE PRIMORSKE D.O.O. NOVA GORICA<br>SLOVENIA |

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| **Organisation Name:** | **VENETO INNOVAZIONE SPA** |
| **Department:** | VENETO INNOVAZIONE S.P.A.<br>ITALY |

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|---|---|
| **Organisation Name:** | **MINISTRY OF ECONOMY AND ENERGY** |
| **Department:** | "ENTERPRISE POLICY" DIRECTORATE, N/A "PRE-ACCESSION PROGRAMMES AND PROJECTS " DIRECTORATE<br>BULGARIA |

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|---|---|
| **Organisation Name:** | **HORDALAND FYLKESKOMMUNE (HORDALAND COUNTY COUNCIL)** |
| **Department:** | DEPT FOR REGIONAL DEVELOPMENT/ EUROPEAN OFFICE DEPT FOR REGIONAL DEVELOPMENT/ EUROPEAN OFFICE<br>NORWAY |

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| **Organisation Name:** | **THURINGER AGENTUR FUR TECHNOLOGIE UND INNOVATION GMBH-IRC** |
| **Department:** | DEPARTMENT INTERNATIONAL PROJECTS<br>GERMANY |



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| **Organisation Name:** | **NATIONAL CENTRE FOR PROGRAMME MANAGEMENT-NCPM** |
| **Department:** | BIOTECH PROGRAMME<br>ROMANIA |

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| **Organisation Name:** | **ZENIT ZENTRUM FUER INNOVATION UND TECHNIK IN NORDRHEIN-WESTFALEN GESELLSCHAFT MIT BESCHRAENKTER HAFTUNG** |
| **Department:** | ZENIT GMBH<br>GERMANY |

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| **Organisation Name:** | **INSTITUTE OF BALTIC STUDIES** |
| **Department:** | IBS<br>ESTONIA |

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| **Organisation Name:** | **BIC BRATISLAVA, SPOL. S R.O.** |
| **Department:** | BIC BRATISLAVA<br>SLOVAKIA |





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# 10. INCREASING THE COMPETITIVENESS OF TRANS-NATIONAL TECHNOLOGY TRANSFER AND INNOVATION IN ROMANIA BY CREATING AN INNOVATION RELAY CENTRE

**Concerned partner(s)**:

- PP2 - "George Asachi" Technical University of Iasi (RO)

**Programme Acronym:** FP6-INNOVATION
**Project Reference:** 510446 **Project Acronym:** ROMANIAN IRC4D

**Status:** ***Completed*** **Duration:** 48 months

| Record Control Number | Quality Validation Date | Update Date |
|---|---|---|
| 75669 | 2007-06-11 | 2008-10-16 14:56:16.0 |

| Subject Index Codes: | Education, Training; Economic Aspects; Coordination, Cooperation; Scientific Research; Forecasting; Legislation, Regulations; Policies; Social Aspects |
|---|---|

**Objective:** The IRC ROMANIA goal is to promote the Trans-national Technology co-operation based on the flow of information and services provided by the main contractors and also by the regional partners. The IRC Romania will act in four main domains such as informat ion (including awareness campaign), direct contacts /visits with/at clients for partner and technologies offers/requests, assistance for projects preparation and development and monitoring The network of main contractors and regional partners will be linke d to the IRC and BBS network as beneficiary of an extremely powerful flow of information. The strategy is based on the following key actions: to create an "optimum" framework for stimulating the partnership between government, intermediary organisations and private business sector aiming to develop an innovation strategy; to stimulate the local communities to identify their specific problems and find out ways to involve key actors to elaborate solutions to those problems; to support and convince SMEs t o couple the efforts of the local governments, research organisations, universities and civil society for LOCAL INITIATIVE DEVELOPMENT THROUGH INNOVATION; to collect information and to spread out opportunities for partnership and business development. IR C Romania team will act to support Romania for European Integration. Just for that the TTT and Innovation process will be focused on the co-operation between Romanian and European partners. The target group is officials from the government, central and loc al public authorities, research organisations, universities, SMEs and civil society. The main target of the Romanian IRC is to couple efforts (technically and financially) coming from institutions and persons in charge for the LOCAL DEVELOPMENT. IRC Roma nia will provide its services at national level, covering all of Romanian territory using a network of 7 regional partners (Iasi, Braila, Calarasi, Craiova, Timisoara, Cluj, Brasov) and Bucuresti.



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|---|---|---|
| **Start Date:** 2004-04-01 | **End Date:** 2008-03-31 | **Duration:** 48 months |

| | |
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| **Project Status** | Completed |
| **Project Cost** | 1.03 million euro |
| **Project Funding** | 508750.00 euro |
| **Programme Type** | 6th FWP (Sixth Framework Programme) |
| **Programme Acronym** | FP6-INNOVATION |
| **Subprogramme Area** | INNOVATION-4.2 Innovation Relay Centres |
| **Project Reference** | 510446 |
| **Contract Type** | NoE ... Networks of Excellence (Networks of Excellence) |
| **Prime Contractor** | |
| **Organisation:** | **ASOCIATIA ROMANA PENTRU INDUSTRIA ELECTRONICA SI SOFTWARE (ROMANIAN ASSOCIATION FOR ELECTRONIC AND SOFTWARE INDUSTRY)** |
| **Department:** | HEADQUARTER<br>ROMANIA |

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| **Other Contractors** | |
| **Organisation Name:** | **SC IPA SA** |
| **Department:** | SC IPA SA CIFATT CRAIOVA<br>ROMANIA |

| | |
|---|---|
| **Organisation Name:** | **SC TEMAGON ROMANIA SRL** |
| **Department:** | FINANCIAL DEPARTMENT<br>FUNDED PROGRAMS DEPARTMENT<br>ROMANIA |



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## 11. CAR-COMM-NET

**Concerned partner(s)**:

- PP3 - West-Pannon Regional Development Company (HU)

**Project full name and acronym:** „CAR-COMM-NET- Training for vocational communicative skills in Automotive Industry"
**Funding authority:** Phare CBC Small Project Fund
**Project partner:** PANAC
**Project coordinator:** INNONET Innovation and Technology Centre
**Duration:** 2003-2004

**Objectives:**

- Transnational training for vocational communicative skills in Automotive Industry
- Establishing connections among automotive clusters, innovation centers, R+D institutes and enterprises within the West-Pannon Region
- Strenghtening trust, adopting best practices, stimulating supplier-type business partnership

98 Automotive Industry experts attended trainings:

- **Inter-cultural training**
- **Function-oriented training**
- **Technology-oriented training**

Based on PANAC's idea, a Hungarian-German-English **Technical Dictionary of the Automotive Industry** was created in the scope of the project, gathering together the technological and management terms used in the Automotive Sector.

## 12. REGINS

**Concerned partner(s)**:

- PP1 – Comunimprese Scarl (IT)
- PP3 - West-Pannon Regional Development Company (HU)

**See at 1. project**





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## 13. RICARDA

**Concerned partner(s)**:

- PP3 - West-Pannon Regional Development Company (HU)


**Project full name and acronym:** RICARDA – Regional Intellectual Capital Reporting – Application and Development of a Methodology for European Regions
**Funding authority:** Sixth Framework Programme Research and Technological Development („Knowledge Regions 2")
**Project partners:** Hungarian Academy of Sciences Regional Research Centre Western-Hungarian Scientific Institution, Kista IT Cluster (SWE), Virtual Dimension Centre (DE), Polymer Competence Centre (A), Pannon Automotive Cluster (H)
**Total budget:** EUR 500.000
**PANAC budget:** EUR 37.000
**Duration:** 2006-2007

**The objective of the project** is to process and apply a method which enables the drafting of an intellectual-property report, or knowledge-balance, of knowledge-intensive networks and clusters. As a management tool, this knowledge-balance contributes to achieving the strategic aims of the cluster, yet on the other hand it serves as a communication tool for the partners and concerned participants of the cluster.

In the first phase of the project **PANAC's strategic objectives were redefined**.
In the second phase **the knowledge-balance of the member enterprises of Pannon Automotive Cluster** was drafted, entitled **"Intellectual-Capital Report 2006"**.

## 14. BELCAR

**Concerned partner(s)**:

- PP1 – Comunimprese Scarl (IT)
- PP3 - West-Pannon Regional Development Company (HU)

**See at 3. project**



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# 15. GVOP

**Concerned partner(s)**:

- PP3 - West-Pannon Regional Development Company (HU)

**Project full name and acronym:** GVOP-1.1.3.-B "Development of Services for Clusters"
**Funding authority:** Operative Program for Economic Competitiveness (Facilitating Investments)
**Projekt partnerek:** -
**Total budget:** HUF 24 million
**Duration:** 2006-2007

Main activities and results:
**Improvement of joint information technology platform and PANAC website (www.autocluster.hu).** The main objactive is to better communication between companies and the Cluster Management, in order to improve possibilities for cooperative avtivities and multiply network linkings.


A **'forum' service** was implemented in order to satisfy the information needs of enterprises, which cover essential professional topics such as: quality issues, decrease of costs, research and development. Also, a **newsletter sending function of the website** was created to satisfy information needs. To improve the emergence of international connections an **English version** has also been set up.

**Results:**

- **Improvement of Benchmarking Club**
- **Establishing Automotive Industry database**
- **Obtaining a server**





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## 16. HEFOP

**Concerned partner(s)**:

- PP3 - West-Pannon Regional Development Company (HU)

Értékünk az ember
Magyarország célba ér

**Project full name:** Automotive Academy training sequence
**Funding authority:** National Development Plan Operative Programme for Human Resources
**Project partners:** Ratipur Motor-Vehicle Parts and Installation Production and Sales Ltd. (Komló); MATECH 2000 Industrial Development and Main Contractor Ltd. (Székesfehérvár)
**Total budget:** HUF 5 million
**PANAC budget:** HUF 2,6 million
**Duration:** 2006

As a result of the project, 14 professionals acquired general knowledge of the requirements of the whole automotive verticum. The training programme consisted of consecutive modules. The main objective was to prepare and further train the staff of enterprises on the basis of detailed car plant requirements.

*Modules of the training programme:*

- Review of standard ISO/TS 16949:2002, developing process approach
- Product quality planning (APQP, VDA 4.) in the Automotive Industry, FMEA, Control Plan
- Statistic Process Control (SPC)
- Measure System Analysis (MSA, VDA 5.)
- Product Process Application (PPAP, VDA 2.)
- Quality Techniques, Global 8D method
- ISO/TS 16949:2002, VDA inner auditor training

Basics of Toyota process system, Lean Manufacturing





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## 17. "INTRODUCTION OF CLUSTER APPROACH AND THE ESTABLISHMENT OF A PILOT CLUSTER MODEL"

**Concerned partner(s)**:

- PP4 - Technical University of Gabrovo (BU)

The team of TU-Gabrovo has made some investigations and activities in BG according to the methodology of WP3.1. The main task was collecting and providing information on projects or initiatives in automotive industry in BG. During our investigation we collected information from Ministry of Economy, Energy and Tourism and visited a lot of companies, closely connected with automotive industry. Unfortunately, we did not find info about current or past projects and/or initiatives in automotive industry that are connected to the automotive industry.

However, it should be emphasized that in Bulgaria, after its admission in the EU, the creation of clusters is seen as a modern method for increasing the competitiveness of companies in global markets. The beginning was initiated by a number of suggestions, funded by the Phare and the United States Agency for International Development, in the period of 2000 - 2004 years. The official registration of groups of interconnected companies in the form of clusters in BG started with a decision of the Ministerial Council in the Spring of 2004.
The clusters creation began with the following two projects.

• Project full name and acronym: "Introduction of Cluster Approach and the establishment of a pilot cluster model" BG 2003/004-937.02.03
• Funding authority: Ministry of Economy
• Project partners: Ministry of Economy; District Administrations; Agency for Small and Medium – sized Enterprises; Association of Regional Development Agencies; Professional Branhc associations; Ministry of Finance.
• Total budget: 0,8 M EUR
• PP's budget: NA
• Duration: 2004 -2006

Project's overall objective

- To improve the competitiveness of the relevant sectors of the Bulgarian economy, by using cluster model advantages.
- To create clusters, which serve as an example of good practice in future similar projects.
- To develop a National strategy for development of clusters and Work Program for its implementation.



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## 18. "INITIATIVE OF CLUSTERS DEVELOPMENT" PHASE 2

**Concerned partner(s)**:

- PP4 - Technical University of Gabrovo (BU)

| |
|---|
| Project full name and acronym: "Initiative of clusters development" Phase 2, BG2005/017-586.04.02<br>Funding authority: Bulgarian Ministry of Economy and Energy<br>Project partners: Varna Business Agency; Granat Ltd; Tanchev & Co; Tourexpo; FIL; Varna Chamber of Tourism;<br>Total budget: EUR 600 000<br>PP's budget: NA<br>Duration: 06.2007 -02.2009 |

The project "Initiative of clusters development" Phase 2 is continuation of the project 2003/004-937.02.03 under program Phare – "Introduction of Cluster Approach and the establishment of a pilot cluster model" - and based on its results, key documents and acquired capacity. The project meets the objectives of Bulgarian National Strategy about the development of clusters during 2007-2013.

Project's overall objective

- Increasing the competitiveness of Small and Medium Companies by providing financial support for development of existing or creating clusters of Bulgarian companies.
- The deadline of the project was 28.02.2009

As a result of these initiatives 27 clusters (for the time being) were created in Bulgaria in the field of Information and communication technologies, tourism, woodworking, agricultural machinery, food processing, energy, media, laser and optics, high-tech and others but no automotive cluster still.

The next two figures summarize the available information on regional organizations and national institutions involved in clusters support (Gabrovo is situated in the center of the map).





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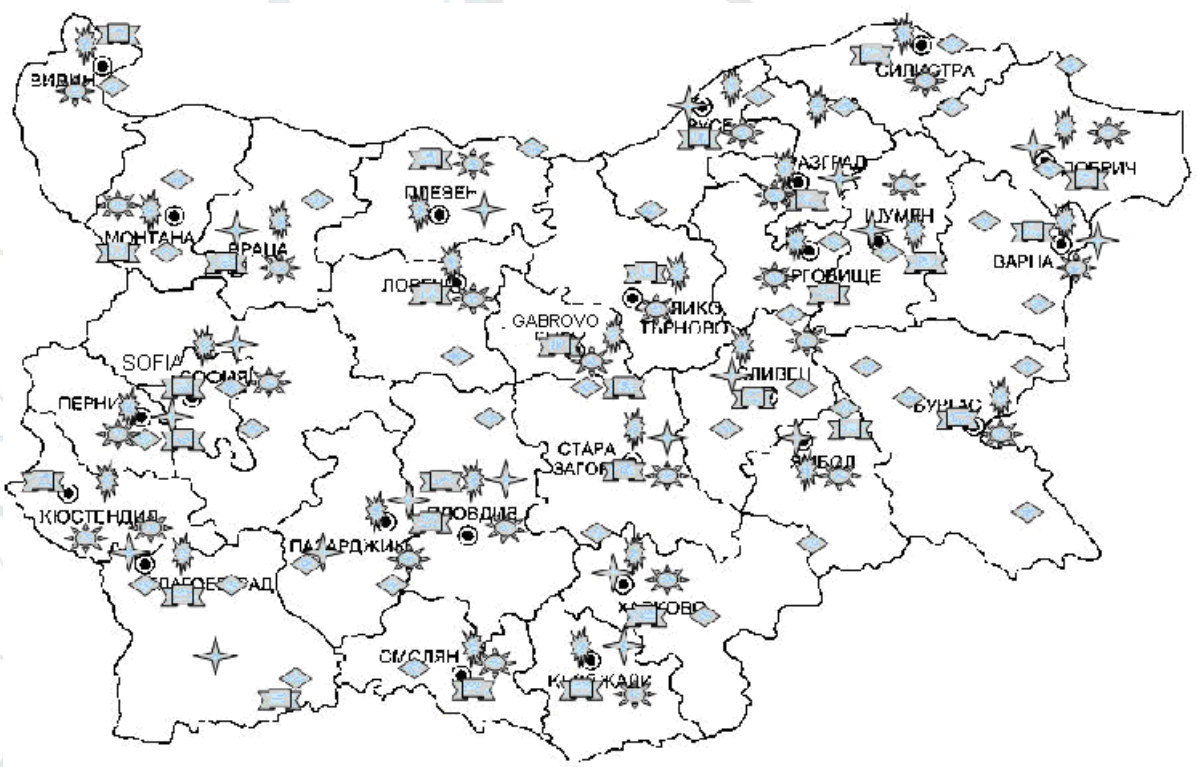
**National institutions and organizations support clusters**




- Bulgarian Small and Medium Enterprises Promotion Agency
- Bulgarian Association of Regional Development Agencies
- Jobs Centers
- Bulgarian Chamber of Commerce and Industry
- Bulgarian Industrial Association





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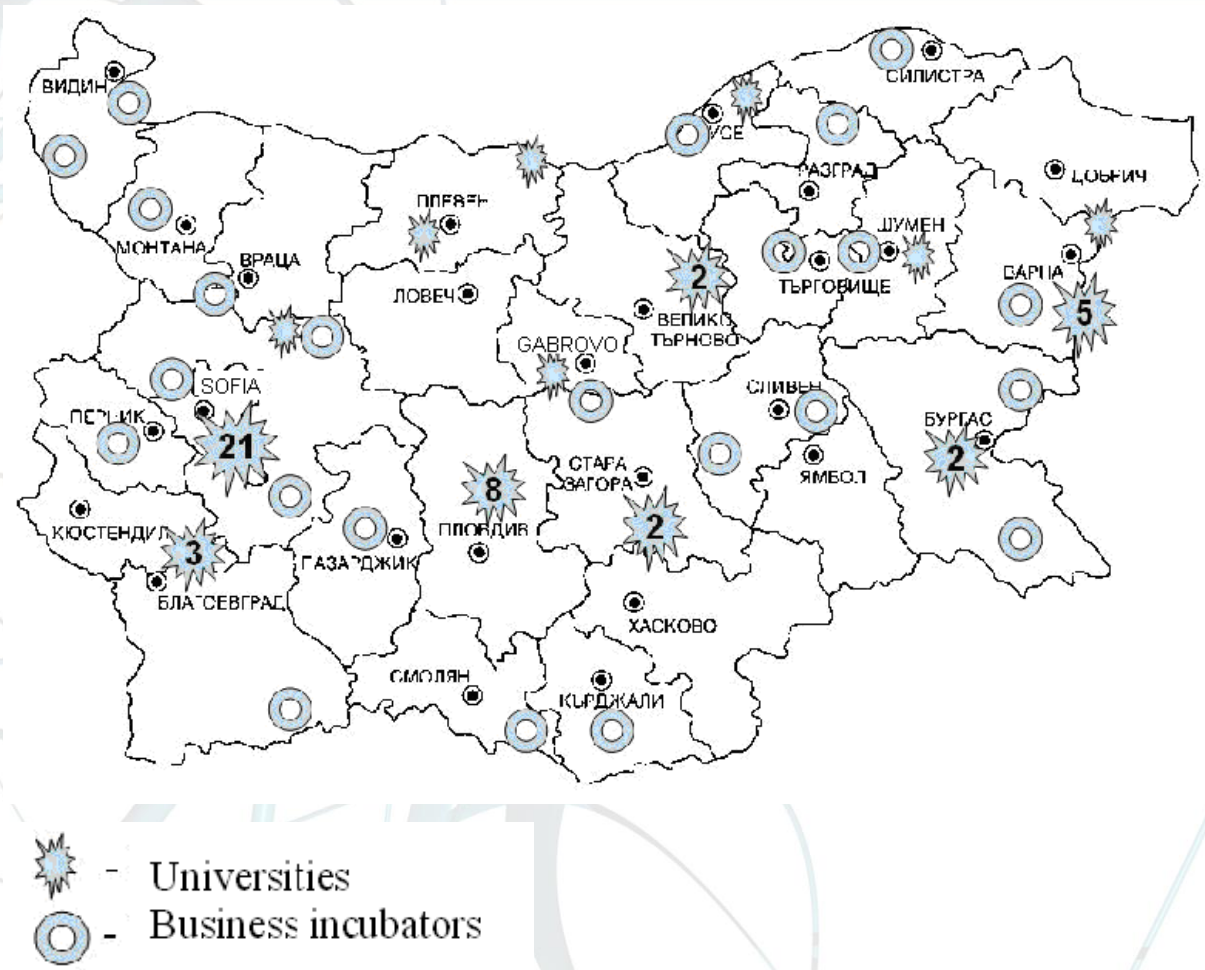


In connection with the best initiatives in the automotive education and industry is necessary to mention that in 2005 at the Technical University of Gabrovo was established degree courses in the professional trends Master in “Automotive Electronics ". The training is 3 terms and ends with the master thesis developed at the company in the field of automotive industry.

The main objective of the course is for students to gain knowledge of basic theoretical principles and practical realization of electronic systems in the vehicle and control modules. Due attention is paid to methods and means of reducing the toxicity of exhaust gases, noise and vibration in the engine. Emphasis is on diagnosis of the vehicle with BOSCH stands and stands developed in Bulgaria. In the course of training learn the basics of data transmission, communication (GPS) and interfaces found a place in automotive industry (CAN, MI Bus, D2B, etc.).

The speciality “Automotive electronic” is supported and sponsored by companies BOSCH, MeleXis and EPIQ.





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# 19. COOPERATIVE VULNERABLE ROAD USERS- WATCH-OVER

**Concerned partner(s)**:

- PP5 - Center for Research And Telecommunication Experimentation for NETworked communities (IT)

European Commission Information Society and Media
SIXTH FRAMEWORK PROGRAMME

**Project full name and acronym:**
Cooperative vulnerable road users- WATCH-OVER
**Funding authority:** co-funded by the European Commission Information Society Technologies among the initiatives of the 6th Framework Program
**Project website:** http://www.watchover-eu.org/index.html
**Project Coordinator:** Centro Ricerche Fiat, Torino Italy
**Project partners**: http://www.watchover-eu.org/consortium.html
**Project start date and duration:** January 2006, 36 Months
**Project end date:** December 2008

**Summary- vision, objectives, applications**

The goal is the design and development of a cooperative system for the prevention of accidents involving vulnerable road users in urban and extra-urban areas.
The technical challenge is the development of a cooperative system for real time detection and relative localisation of vulnerable users that includes innovative short range communication and video sensing technologies. The implementation challenge is the deployment of a reliable system that is versatile for different vehicles and vulnerable road users.
The innovative concept is represented by an on board platform and by a vulnerable user module.

**Main achievements/ or expected results- use cases**

WATCH-OVER presented two demonstrators cars on the 2008 IEEE Intelligent Vehicles Symposium (IV'08) in Eindhoven, the Netherlands.
Daimler presented the latest system for real-time vision-based pedestrian detection from a moving vehicle. The demonstration was conducted with real pedestrians on the test rack and also in real urban traffic. The University of Chemnitz provided a live demonstration of a pedestrian recognition system using a near infrared camera.
The demonstrations of the two cars gathered a wide feed-back and were closely followed by the public eye. Thus, the DAIMLER demonstrator was featured in the Dutch National TV (NOS) eight o'clock evening news as well as in several radio and TV features, e.g. Noorderlicht radio and TV, Brabant local TV and in the morning news of NOS radio.




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# 20. ADAPTIVE INTEGRATED DRIVER-VEHICLE INTERFACE – AIDE

**Concerned partner(s)**:

- PP5 - Center for Research And Telecommunication Experimentation for NETworked communities (IT)


**Project full name and acronym:** Adaptive Integrated Driver-vehicle InterfacE - AIDE
**Funding authority:** co-funded by the European Commission Information Society Technologies among the initiatives of the 6th Framework Program; The project is part of the EC's eSafety framework and the EUCAR Integrated Safety Program, and has close links to other related FP6 initiatives.
**Project website:** http://www.aide-eu.org/index.html
**Project Coordinator:** Volvo Technology Corporation Intelligent Vehicle Technologies
**Project partners:**
- Key industrial stakeholders like VTEC, CRF(IT), BMW, PSA, BOSCH
- AIDE sub-project leaders JRC, TNO and ICCS
**Project start date and duration:** March 2004, 48 Months
**The project ended successfully in April 2008**

**Summary- vision, objectives, applications**
The objectives of AIDE are:

- to maximise the efficiency, and hence the safety benefits, of advanced driver assistance systems,
- to minimise the level of workload and distraction imposed by in-vehicle information systems and nomad devices and
- to enable the potential benefits of new in-vehicle technologies and nomad devices in terms of mobility and comfort.

**Main achievements/ or expected results- use cases**
Three demonstrator vehicles have been chosen as platform for the AIDE functionalities:

- a Fiat Chroma as a luxury car,
- a Volvo FH12 as truck demonstrator and
- a Seat Leon as a city car demonstrator.

All vehicles will be able to show integrated and adaptive HMIs based on different ADAS and IVIS systems. During the final phase of the project these demonstrators will be used to generally evaluate the AIDE concept.




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## 21. CO-OPERATIVE SYSTEMS FOR INTELLIGENT ROAD SAFETY- COOPERS

**Concerned partner(s)**:

- PP5 - Center for Research And Telecommunication Experimentation for NETworked communities (IT)

European Commission Information Society and Media
SIXTH FRAMEWORK PROGRAMME

**Project full name and acronym:** CO-OPerative SystEms for Intelligent Road Safety- COOPERS
**Funding authority:** co-funded by the European Commission Information Society Technologies among the initiatives of the 6th Framework Program
**Project start date and duration:** 01 February 2006; 48 months
**Project partners:** http://www.coopers-ip.eu/index.php?id=235
**Project Coordinator:** AustriaTech - Gesellschaft des Bundes für technologiepolitische Maßnahmen GmbH
**Project website:** http://www.coopers-ip.eu/index.php?id=2

**Summary- vision, objectives, applications**

The goal of the project is the enhancement of road safety by direct and up to date traffic information communication between infrastructure and motorised vehicles on a motorway section

COOPERS provides vehicles and drivers with real time local situation based, safety related status and infrastructure status information distributed via dedicated Infrastructure to Vehicle Communication link (I2V).

**Objectives:**

- traffic jam warning and guidance
- in-car display and alert of area-specific speed limits
- lane specific, selective ban of lorries
- estimated time of arrival, based on current traffic situation on the network
- car breakdown/emergency services
- enhanced traffic management based on floating car data
- safety related information for drivers, speed and distance proposal
- data exchange between operators for international seamless service handover monitoring of transport flows and information exchange for changing demands of transport





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**Main achievements/ or expected results- use cases**

On the 29th of April 2009 AustriaTech presented a test vehicle of the COOPERS project at the informel EU minister´s of transport meeting in Litomirce, Czech Republic. The COOPERS test car was showcased in a tent in front of the conference building and for the visitors the complete system were showed and demonstrated via video sequences.


The COOPERS concept will be validated in 3 demonstration sites, which differ in their layout regarding Trans European Networks (TEN), approach to traffic information and their targeted objectives efficiency or safety. A geographical representation of the three demonstration sites can be seen in the figure.

**Demonstrator 1** North-South-Corridor from Bavaria (DE ~230km) passing through western Austria (AT ~110km) into Italy (IT ~230km).

**Demonstrator 2** The ~80km corridor from Rotterdam (NL) to Antwerp (BE).

**Demonstration Site 3** consists of the Berlin city highway A100, A111 and A113 with a total length of ~25km.

**Demonstrator 4** is located in the southwest and the northeast part of France.





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## 22. INTELLIGENT CO-OPERATIVE SYSTEMS IN CARS FOR ROAD SAFETY- I-WAY

**Concerned partner(s)**:

- PP5 - Center for Research And Telecommunication Experimentation for NETworked communities (IT)

European Commission Information Society and Media
SIXTH FRAMEWORK PROGRAMME

**Project full name and acronym:** Intelligent Co-operative Systems in cars for road safety- I-WAY
**Funding authority:** co-funded by the European Commission Information Society Technologies among the initiatives of the 6th Framework Program
**Project website:** http://www.iway-project.eu/index.aspx
Project Coordinator: Ele.Si.A. S.p.A.(I) and LOQUENDO S.p.A (I) **Project partners:** http://www.iway-project.eu/Consortium.aspx
**Project partners:** http://www.iway-project.eu/Consortium.aspx
**Project start date and duration:** 1st February 2006, 36 months

**Summary- vision, objectives, applications**

The I-Way project is strongly committed to achieve the two strategic objectives of i) increasing road safety and ii) bettering transport efficiency by achieving the following operative goals:

1. To **increase safety in road transport** by empowering the information exchange among vehicles and between vehicles and the surveillance control system and by providing vehicles with active sensors that recognize driver fatigue and act on it.
2. To **improve traffic management control** by providing vehicles with on car sensors that recognize weather conditions, distance from various types of obstacle on the road, including automobiles, the road shape and the driver fatigue.
3. To **make transport more efficient and effective** by supporting drivers with warnings and suggestions (i.e. traffic and accident alert, distance alert from objects, warning of lane deviations, warning for driver sleepiness) thanks to an intelligent decision support system and an intelligent driving control system that monitors, collects and manages information and communication for the driver.
4. To **make voyages more friendly and comfortable** for drivers and passengers that, are endowed with a large amount of information about weather conditions and road traffic, have the chance to vary their route as well as their destination for better trip.

**Main achievements/ or expected results- use cases**

I-Way platform integrates several independent sub-systems that work in with, so as to provide the whole I-Way functionality. It is composed of the in-vehicle subsystem and the external transport system.

The in-vehicle subsystem consists of the following modules which are located in the interior of the vehicles:

1. **The vehicle sensing module**. It is responsible for the acquisition, processing and analysis of raw data coming from the on-board sensors.



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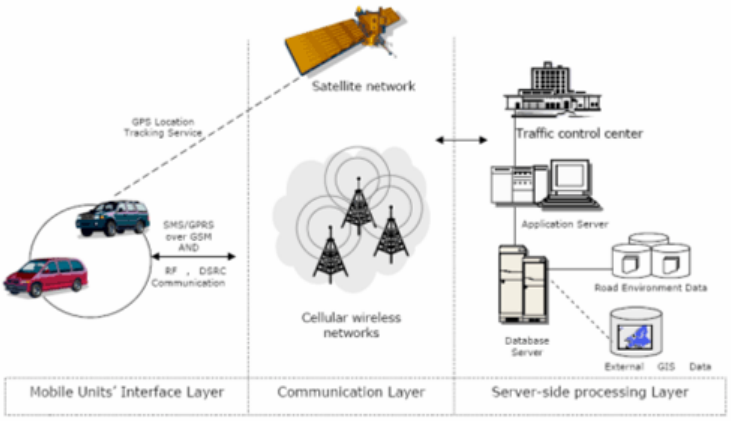
2. **The data acquisition module.** It is responsible for the aggregation, combination and correlation of acquired information provided by the vehicle sensing module and by external sources.
3. **The mobile interfaces of the vehicle**. Through vocal and graphic interfaces drivers input and receive significant information regarding accurate traffic jam estimations, weather conditions, the road shape, speed and distance from a vehicle travelling ahead etc.
4. **The situation assessment module**. its purpose is to provide estimation of the road situation based on prior knowledge and incoming transient information.
5. **The communication module** which handles the real-time exchange of data among the vehicles with each other and between a specific vehicle and the Road Management system.

The External Transport System which includes:

1. The **Roadside equipment** which is responsible for data acquisition referring to the road environment in locations where vehicles cannot precisely recognize dangerous conditions.
2. The **Road Management System** including an application and a database server which holds and manages the real-time road information.





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# 23. FIELD OPERATIONAL TEST SUPPORT ACTION- FESTA

**Concerned partner(s)**:

- PP5 - Center for Research And Telecommunication Experimentation for NETworked communities (IT)

European Commission Information Society and Media
SEVENTH FRAMEWORK PROGRAMME

**Project full name and acronym: F**ield op**E**rational te**S**t suppor**T** **A**ction- FESTA
**Funding authority:** Funded under 7th FWP (Seventh Framework Programme)
**Project website:** http://www.its.leeds.ac.uk/festa/about_us.php
**Project Coordinator:** Centro Ricerche Fiat S.C.p.A., Italy
**Project partners**: INFOBLU SPA, Italy
**Full list of partners**: http://www.its.leeds.ac.uk/festa/consortium.php
**Project start date and duration:** 05/11/2007; 6 months

**Summary- vision, objectives, applications**

The FESTA Support Action is a vital step in the realisation of scientifically robust and efficiently run Field Operational Tests which aim to evaluate key ICT functions. A consortium of European experts with a wide range of skills has been formed to allow the development of a 'best-practise' handbook which will guide the design and implementation of an FOT. The consortium involves the participation of academic institutes and national research laboratories, vehicle manufacturers and system providers, along with representatives of national road authorities.

This allows the dovetailing of scientific integrity and practical considerations. This Support Action will consider the whole lifecycle of an FOT, from the analysis of stakeholders' needs, the choice of behavioural and other (performance and individual) indicators, the methods by which they are measured (data acquisition), and analysed, reported and integrated and legal, ethical and procedural considerations. In addition, a whole range of ICT functions will be considered, ranging from vehicle systems (e.g. collision warning systems), cooperative systems (e.g. traffic management systems) and nomadic devices such as driver information systems.

Running alongside the standard management functions, will be the development of two key workshops to involve wider participation of stakeholders. They will provide the opportunity to undertake needs analyses and dissemination activities. The potential for exploitation of the results and outputs of the FESTA Support Action are high, given the specific EC call for FOTs in the near future.

**Main achievements/ or expected results- use cases**

The documents and handbook developed by FESTA project are downloadable here: http://www.its.leeds.ac.uk/festa/downloads.php





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# 24. PTC

**Concerned partner(s)**:

- PP7 - Business interest association ACS, Automotive Cluster of Slovenia (SLO)

**Project full name and acronym:**
Polycentric technological centre as an international innovatory system of the Slovene automotive supply industry, PTC
**Funding authority:**
Ministry of Economic Affairs (Republic of Slovenia)
**Project partners:**
Automotive Cluster of Slovenia, CIMOS d.d., HIDRIA AET d.o.o., EMO-ORODJARNA d.o.o., ISKRA ISD Plast d.o.o., ISKRA ISD Strugarstvo d.o.o., ISKRA ISD Galvanika d.o.o., ISKRA MEHANIZMI d.d., ISKRA AVTOELEKTRIKA d.d., KOLEKTROR LIV d.o.o., TPV d.d., University of Ljubljana – Faculty of Mechanical Engineering, University of Ljubljana – Faculty of Natural Sciences and Engineering, University of Maribor – Faculty of Electrical Engineering and Computer Science
**Total budget:** 7 million €
**PP's budget:** 100.000,00 €
**Duration:** 1.10. 2005 - 31.03.2007

After the ACS had been formed, it successfully went through the phases of initial activities and development, so that it has now entered the phase of growth. The main features of this phase are deepening of the co-operation between members, the increase of the number of members which results in the extension of the potential knowledge that is to come into effect in the international environment.

The cluster wishes to direct its way of development into the polycentric technological centre as a regional innovatory system, and in this way establish co-operation in the field of innovatory activities between the companies and other institutions which are involved in development and spreading of new knowledge. These organisations, apart from having important competence, invest in training of their employees, as well as provide the necessary financial and other support for innovations.

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

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


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

Automotive industry with its requirements has a strong influence on all three spheres – economic, academic and governmental. In recent years merging and takeovers have become processes, typical of automotive industry which in the terms of a long-term development means the decrease of number of automotive producers and the survival of only a few of them that will dominate the whole world automotive market. Due to the altered function of suppliers more and more competence is being transferred from the automotive producers to suppliers. In the next five years automotive suppliers plan to reduce their research and development by almost a third which means that the majority of important innovations in the future will become system suppliers' responsibility. This definitely requires new business forms and new cooperation quality that is displayed in transparency, trust, partnership and division of opportunities and risks. Big investments into development and the planned development of the culture of inventiveness and innovation are characteristic of Slovenian automotive industry and this is one of the reasons that the best Slovenian automotive companies have managed to anchor themselves in market niches that they cover. By investing in research, development, inventiveness and innovation they are reinforcing their own competition and they emphasise especially quality labour force, abilities to adjust and respond. After having been established and having gone through the phase of initial activities and the phase of development, ACS has entered the phase of growth the characteristics of which are even more intense cooperation between the members, the increase of number of members and in this way the increase of the potential knowledge and competence base. Network connection on the knowledge and competence level can be understood as a new dimension of forming ACS. Side by side with the internal network connection also the network connection with external partners is becoming more and more important. The project "Polycentric technological centre as an international innovative system of Slovenian automotive supply industry" was started as a result of a realisation that only by mutual investments can the position of Slovenian automotive suppliers be improved as well as the cooperation between the economic and academic sphere.

Automotive production is one of the most important processing industries in EU since it creates three quarters of all the added value. Also on the world scale it is seen as one of the most important industrial branches that has an important influence on the whole of the national economy in a certain state. This industry has a long tradition, great economic power and reputation. In the economic sphere this influence is not only reflected directly on automotive producers and their suppliers and sub-suppliers, but also on other branches of industry; electronics, production and distribution of oil derivatives, etc. In the academic sphere there is an important influence on basic and applicative research which is not only a consequence of a competition fight but also a consequence of increasing requirements in the field of ensuring security and environment protection. In addition to this there is also a technological development and power of innovation as key factors in automotive industry. In the governmental sphere automotive industry is often subject to state measures, protection and acceleration of its development. Thus, automotive industry is no more a "classical" industrial production. We can talk about an industry that exploits connections and advantages of a new



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"social environment" which means that it is no longer run by only work and capital but a new production factor – knowledge.

The competition forces automotive manufacturers to produce faster, better and cheaper. In recent years merging and takeovers have become processes, typical of automotive industry which in the terms of a long-term development means the decrease of number of automotive producers and the survival of only a few of the strongest ones that will dominate the whole world automotive market (the five biggest producers create a half of the income of the branch. By merging producers successfully lower the costs of development, exchange the experience and they successfully unify components and mutual platforms for individual models that can despite of this externally entirely differ one from another. The same competition pressure is reflected on the producers of automotive parts.

All of this influences the form and activity of "supply chains" that is shown in changed cooperation between automotive producers and automotive parts producers. Due to the altered function of suppliers more and more competence is transferred from automotive producers to suppliers which requires new business forms and new cooperation quality that is shown in transparency, trust and partnership as well as division of opportunities and risks. Combining competence and the unification of knowledge "base" is of key significance in this process.





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# 25. AUTO IN

**Concerned partner(s)**:

- PP7 - Business interest association ACS, Automotive Cluster of Slovenia (SLO)

**Project full name and acronym:**
Boost Automotive SMEs participation in FP7, AUTO-IN
**Funding authority:**
European Commission (FP7)
**Project partners:**
Fundacion centro de investigacion y desarrolo en automomocion (Spain), Asociatia Producatorilor si Importatorilor de Automobile (Romania), Automotive Cluster of Slovenia (Slovenia), Social and Economic Development Centre (Litvania), Institute of Fundamental Technological Research – Polish Academy of Sciences (Poland).
**Total budget:** 245.278,00 €
**PP's budget:** 34.514,00 €
**Duration:** 1.5.2006 - 30.4.2007

The automotive industry, in Europe is responsible for about 10 million jobs (direct and indirect) and one out of ten European automotive workers lives in the new Member States. Although the automotive production of the new Member States occupies a rather small share in the overall European production, at national level this industry is a major driver of the economy in those new Member States In Europe 99% of the enterprises are SMEs and in particularly the automotive Industry is characterised by a high number of small and medium sized companies spread by the whole continent as component suppliers for the large internationally owned manufacturers. However, due to structural shifts in the automotive industry, the need for R&D investment for those small and medium sized suppliers has increased markedly. This initiative aims to increment the Research and Innovation potential in automotive SMEs, mainly from the New Member States and Candidate Countries by providing to no-profit organizations from those countries, instruments to assist the SMEs to take advantage of the European Research opportunities to carry on their Research and Innovation projects. This Specific Support Action will be designed and implemented within a time scale of 12 months and it will cover the period of the final definition of the FP7, the opening of the first calls (foreseen to November 2006) and most probably it will cover also the closing of the first calls (March/April 2007). This timing is very suitable for the project objective as it will provide support to the SMEs in a moment where the information about new rules, definitions, instruments, priorities, contract models and Technology Platforms will be defined and available. The activities result in fruitful co-operation in RTD between New, Old and Future member States and stimulate generation of innovative projects in the field of Surface Transport.

AUTO-IN–"Boost Automotive SMEs Participation in FP7" is a Specific Support Action funded by the European Commission within the VII framework programme for RTD. AUTOIN project is articulated around a network of 5 clusters, created from a technological need. The project is coordinated by CIDAUT (Spain) and counts whit the collaboration of the following partners:


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**APIA (Rumania)**
**ACS (Slovenia)**
**SPEC(Lithuania)**
**IFTR (Poland)**

The project AUTO-IN (Boost Automotive SMEs Participation in FP7) is a Specific Support Action (SSA) funded by the European Commission within the 6th Framework Programme and will be implemented within a time scale of 12 months, from May 2006 until April 2007.
This initiative aims to increment the Research and Innovation potential in automotive SMEs, by providing instruments to the SMEs to take advantage of the European Research opportunities to carry on their Research and Innovation projects.

The proposed activities of the AUTO-IN project focus on a specific support to SMEs and will result in fruitful co-operation in RTD between New, Old and Future member States and stimulate generation of innovative projects in the field of Surface Transport.

A first stage of the project consisted in an overview of the automotive sector and in the identification of its research priorities. The result of this study can be downloaded from the project webpage as well as a support document to assist in the realization of innovation Audits and in Clusters organizations. Several innovation audits have been already done in all participating countries in selected SMEs in order to identify their research/technology needs Future actions include support activities for the automotive SMEs as: Support in the creation of international clusters gathering together stakeholders from the automotive sector, capitalization of their synergies for developing RTD and innovation proposals.

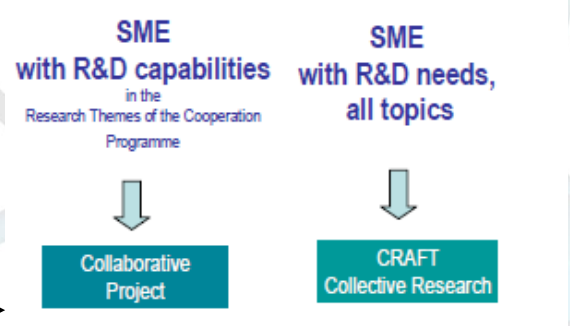
On the first months of 2007, other document related with EC research funding sources for the automotive sector will be available as well as a manual to assist SMEs in its participation in FP7 will be published in the project website and presented in the AUTO-IN International event to be organized in Poland on the 1st and 2nd March 2007.

Not only are the top technology pioneers (3% of all SMEs) important. Most industrial innovation happens and is needed most at technology adopting and leading technology users (30 % of SMEs).

Across all the Research themes of the Cooperation Programme, SMEs can participate in the Collaborative projects. Under the Cooperation heading it is foreseen that at least 15% should be assigned to SMEs.

Within the Capacities Programme, Specific actions to support SMEs will be carried out in the entire field of science and technology, with financial means allocated through two schemes Research for SMEs (CRAFT) and Research for SME associations.

SME participation in a FP7 Project →





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# 26. SENAI

**Concerned partner(s)**:

- PP7 - Business interest association ACS, Automotive Cluster of Slovenia (SLO)
- PP9 - Automotive Cluster Serbia (Serbia)

**Project full name and acronym:**
South-East-European Network of Automotive Industry, SENAI
**Funding authority:**
Austrian Research Promotion Agency
**Project partners:**
**Austrian partners:** ACstyria Autocluster GmbH, Fuchshofer CAM-CNC Präzisionstechnik GmbH, UseNet Software GmbH & Co KG, Bernhard Paugger Werkzeug- und Entgratungstechnik GmbH & Co KG
**Slovenian partners:** Automotive Cluster of Slovenia, CNC P&K d.o.o., ULBRICH HIDROAVTOMATIKA d.o.o, HYDROSERVIS Andrej Srajner s.p.,
**Croatian partners:** Croatian Chamber of Economy, AD PLASTIK d.d., METAL PRODUCT d.o.o.
**Serbian partners:** Autoklaster Srbije (Automotive Cluster of Serbia), Trayal GTR, JUCIT INVEST Kragujevac d.o.o., DP Zastava PES Surdulica
**Total budget:** 150.00,00 €
**PP's budget:** 8.170,00 €
**Duration:** 1.1.2005 - 15.12.2007

The Network-Project „SENAI – South-East-European Network of Automotive Industry" was handed in from the ACstyria Autocluster GmbH in cooperation with fourteen partners from Austria, Slovenia, Croatia and Serbia at the Austrian Research Promotion Agency.

**Austrian partners:**

- Fuchshofer CAM-CNC Präzisionstechnik GmbH
- UseNet Software GmbH & Co KG
- Bernhard Paugger Werkzeug- und Entgratungstechnik GmbH & Co KG

**Slovenian partners:**

- Slovenski avtomobilski grozd (Automotive Cluster of Slovenia)
- CNC P&K d.o.o.
- ULBRICH HIDROAVTOMATIKA d.o.o
- HYDROSERVIS Andrej Srajner s.p.

**Croatian partners:**

- Croatian Chamber of Economy
- AD PLASTIK d.d.


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- METAL PRODUCT d.o.o.

**Serbian partners:**

- Autoklaster Srbije (Automotive Cluster of Serbia)
- Trayal GTR
- JUCIT INVEST Kragujevac d.o.o.
- DP Zastava PES Surdulica

The main aim of the project was to establish a sustainable, cross-border automotive network, in order to strengthen the south-east-European automotive region and to develop a counterbalance to growing the market in China.

Therefore was necessary to build up an information-, communication- and cooperationplatform, which encourages Austrian companies and companies of the South-East-European countries (particularly the partners of the ACstyria Autocluster GmbH) to get all the information they need to open up new markets.

In order to optimize the quality of the information was necessary to install information managers in the South-East-European countries. These contact persons make sure that all the information is complete and up to date.

The information-managers are working in the range of the sub-clusters and they were the direct contacts for the ACstyria Autocluster GmbH, who took over the role of the systemintegrator and the coordinator.

The most important thing was establish a network of face-to-face contacts through the cooperation- and one-on-one-business-meetings to initiate potential cooperation and business relations, because everyone should be aware that “competitors are stronger together”.

Besides these main aims the following operational objectives were important as well:

- Elimination of cross-cultural barriers
- Mutual knowledge and understanding of people with many different social
- backgrounds and preferences
- Basic data collection
- Establishment of a data pool, available to all partners network partners
- Needs collection of small and medium Austrian enterprises in terms of strategic
- purchasing
- Survey of the sourcing needs of small and medium Austrian enterprises
- Creation of information point in the partners countries
- Development of bilateral cooperation forms
- Motivation, initiation and coordination of cooperative projects
- Know-how transfer and education

As part of the Project coordination, contents, objectives, tasks and obligations were set and achievements continuously controlled. This was necessary to carry out management team meetings in order to represent progress, exchange new ideas, know how,…



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One of the main areas in the network project "SENAI - South-East-European Network of Automotive Industry "is the collaboration and contact management. In the first step of the organization of the cooperative meetings, general contacts and information between ACstyria Autocluster GmbH and companies from MOE-countries were exchanged. That was also an overview of the corporate structure in the respective countries. Focus was on learning about new unfamiliar cultures and the reduction and overcoming of barriers.

The role of the ACstyria Autocluster GmbH lies primarily in communicating, motivating, initiating and in the concrete support of partner companies in searching for new partners and markets in different areas (technology, Training, etc.). Only then, can the further consequence of a technology or knowledge become possible. Initial contacts were intensified in the one-onone meetings between Austrian companies and companies from the CEE countries to start concrete cooperation and projects, and so increase the value of the total economic region.

To the entire region of Austria, Slovenia, Croatia and Serbia – named as EUROPEAN AUTOMOTIVE REGION par excellence, platforms must had been set up in the form of clusters, whose task is to gather targeted information on each country to concentrate and keep updated. This step was omitted in Slovenia, as with the existing Automotive Cluster of Slovenia there was already established a well-functioning organization. Respondents, socalled information managers, were used for an active information transfer between the ACstyria and the respective CEE countries. They were responsible for a rapid and smooth communication.





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# 27. NEAC

**Concerned partner(s)**:

- PP7 - Business interest association ACS, Automotive Cluster of Slovenia (SLO)

**Project full name and acronym:**
**Network of European Automotive Competence**, NEAC
**Funding authority:**
European Commission (INTEREG IIC)
**Project partners:**
Accelerate (GB), Welsh Automotive Forum (GB), Univerza v Ljubljani - Fakulteta za strojništvo (SLO), Landkreis Chemnitzer Land, Wirtschaftsregion Chemnitz-Zwickau (D), WARR Wroclawska Agencja Rozwoju Regionalnego S.A. (PL), IMPIVA, Instituto de la Pequeba y Mediana Industria Valenciana (S), Ministerium für Wissenschaft und Forschung des Landes Nordrhein-Westfalen (D), Conseil Regional de Lorraine (F), Ministerium für Wirtschaft und Arbeit des Landes Sachsen Anhalt (D), ASTER, Area della ricera CNR di Bologna (I), Ministerstvo ERIM, Samarskoi Oblasti (Russia).
**Total budget:** 1,9 mio €
**PP's budget:** 150.000,00 €
**Duration:** 1.1.2005- 31.12.2007

In an increasingly global and competitive market, the automotive industry faces an ongoing battle to adapt its technology to changing needs. This applies to suppliers as well as to system and vehicle producers. Regional SMEs (small to medium-sized enterprises) belonging to the auto-supply chain have looked for ways to overcome these challenges. For many regions, the establishment of clusters focusing on specific fields of competence have proven to be a useful tool, providing an interface between regional development strategies and key economic players. Until now these efforts have been mostly region specific. There has been little in the way of an interregional strategy at the European level which could help European automotive regions to work together to increase their global competitiveness.

The project intends to provide a platform to help automotive regions understand the competences and excellence of their own supply base within the context of the EU. By creating joint approaches and instruments, NEAC wants to improve regional and European competitiveness of the automotive supply industry.

**Phase One**
It was agreed that NEAC should carry out baseline analysis of what initiatives each of the partner regions has in place to support their Automotive Clusters. This would include 4 main areas, i.e. Innovation, Technical Skills, Competences and Regional tools. An outcome of this analysis is the production of a "Competences Map of Automotive Clusters" from a significant number of EU regions, both from the new member states and from the previous 15 member states. The Map will become a tool, which can be used to support future action within Automotive Clusters and is sustainable.


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In carrying out this important piece of work, it was agreed that a standard tool and methodology would be developed and used to gather this information, which will enable the comparison of regions on a "like for like" basis.

It is anticipated that the above work will inform NEAC partners of policies at regional level, which can then be used to inform relevant regional, national and EU level policy makers.

A key consideration for NEAC is to measure the impact on investment made by SME's, by regional, by national and by EU level support tools.

A matrix will be developed and populated of the activity that takes place in partner regions. The matrix will be used to compare activities supporting the Automotive Clusters. The comparison will be both quantitative and qualitative.

A major issue to be considered and planned for is what resource will be required to carry out the above activity and indeed, how that resource will be identified and engaged.

It is important to agree and adhere to regional timescales in terms of gathering the information. A suggestion of approximately 3 weeks per region was put forward. In order for the information gathering to be effective and efficient, all relevant actors and decision makers should be made aware and relevant "doors opened".

One of the key decisions to be agreed upon is the methodology to be adopted, the work plan, its structure and timing.

Partners should be using the opportunity provided by NEAC to network and discuss new project ideas.

At the Launch event, a thorough briefing will be provided on the above work programme. It was considered that a "hands on" approach would provide the best results of the information gathering for the baseline analysis, i.e. support will be provided to regional information gatherers. A key outcome of the above will be a better understanding of the policies applied to different regions and it is expected that the "best" of these policies will be shared at a conference.

The research start is scheduled for June 2005 at the Project launch event in Birmingham. The first phase should be completed by December 2005, the results of the first phase to be disseminated at a Public policy Conference in Slovenia in Spring 2006 (probably March). It is planned that this event will be in two parts, part one for the Public Policy Conference and part two, for a "Showcase" event, which will include a marketplace element, facilitating the opportunity for SME's to network from across the regions.

**Phase Two**

Phase two is mostly concerned with Benchmarking SME's from each region. The number of SME's that will participate is to be decided, however, a figure of 50 SME's per region is thought to be the minimum. This phase will be launched at the Public Policy Conference referred to above, i.e. Spring 2006.



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The results of this piece of work will be presented at a Conference in the Autumn 2006, probably October or November. Trained providers will carry out the Benchmarking.

A number of individuals in each region will "Counselled" by trained providers to carry out the Benchmarking activity. This is a sustainable outcome that the regions can benefit from after the project has concluded. The results will be entered onto a central analysis tool via the WWW (the precise web site to be decided). Examples of potential tools include (www.autoregions.com; www.autoindustry.co.uk; www.carnet.com; www.wafs.ws; www.accelerate.uk.net; www.acs-giz.si)

Each participating SME in a given region will be provided with a report comparing their performance with other SME's in their region. This is a sustainable outcome, which can continue to benefit partner regions after NEAC project has concluded.

Another practical application of this piece of work is the comparison between NEAC partner regions on competitiveness of SME's. A report on competitiveness will be presented in March 2007.

As part of this exercise, it important to include if and how regions transfer technology between centres of Technology Development and Industry, how it is done, who does it, what are the key performance indicators, how success is measured and what the focus is.

Research may also need to be carried out into future market opportunities and conditions within the EU and outside of the EU.

**Phase Three**
Phase three is mainly concerned with evaluation of the results of the activity carried out in Phases one and two. The results of the evaluation will then be disseminated to the regions fed through to national and EU level policy makers.

It is anticipated that a number of mechanisms and tools will be utilised to encourage networking activity, including:

- Networking – at conferences and other cross regional activity opportunities
- E-portal
- EU Cluster
- Web based tool
- Sustainability
- Video conferencing
- Steering Group Meetings regular
- Newsletter e-copy/hard copy from working groups
- "Travelling exhibition"

**Phase Four**
Key reports to Commission, Clusters and Cluster companies

**Key deliverables**

- EU Competence matrix, which will include: - Tools utilised; Regional Policies applied/Skills mix and identify gaps/Innovation



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- Benchmarking Report
- Regional evaluation and EU wide evaluation
- Individual SME's evaluation with other SME's their regions and with SME's across
- NEAC Partner regions
- Regions get methodology
- Training module
- The research and analysis activity can be carried on after conclusion of project, i.e. it is sustainable
- Regional strategies can be drawn
- EU strategies can be drawn
- Draw competitiveness agenda at mid term perspective – Lisbon Agenda
- Global context/view
- Portal Sustainability
- Travelling exhibition – raising profile to EU automotive competences
- Networking Management
- PR
- Objective 1 region supported to showcase their "wares".

The partnership brings together local and regional actors in a network which is recognised as a stakeholder at the European level. NEAC is creating a standard methodology which all the partners can use to self-monitor their own competences and competitivity. The NEAC framework enables regions to work together to have a full understanding of the diversity and distribution of automotive competence. Furthermore, NEAC encourages the joint development of new tools and new approaches.

The network keeps beneficiaries informed and raises awareness of the potential of European automotive regions. For the regions themselves, being part of a network allows them better access to European programmes, improved knowledge of regional support policies and the opportunity to influence the next generation of EU Structural Fund programmes.

**Achievements so far**

NEAC started in Jan 05 and completed Dec 07 and it has achieved specific results and strategy recommendations for the European Automotive Sector. The three content related components have been completed. By mid 2006 component 2 'Competence Assessment' was completed and by 30th. June 2007 component 3 'Competitiveness Assessment' was finished. The results of C2 and C3 have been the input indicators for component 4 'Competitiveness Agendas'. Component 4 was finalised on target in Nov 07. NEAC has drawn conclusions, formulated recommendations, strategy and policies which will enhance the strength and competitiveness of the automotive supply base in Europe. A system has been developed to assure the sustainability of the results of C4. In this system also the need to find solutions for 'future skills' and 'alternative fuels', two hot issues for the automotive industry, are included. All partners have recognised the value in participating in the project and that this is a1st step towards future collaboration through the pan-European network, EASN. The need for collaboration has been recognised, not only by the NEAC partners but also by the other identified automotive related EU projects (Belcar, TCAS, Automotive Regions and ICARO). The work towards EASN has started and in the future, the partners will work within this



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framework on collaborative initiatives. Even though NEAC has completed its planned activity, through the final report and the website, which will be maintained in 2008, the link between NEAC and EASN will be elaborated and strengthened. The results of the final report will be used as a foundation for developing on-going activity to support the NEAC partners, other EASN project partners and those regions not involved so far.





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## 28. TCAS - TRANSNATIONAL CLUSTERING IN THE AUTOMOTIVE SECTOR

**Concerned partner(s)**:

- PP7 - Business interest association ACS, Automotive Cluster of Slovenia (SLO)

**Project full name and acronym:**
Transnational Clustering in the Automotive Sector, TCAS
**Funding authority:**
European Commission (FP6)
**Project partners:**
Hessen Agentur GmbH (D), Automotive Cluster RheinMainNeckar (D), Mobility Industry NordHessen Network e.V. (D), Wielkopolska Agencja Rozwoju (PL) , GIZ ACS (SLO), Institut de Recherche en Systemes, Electroniques Embarques (F), Birmingham Chamber of Commerce and Industry (GB), Automotive Technology Centre (NL)
**Total budget:** 987.700,00 €
**PP's budget:** 110.000,00 €
**Duration:** 1.10. 2005 - 24.07.2008

**Action Line:** INNOVATION-2004-1.2.1.3 Entrepreneurial innovation and clusters, INNOVATION Research and Innovation

**Coordinator:**
HA HESSEN AGENTUR GMBH, TIB - TECHNOLOGIE, INNOVATION, BILDUNG, Abraham-Lincoln-Strasse 38-42 GERMANY

The EU-project TCAS – „Transnational Clustering in the Automotive Sector" is a consortium of seven leading European Automotive Clusters, which is funded by the European Union in the 6th Framework Programme by a total sum of 1 Mio EUR. In the competition procedure the successful proposal of the project consortium coordinated by the HA Hessen Agentur, could prevail over more than 100 competitors from all over Europe. On the Hessian side there is involved besides the HA Hessen Agentur the Regional Management´s network for the mobility industry in Nordhessen and the Automotive Cluster RheinMainNeckar. The participation of three Hessian partners in a European consortium project is considered remarkable. The additional participation of the Hessian partner region Wielkopolska (Polen) strengthens the close political co-operation on a European basis and deepens economical relations. Further European project partners are the Automotive Technology Centre Netherlands (ATC), a French research- and development-network in the region Haute Normandie, the British leading Automotive Region West-Midlands and the Automotive Cluster Slovenia.

**Project description:**
The proposed coordination action will run over a period of 30 months. The focus is on transnational clustering in the automotive sector, where clusters have proved a successful framework for suppliers to respond to high cost and innovation pressure. Clusters differ, however, in various dimensions, i.e. in terms of their institutional set-up, their management,


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their goals, their instruments, their member services, their financing, their partner structure, etc. In order to develop a best practice strategy on automotive clustering, which takes into account the existing differences, the project consortium includes some of the most advanced and successful European automotive clusters.
It is intended to facilitate the exchange of experiences and best practice among the clusters, thus strengthening their performance - in terms of internationalisation, institutional development and benchmarking - and creating a transnational cooperation platform. It is also planned to share organizational know-how on how to build up successful clusters with the less advanced participant regions from the new member states. Making use of the experiences of the other clusters and drawing upon their expertise, Wielkopolska is developing a regional strategy to built up an automotive cluster with implications for regions in other new member states.

At the same time, direct and tangible benefits for the involved cluster enterprises will be produced through opening up new European business perspectives. Over a period of 22 months, visits to all participating cluster regions will be organized. The visiting scheme is addressed both to cluster enterprises seeking international business contacts as to cluster managers exchanging experiences and best practice. Each regional showcase event will include visits to selected enterprises, thematic workshops, the arrangement of a cooperation partner exchange and best-practice workshops.

With more than 2 million people employed on the manufacture of motor vehicles and trailers, the automotive industry is a vital part of the European economy. If jobs in related industries are included, then employment in the industry in Europe reaches over 12 million.

The industry is presently undergoing a period of turbulence marked by increasing global competition. Since the early 1990s the supply chain has experienced far-reaching transformations. In the face of increasing costs, European car manufacturers are passing on more and more responsibility to the supply industry, and transferring cost and innovation pressures down the supply chain. These pressures are particularly severe at the lower tier levels of component and parts suppliers, as these companies often lack the resources needed to innovate.

Clusters in the automotive sector have proved to be a successful framework for suppliers to respond to high costs and innovation pressures.

The aim of this project is the promotion of the exchanges between the participating partners as through mutual business visits and cooperation markets as well as through the organisation by the cluster manager´s exchange of experiences. The business members of each cluster are supported by the build up of contacts to cooperation partners to the participated European Clusters. Further goals of this project is the formulation of a “best-pratice” strategy for developing and advancement of competence networks in the Automotive Sector as well as the deduction of concrete arrangements by which it is effective possible to support competence networks on a regional and European level. In the framework of the Europe Innova Conference in November 2006 the project TCAS and the related project belCAR were awarded as „Network of the year 2006“ by the European Commission (DG Enterprise & Industry). In the future the co-operation between all EU-funded networks on an European level will be intensified. The focus of TCAS is on facilitating exchange of experience and best



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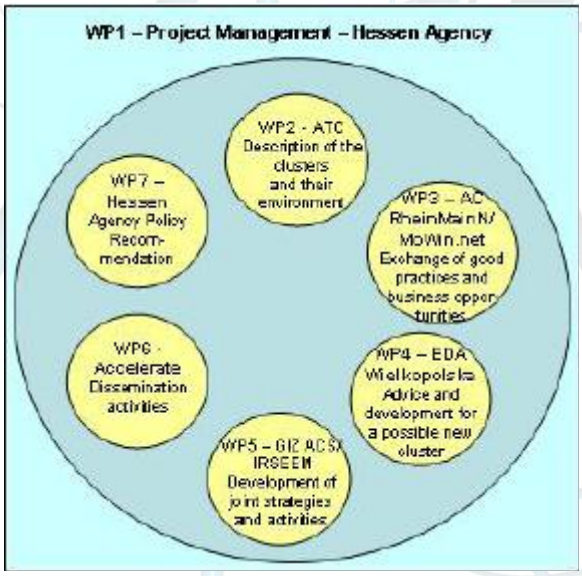
practice among European automotive clusters in order to strengthen their performance, create a transnational cooperation platform and opening up new European business perspectives for cluster enterprises.

The project has 5 specific objectives:

- To exchange experience and best-practice among advanced automotive clusters.
- To develop a best-practice strategy and policy recommendations on clustering in the automotive sector.
- To transfer know-how in order to build-up and manage clusters in the less advanced regions of the New Member States.
- To promote co-operation between the participant clusters and to form a stable cooperation platform.
- To open up new European business perspectives to participant cluster companies.

To develop a best practice strategy on automotive clustering and take account of existing differences, the project includes some of the most advanced and successful European automotive clusters, which will facilitate the exchange of experience and best practice.

The work plan comprises 8 interlinked work packages. Each work package was the responsibility of one of the project partners:




- WP1 aims to construct a framework for the project and provide the necessary project management to ensure that the project is completed on time and within budget.
- WP2 involves a comprehensive description of each participant cluster contributing to the development of a best-practice strategy and providing a basis for policy recommendations.
- WP3 will implement a business cluster visiting scheme.
- WP4 will prepare an action plan for automotive cluster formation in Wielkopolska and provide generalised guidelines for institutions involved in cluster formation in the new EU member states.
- WP5 will oversee the development of bi- or multilateral innovative strategies or projects between participant clusters.



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- WP6 will ensure the exploitation and dissemination of results in parallel with the cluster visiting scheme.
- WP7 will develop best-practice strategy on the establishment, structure, organisation and management of an automotive business cluster including analysis of the benefits and pitfalls of clustering, as well as the formulation of policy recommendations and lessons learnt.





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# III. CURRENT INITIATIVES

## 1. AC CENTROPE - CROSS-BORDER COOPERATION AUSTRIA – SLOVAKIA

**Concerned partner(s)**:

- LP - Automotive Cluster – West Slovakia (SK)
- PP6 - Slovak Technical University (SK)

| | |
|---|---|
| Project full name and acronym | Automotive Cluster Centrope – Continuation of cross-border cooperation between ACVR, ACWS and PANAC in order to reinforce the position of Centrope region as a automotive region /Acronym – AC CENTROPE/ |
| Funding authority | European Regional Development Fond |
| Project partners | Automotive Cluster Vienna Region /LP/, Automotive Cluster – West Slovakia /PP/, City of Trnava /PP/ |
| Total budget | 910 091,00 € |
| PP's budget | 217 550,00 € |
| Duration | 1st January 2009-31st December 2011 |

Official site of the project: www.accentrope.com

**Objectives:**

WP1-bilingual website, public relations media, media presentations and exhibitions
WP2-Analysis of enterprises min. 5 from the Slovak side, SWOT analysis, organization of joint seminars 2, setting up discussion forum Centrope Club "with Austrian firms cluster ACVR, and Hungarian cluster PANAC Automotive Cluster - West Slovakia, WP3 benchmarking of automotive sub-regions in Austria and Slovakia, on 24 indicators. Processing Business Plan for the Benchmarking Club. WP4-Porting and extending the Automotive Academy in Vienna at STU MTF implementation skills concepts "Train the Trainer" Implementation of 10 training courses taken from Vienna University and the ACVR. WP5-cartographic representation of partner companies from Austria, Hungary and Slovakia on the Internet and provide information on the partners and their ability WP6-organization partners in joint exhibitions in Slovakia and Austria. Enable businesses to communicate with each other and present their products. This year, the option will be an exhibition Plastic Car - Autosalon Bratislava on 21.-23.4.2009 WP7-qualification of enterprises, organization of seminars to prepare businesses for implementing advanced knowledge. Courses SIX SIGMA, Toyota Productions System, management innovation, the peg of the Austrian company co-WP8 management, coordination and controlling project.

**Main goals:**

- Bilingual web page, Public Relation in mass media, presentation in mass media and on fairs



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- Analysis of min. 5 Slovak companies, SWOT analysis, organizing 2 seminars, foundation of discuss group "Centrope Club" in cooperation with companies from Austrian cluster ACVR, Hungarian cluster PANAC and Automotive Cluster Western Slovakia.
- Benchmarking of automotive sub suppliers of in the region of Austria and Slovakia, based on 24 indicators. Elaboration of Business plan for Benchmarking Club.
- To remove and enlarge the Automotive academy from Vienna to Slovak University of Technology (Faculty of Materials Science and Technology). Introducing and qualifying conceptions "Train the Trainer". Introduction of 10 educational concepts taken over from the University of Vienna and ACVR.
- Cartographical representation of partner companies from Austria, Hungary and Slovakia on internet, publishing of partner specifications and their potentialities.
- Organization of mutual partner representations in Slovakia and Austria. Facilitation of mutual company communication and presentation of their products. This is possible on the fair Car Plast – Autosalon Bratislava this year (21.-23.4.2009.)
- Qualification of companies, organization of seminars with the aim to prepare the companies to acquire new advanced knowledge. Workshops SIX SIGMA, TOYOTA Production system, innovations control, in cooperation with companies from Austria.
- Leading, coordination and controlling of the project.

**Project activities:**

- **Meeting of companies cooperating on the project AC CENTROPE.**
- **Mutual presentation realized in frame of the project AC Centrope – Automotive Custer Western Slovakia and ACVR Austria on the** fair "Bratislavsky Autosalon" on 21.–23.4.2009. The ambition is to help to companies to find the possibilities for development cooperation and production sales. The members of Automotive Cluster Western Slovakia will be presented and promoted on the fair.
- **Benchmarking** as a tool of quality increase and achieve a success on the market – meeting of cluster members on 22.4.2009., Incheba Bratislava.
- Presentation of Automobile Cluster and ACVR members on the fair Autosalon in Nitra, Slovakia, 2.6.10.2009.
- AC Centrope contracting meeting of companies from Slovakia and Austria – 5.10.2009 Autosalon Nitra.
- In frame of this project we expect to find out:
  - New contacts on app. 120 ACVR companies
  - Creating of new web page which compares the potential of Slovak and Austrian companies with the best region companies.
  - Creating of Automotive academy branch on Slovak University of Technology (Faculty of Materials Sciences and Technology) in cooperation with University of Vienna.
  - Enlargement of mutual promotion of region companies in South-Eastern Europe as well as in former Soviet Union countries and spreading on new EU projects.
  - Employment of app. 10 people on frame of this project. For each invested 100.000 we expect creating of app. 8 new jobs positions, it means app. 36 new positions.

**Collaboration on the project:**
MTF STU, Trnava Comax, cobbler and spol.sro Get On Bratislava, SARIO and other companies interested.



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## 2. AUTOPLAST BORDER COOPERATION SR - CR.

**Concerned partner(s)**:

- LP - Automotive Cluster – West Slovakia (SK)

| | |
|---|---|
| Project full name and acronym | Creating conditions for increasing quality of human resources for automotive industry needs in the field of plastic /Acronym – AUTOPLAST/ |
| Funding authority | European Regional Development Fond |
| Project partners | City of Trnava /LP/, Automotive Cluster – West Slovakia /PP/, Slovak University of Technology, Faculty of Material Sciences and Technology /PP/, Plastic Cluster Zlín /PP/ |
| Total budget | 308 818,00 € |
| PP's budget | 28 300 € |
| Duration | 2009-2011 |

**Objectives:**

- promoting socio-cultural and economic development of the region and cross-border cooperation
- Development of cooperative relationships between businesses, universities and clusters of plastics for the automotive industry to support innovation potential and the Zlin region, Trnava
- exchange of experiences and cooperation in research and development of materials and technologies
- improve the quality of training in plastic on the issue of the MTF STU Trnava
- build and operate the training and teaching work, which will focus on the most demanding technology in plastics processing.

**Work Packages:**

WP1-processing needs of the manufacturing organization studies, the initial meeting, an analysis of levels of education in the field of plastics, competition for the best diplomantský and doctoral project in the field of plastics processing, learning concepts in plastics and professional schools at STU MTF accreditation of academic direction "of plastics technology at STU MTF " WP2-the project website, PR activities, an exhibition of plastic firms CR and SR at the exhibition car show in Bratislava 2010, meeting business - innovative solutions, develop cooperative relationships between businesses, universities and clusters, to increase the innovation potential of both regions, WP3-training of staff and MTF STU Zlinsky University, exchange experience, mediation training for manufacturing businesses - exchange visits, exchange of experiences and cooperation in research and development of materials and technology WP4-implementation technical laboratories for the design and simulation of plastic processes at STU MTF purchase and installation of technology WP5-administration and monitoring project.

**Long term goal:**

create conditions for the transfer of technology as an opportunity for our regional SMEs.

**Collaboration on the project:**

STU MTF SAS - Institute of Materials, VÚSAPL Nitra, Johns Manville, 2 SOS (Nitra and Trnava), or other firms interested.



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# 3. AUTOCLUSTERS PROJECT – CROSS-BORDER COOPERATION 9 COUNTRIES

**Concerned partner(s)**:

- LP - Automotive Cluster – West Slovakia (SK)

| | |
|---|---|
| Project full name and acronym | The international cooperative network of educational and research institution with subcontractors and other bodies active in automotive industry /Acronym – AUTOCLUSTERS/ |
| Funding authority | European Regional Development Fond |
| Project partners | Automotive Cluster – West Slovakia /LP/, COMUNIMPRESE SCARL CONSORTILE COMPANY LIMITED BY GUARANTEE/PP/, "George Asachi" Technical University of Iasi /PP/, West-Pannon Regional Development Company /PP/, Technical University of Gabrovo /PP/, Center for Research And Telecommunication Experimentation for NETworked communities /PP/, Slovak Technical University, Faculty of Material Sciences and Technology /PP/, Business interest association ACS, Automotive Cluster of Slovenia /PP/, Croatian Employers' Association /PP/, Automotive Cluster Serbia /PP/, Automotive Cluster Vienna Region - VIENNA REGION Wirtschaft.Raum.Entwicklung.GmbH /Observer/ |
| Total budget | 1 645 000,000€ |
| PP's budget | 335 000,00€ (10% partner included) |
| Duration | 2009-2012 |

On 6.7.2009 **approved** Monitoring Comitee Budapest AUTOCLUSTERS project where the project is the lead partner automotive cluster - Zapala Slovakia and participates in a project where 11 partners from 9 countries of Southeast Europe. The project should ensure the transfer of knowledge and innovation in the networking between the partner regions.

Project cross-border cooperation, in developing a car network in Southeast Europe and improving innovative capacity in the region, as well as improvement of technology and knowledge transfer. The project aims at implementing new technologies in enterprises, ensuring the education of highly skilled technicians, cooperation in the development of products and technologies through new projects incurred.

The result of the decision of the Monitoring Committee of the above-proposed plan is one of the 5% selected successfully submitted plans, the total number of 822nd The project aims to:

- implementation of new technologies in enterprises
- ensure training of highly skilled technicians



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- cooperation in the field of product development and technology

**Work packages:**
**WP1: Transnational project management and coordination**
**P**roject management will be ensured by LP, in close co-operation with all partners. The main instruments To ensure an effective management and co-ordination will be:

1. A Steering Committee (SC) composed of one representative per partner that shall meat at least twice year. Steering Committee will be responsible for full implementation of the project: After every meeting the appropriate minutes will be produced.
2. Progress reports produced and submitted to each SC meeting for approval will recall the activity of the project since the previous SC.
3. A dedicated Joint-Secretariat for day to day management of the project will be established. General, Communication and Financial Manager of the project will be named. They will be supported by Joint-Secretariat and they will be responsible for implementation of the project according to the project plan and decisions made by SC.
4. Web-based software for Financial management and reporting will be of use obligatory for all partners

**WP2: Communication and dissemination**
The project goal is to develop and realize clear and highly focused communication strategy, Which will be targeted to specific groups - project members, statekohlders and other potential beneficiaries, as well as to the university students and others. This definition of target groups is clearly Reflected in communication mix Which has to be used in the project communication:

- Traditional media (mainly press, or other local or regional channels ATL)
- On-line media (Web, new-letters,…)
- Events (conferences,…)
- Dissemination of own publications (it's described in appropriate WP's)

To make the communication mix as effective as possible appropriate combination of the mass market (but focused target group) and direct channels is prepared. In the WP2 there is just described communication related to project level, in each WP there is clear description of the communication related to package activities.

**WP3: Best Practices and study on clusters dev. in SEE**
These activities should start immediately after the project management is formed, because some outputs are crucial for some other activities of the project. As usual at the beginning we have to go through Deeply - News in EU policies, in other news running projects as well as new results or available sources - In all countries of SEE is necessary to study cooperation strategies, clusters development in automotive industry and cooperation with R & D. The major goal is to analyze best practices across region, identify basic SWOT for each partner as well as to help partners in future development by bringing new ideas, possibilities as well as valuable contacts. During this phase of project 2 Exchange of experience seminars has to be organized. As the result should be prepared (and after that publish at the web pages for free):


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Best practice brochure on the Study of Automotive business strategy and development clusters in SEE.

**WP4: Innovative trends and main challenges in Automotive**
R & D centers as well as car producers and sub-contractors in Automotive Industry has to be invited into the process. The major aim is to find in the whole business communities the areas where the reasonable cooperation between sub-contractors and universities is possible. This task has to be performed in deep cooperation with car producers, who are the final users of this activity. European policies and trends has to be taken into account as well. We plan to analyze tha innovation capacities in various number of sub-contractors from different regions of SEE as well as from different fields of expertise and production. The goal is to identify strength and weaknesses in their production cycle, and how well they are ready to Cooperate with the R & D plus universities. The capability to support researchers, to produce the prototypes and finally to start the production will be part of analysis as well. The results should input to the projects they could be financed at local level.

**WP5: Increasing of cooperation and innovation capacity**
The selected second level clustering initiatives will be realized by this WP. We focus on:

- Increase the exchange and cooperation between project partners (mainly to support the innovation circle R & D (University) -> Automotive incl. Subcontractors as subjects driven innovation -> and car part producers and final users of innovation)
- Increase the capacity for innovation in the regions of simulating highly Educated experts in education technology areas

Our goal is to stimulate interest between the university students as well as researchers. We would like to stimulate universities to focus on Educating future of highly qualified labor force for automotive industry too. We see great chance in stimulating innovative of the exchange during the study visits. During realizations we would like to follow the Regions of Knowledge initiative. The aim is to develop the permanent exchange program based on this activity

**WP6: Pilot R & D cooperative projects**
This activity follows results and outputs of WP4. 4 Working Groups in 4 specific areas (see c 6.1) Based on the results of WP4 where the direct application of new and innovative research results are required and results should be Deliverable. Working groups will be formed from the R & D, universities, clusters and subcontractors in automotive and car producers and partners. The overall goal for each working group is to develop the appropriate letter of the cooperating projects, they could be realized as the project pilots. The projects have to be innovative, include the direct link between the R & D institutions and SME's producer. The project has to show the real application of R & D in praxis but it also has taken into account the real usability. From all of them should be selected small ones for real realization as the project pilot samples and more other 5 they have to be prepared during the project and proposals for Framework Program.

**WP7: Common methodology**
Project aims to help partners involved in the project, but not only them, to understand the critical factors that influence the competitiveness of local plants and suppliers should monitor


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economic trends and innovation in the automotive industry.In the project, the main aim of this workgroup is the present real results and experiences achieved during the project in relation with some general issues that affect the automotive industry all over Europe: different legislation concerning the labor market; territorial intelligence on labor 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 behavior of workforce, know-how, the decentralization of the decision-making process versus centralization; evolution of the different skills and techniques; impact on productivity; Attractiveness of territories.The WP will take an in-depth look at the subject of the project, in its various forms and levels.





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## 4. AUTONET

**Concerned partner(s)**:

- LP - Automotive Cluster – West Slovakia (SK)

| | |
|---|---|
| Project full name and acronym | Transnational Network of Leading Automotive Regions in Central Europe /Acronym – AutoNet/ |
| Funding authority | European Regional Development Fond |
| Project partners | Automotive Cluster – West Slovakia /LP/, COMUNIMPRESE SCARL CONSORTILE COMPANY LIMITED BY GUARANTEE/PP/, Bussiness Interest Association ACS, Automotive Cluster of Slovenia (GiZ ACS) /PP/, West-Pannon Regional Development Company /PP/, Saxony Economic Development Corporation /PP/, Province of Reggio Emilia /PP/, Moravian-Silesian Automotive Cluster /PP/, Wielkopolska Agency for Enterprise Development /PP/, Lower Silesian Agency for Economic Cooperation /PP/ |
| Total budget | 2 406 567,00 € |
| PP's budget | 393 508,00 € |
| Duration | 2009-2011 |

1. The project has undergone II. round of approval.
2. Innovation across Europe, a project co D 8 countries, AT, CR, Slovakia, Slo, serbia, RO, UA (the potential development of cooperation and coordination of activities towards the market of Ukraine and Russia)
3. The importance of increasing innovation activities in universities and create space for the implementation of innovation in the region.





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## 5. FRAMEWORK PROJECT LABORATORY & SIEMENS VÚJE

**Concerned partner(s)**:

- LP - Automotive Cluster – West Slovakia (SK)

**Project Name:**
Construction of the laboratory automation and management of production units.

**Project Objectives:**
Extension of existing laboratory on an additional 10 workstations based stations SIEMENS SIMATIC S7-300 to improve the quality of the learning process for students and improved training for workers in the field of automation and control using asynchronous motors primarily in the areas of programming various types of programmable logic controllers, software tools, interfaces and languages needed to create a control program, hardware settings for individual stations and facilities management, acquiring more complex and more complex programming techniques in different languages, hardware and communication links and the settings used in practice for the management of production lines, technological processes or production processes.

**Main partner of the project:**
Autoklaster West Slovakia

**Cooperating partners:**

- Faculty of Materials Science and Technology STU Bratislava
- Foundation Trnava Trnavčanom
- SIEMENS SpA
- VÚJE SpA
- Trnava Self-Governing Region





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# 6. ARCHIMEDES

**Concerned partner(s)**:

- PP2 - "George Asachi" Technical University of Iasi (RO)

**Title:** Achieving real change with innovative transport measures demonstrating energy savings
**Research area:** SST-2007-3.4-01 Testing innovative strategies for clean urban transport
**Project start date:** [2008-09-15]
**Project Acronym:** ARCHIMEDES
**Project Reference:** 218940
**Start Date:** 2008-09-15
**Duration:** 48 months
**Project Cost:** 26 million euro
**Contract Type:** Large-scale integrating project
**End Date:** 2012-09-14
**Project Status:** Execution
**Project Funding:** 15.98 million euro

**Coordinator**
**Contact Person:** Name: MARKWORTH, Kurt Hermann (Mr)
Tel: +45-99312300
Fax: +45-99312314
**Organisation:** AALBORG KOMMUNE
BOULEVARDEN
DENMARK

**Project description**
ARCHIMEDES is an integrating project, bringing together 6 European cities to address problems and opportunities for creating environmentally sustainable, safe and energy efficient transport systems in medium sized urban areas. The objective of ARCHIMEDES is to introduce innovative, integrated and ambitious strategies for clean, energy-efficient, sustainable urban transport to achieve significant impacts in the policy fields of energy, transport, and environmental sustainability.

An ambitious blend of policy tools and measures will increase energy-efficiency in transport, provide safer and more convenient travel for all, using a higher share of clean engine technology and fuels, resulting in an enhanced urban environment (including reduced noise and air pollution). Visible and measurable impacts will result from significantly sized measures in specific innovation areas. Demonstrations of innovative transport technologies, policy measures and partnership working, combined with targeted research, will verify the best frameworks, processes and packaging required to successfully transfer the strategies to other cities. Two learning cities will participate fully in the decision making and organisational structure. New member state representation is assured with one Lead City and one Learning City.


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A strong educational objective will be realised with training and learning actions within the consortium, and via promotion, training events and educational exchanges between students, citizens and stakeholders in the project innovation areas. Dissemination of results and the focus on exploitation activities will impact well beyond the innovation area itself, providing lessons for citizens, practitioners and policy makers. The result will be a greater acceptance for new tools, services and technologies and the objectives that lie behind them.

**Participants**

| | |
|---|---|
| UNIVERSITY OF THE BASQUE COUNTRY | SPAIN |
| GRUPO DE ESTUDIOS Y ALTRENATIVAS 21, S.L. | SPAIN |
| COMPANIA DEL TRANVIA DE SAN SEBASTIAN SOCIEDAD ANONIMA | SPAIN |
| AYUNTAMIENTO DE DONOSTIA-SAN SEBASTIÁN | SPAIN |
| TECHNICAL UNIVERSITY | ROMANIA |
| REGIA AUTONOMA DE TRANSPORT PUBLIC IASI | ROMANIA |
| PRIMARIA MUNICIPIULUI IASI | ROMANIA |
| NORDJYLLANDS TRAFIKSELSKAB | DENMARK |
| TRASPORTI PUBBLICI MONZESI | ITALY |
| PROJECT AUTOMATION SPA | ITALY |
| COMUNE DI MONZA | ITALY |
| STATUTARNI MESTO USTI N.L. (STATUTORY CITY OF USTI N.L.) | CZECH REPUBLIC |
| BRIGHTON & HOVE BUS AND COACH COMPANY LIMITED | UNITED KINGDOM |
| BRIGHTON & HOVE CITY COUNCIL | UNITED KINGDOM |
| INSTITUTO VASCO DE LOGÍSTICA / LOGISTIKAKO EUSKAL ERAKUNDEA | SPAIN |





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# 7. ASSET-ROAD

**Concerned partner(s)**:

- PP2 - "George Asachi" Technical University of Iasi (RO)

**Title:** ASSET advanced safety and driver support in essential road transport
**Research area:** SST-2007-4.1-04 Integral system solutions for safety
**Project start date:** [2008-07-01]
**Project Acronym:** ASSET-ROAD
**Project Reference:** 217643
**Start Date:** 2008-07-01
**Duration:** 42 months
**Project Cost:** 8.11 million euro
**Contract Type:** Large-scale integrating project
**End Date:** 2011-12-31
**Project Status:** Execution
**Project Funding:** 6.15 million euro

Coordinator
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Email: Contact
Organisation: PTV PLANUNG TRANSPORT VERKEHR AG.
Stumpfstrasse
GERMANY

**Project description**
As the European objectives of integration and economic growth are achieved, there is a corresponding vigorous growth in road traffic volumes. This results in congestion and increased numbers of road fatalities. The objective of the ASSET project is to reverse these negative effects by developing a number of promising technologies and integrating them into a new holistic approach to road safety. The holistic approach will be at system and practical level. Integrated architectures will be developed to facilitate the exchange of secure information between road, vehicle and driver.

There will be a particular focus on the Human Machine Interface developing supporting systems which pass on safety-critical information to the driver. Driver monitoring technologies such as track and trace will use computer vision to identify abnormal driver behaviour (speed, gap, load) and inform driver and authorities. - Improving drivers knowledge and behaviour - Increased automation and traffic control for safety/efficiency - Innovative measures for safe and sustainable infrastructure A number of technologies will be developed and integrated into the holistic system like a thermal imaging tool to detect dangerous heavy


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goods vehicles, a new weigh-in-motion sensor which can detect critical tyres as well as overloaded.
The main theme is the integration of different information from different sources into a comprehensive system and the communication of the relevant information to where they are needed. Several application areas will be developed with concrete deliverables such as a safety station, crisis and dangerous goods management and an infrastructure life cycle optimisation system. Systems will be tested at a number of sites in different parts of Europe and results disseminated through seminars, workshops and demonstrations.

**Participants**

| | |
|---|---|
| UNIVERSITE DE TECHNOLOGIE DE BELFORT MONTBELIARD | FRANCE |
| MTEL-KTEI TELEINFRA COMPANY INDIA PRIVATE LTD | INDIA |
| NATIONAL INSTITUTE OF TRANSPORT | TANZANIA |
| ADC-AFRIDEUT CONSULT LIMITED | TANZANIA |
| CLARITY CONSULTING INFORMATION AND MANAGEMENT SERVICES LTD | HUNGARY |
| EMTELE OY | FINLAND |
| MANFRED HUEGEL | GERMANY |
| KRIA S.R.L. | ITALY |
| ROC BERNARD GMBH | AUSTRIA |
| BAYRISCHES INNENMINISTERIUM - POLIZEIPRÄSIDIUM OBERBAYERN | GERMANY |
| TECHNICAL UNIVERSITY 'GHEORGHE ASACHI' OF IASI | ROMANIA |
| STATENS VAG- OCH TRANSPORTFORSKNINGSINSTITUT | SWEDEN |
| GOTTFRIED WILHELM LEIBNIZ UNIVERSITAET HANNOVER | GERMANY |
| UNIVERSITAET STUTTGART | GERMANY |
| VALTION TEKNILLINEN TUTKIMUSKESKUS | FINLAND |
| UNIVERSITY COLLEGE DUBLIN, NATIONAL UNIVERSITY OF IRELAND, DUBLIN | IRELAND |
| UNIVERSITA DEGLI STUDI DI MODENA E REGGIO EMILIA | ITALY |
| THE UNIVERSITY OF NOTTINGHAM | UNITED KINGDOM |





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# 8. ICPE-HYFC

**Concerned partner(s)**:

- PP2 - "George Asachi" Technical University of Iasi (RO)

**Title:** Developing RTD potential of INCDIE ICPE-CA in the field of hydrogen and fuel cell technologies
**Research area:** REGPOT-2008-1-01 Any research topic covered by the EC FP7 (EC/EP Decision No 1982/2006/EC of 18 December 2006, published in the Official Journal 30.12.2006 L 412)
**Project Acronym:** ICPE-HYFC
**Project Reference:** 229906
**Start Date:** 2009-04-01
**Duration:** 36 months
**Project Cost:** 819240.00 euro
**Contract Type:** Support actions
**End Date:** 2012-03-31
**Project Status:** Execution
**Project Funding:** 658000.00 euro

**Coordinator**
**Contact Person:** Name: RIMBU, Gimi Aurelian (Dr)
Tel: +40-213468297
Fax: +40-213468299
**Organisation:** INSTITUTULUI NATIONAL DE CERCETARE DE ZVOLTARE PENTRU INGENERIA ELECTRICA ICPE-CANAT INST FOR RESEARCH DEVELOPMENT IN ELECTRICAL ENGINEER
Splaiul Unirii, 313
ROMANIA

**Project description**
The project aim is to unlock and develop the capacity and research potential at INCDIE ICPE-CA, in the field of renewable energy, mainly Hydrogen and Fuel Cells Technologies (thematic priority in the EC FP7), by developing a high quality and promising research centre for hydrogen and fuel cells (HyFCLab) at INCDIE ICPE-CA, as reference research entity both in Romania and EU s convergence region. The applied strategy for HyFCLab development is based on an Action Plan, derived from the SWOT analysis and the present involved projects along INCDIE ICPE-CA, related to the field of hydrogen and fuel cell technology.

The strategic plan demonstrates the total capability for unlocking and developing the research potential at INCDIE ICPE-CA, in the addressed topic, by the support activities in the present project. INCDIE ICPE-CA, by its HyFCLab is going to have an important participation in the European research cooperation and by its expertised contribution will participate to the improvement of the regional economic level and reinforcement of the competitiveness in the


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European Research Area. In this idea, a major infusion of specialized equipments will be done, in correlation with activities for improvement of RDI human resources quality and expertise. The project has a special focus on the experienced research staff recruitment and specialists training by exchange of know-how and experience activities at trans-national level.

Facilitating the knowledge transfer, at national, regional and international level, by organizing specialised workshops and conferences, is also under rigurous attention. Increasing the international visibility of INCDIE ICPE-CA and HyFCLab respectively is another issue of the project. This will be realised by focused dissemination activities of the obtained scientific results, short presentations of the project and its results toward public bodies, innovative SMEs and social environment, as well as publications in scientific journals.





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# 9. EE-VERT

**Concerned partner(s)**:

- PP2 - "George Asachi" Technical University of Iasi (RO)

**Title:** Energy efficient vehicles for road transport
**Research area:** SST-2007-1.1-02 Vehicle/vessel and infrastructure technologies for optimal use of energy
**Project start date:** [2009-01-01]
**Project Acronym:** EE-VERT
**Project Reference:** 218598
**Start Date:** 2009-01-01
**Duration:** 36 months
**Project Cost:** 6.47 million euro
**Contract Type:** Small or medium-scale focused research project
**End Date:** 2011-12-31
**Project Status:** Execution
**Project Funding:** 3.62 million euro

**Coordinator**
**Contact Person:** Name: WARD, David (Dr)
Tel: +44-2476355430
Fax: +44-2476358430
**Organisation:** MIRA LTD
Watling Street
UNITED KINGDOM

**Project description**
Road transport is the second largest EU producer of CO2, one of the greenhouse gases responsible for climate change. While some improvements in efficiency of road vehicles have been achieved, continued growth in traffic and congestion mean that CO2 emissions from road transport have grown overall. At the same time rising fuel prices and supply instability also give pressure for increased efficiency. The EC has set targets for the average CO2 emissions of new vehicles to be 120 g/km by 2012, with further reductions needed to achieve a 40% reduction in CO2 from light passenger vehicles by 2020.

The EE-VERT project will develop technologies that will play a key part in achieving these goals. Despite improvements in individual areas of the modern vehicle such as powertrain, a considerable amount of energy is wasted due to the lack of an overall on-board energy management strategy. Further electrification of auxiliary systems (the "more electric vehicle") promises energy and efficiency gains, but there is a need for a co-ordinated and predictive approach to the generation, distribution and use of energy. In the state-of-the-art, power is


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generated with little knowledge of the actual loads, and some systems (both electrical and mechanical) consume power continually regardless of demand. The introduction of systems such as alternator set-point control and EPAS are first steps towards optimising energy use but such systems operate in isolation.

This project will develop strategies in conventional vehicles, also applicable to hybrids, for overall energy management (thermal and electrical) to reduce fuel consumption and CO2 emissions. Also, the need for the strategies to guarantee power supply to safety-related systems will be considered. It is estimated that EE-VERT technologies can reduce CO2 emissions by around 10% for a car. For a large vehicle savings of around 40% of the CO2 that is created by an auxiliary system such as climate control is possible.

**Participants**

| | |
|---|---|
| FH JOANNEUM GESELLSCHAFT M.B.H. | AUSTRIA |
| ENGINEERING CENTER STEYR G.M.B.H. & CO KG | AUSTRIA |
| LEAR CORPORATION HOLDING SPAIN SL* | SPAIN |
| VOLVO TECHNOLOGY AB | SWEDEN |
| S.C. BEESPEED AUTOMATIZARI S.R.L. | ROMANIA |
| ROBERT BOSCH GMBH | GERMANY |
| CENTRO RICERCHE FIAT SCPA | ITALY |
| UNIVERSITATEA POLITEHNICA DIN TIMISOARA | ROMANIA |





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# 10. WESTEER

**Concerned partner(s)**:

- PP2 - "George Asachi" Technical University of Iasi (RO)

**Title:** Support actions for the emergence of a research driven automotive cluster in West Romania
**Research area:** REGIONS-2007-2-02 Research and rural economies
**Project start date:** [2008-03-01]
**Project Acronym:** WESTEER
**Project Reference:** 205887
**Start Date:** 2008-03-01
**Duration:** 24 months
**Project Cost:** 189840.00 euro
**Contract Type:** Support actions
**End Date:** 2010-02-28
**Project Status:** Execution
**Project Funding:** 169924.00 euro

**Coordinator**
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Tel: +40-256491923
Fax: +40-256491981
**Organisation:** REGIONAL DEVELOPMENT AGENCY OF THE WEST REGION ROMANIA
PROCLAMATIA DE TIMISOARA 5
ROMANIA

**Project description**
The main objective of this project is to put in place a set of tailor-made support activities and to create an appropriate institutional framework which will help catalyze the emergence of a research-driven automotive cluster in West Region Romania. Starting from the promising evolution of the rapidly growing agglomeration of automotive enterprises in West Romania, the project will promote the co-operation among various players in this field, and will activate the growth potential of this agglomeration by mobilizing high-level scientific resources for the benefits for automotive SMEs and by establishing a supporting cluster management unit. This will help to facilitate its evolution towards a competitive European cluster.

**Participants**

| | |
|---|---|
| ASOCIATIA TEHIMPULS | ROMANIA |
| INTERPART PRODUCTION | ROMANIA |
| UNIVERSITATEA POLITEHNICA DIN TIMISOARA | ROMANIA |


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## 11. COSPACES

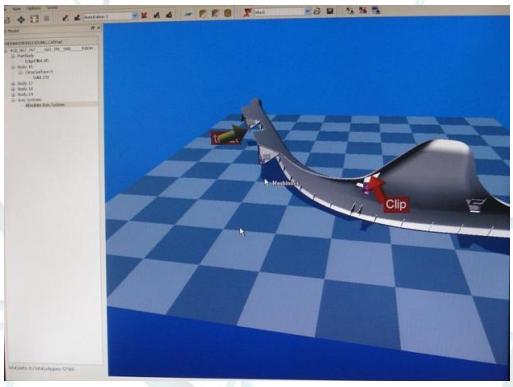
**Concerned partner(s)**:

- PP3 - West-Pannon Regional Development Company (HU)

cospaces Information Society Technologies

**Project full name:** CoSpaces – Innovative Collaborative Work Environments for Individuals and Teams in Design and Engineering
**Funding authority:** European Union 6th Framework Program
**Project website:** www.cospaces.org
**Project partners:** PANAC, Visiocorp Hungary Bt., Varinex Zrt., European Universities, Research Institutes and companies
**Project duration:** 2006-2010
**Total cost**: 11,839,600 €

**The objective of the project** is to develop innovative collaborative environments for individuals and teams in design and engineering.
CoSpaces' overall objective is to support innovative collaborative work environments for individuals and project teams by developing structural models and devided technologies, through devided virtual producing companies. It also encourages the emergence of effective partnerships which are creative, increase productivity and shorten the period between the planning phase and positioning of the product.
This process is realized through person-to-person communication, innovative visualisation, knowledge support and natural interaction, and it will reform the current work routine for a more competitive global market. CoSpaces suggests the linking of these fields of action through three sectors: aircraft industry, **automotive industry and construction industry**.
In order to achieve these aims, the systematic and integrated R&D activity programme will be complemented by wide-range dissemination of gained results, education and planting results in company routine.




>>> www.cospaces.org





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# 12. COOPERATIVE SYSTEMS FOR ROAD SAFETY - SAFESPOT

**Concerned partner(s)**:

- PP4 - Center for Research And Telecommunication Experimentation for NETworked communities (IT)

**Project full name and acronym:** COOPERATIVE SYSTEMS FOR ROAD SAFETY - SAFESPOT
**Funding authority:** co-funded by the European Commission Information Society Technologies among the initiatives of the 6th Framework Program
**Project website:** http://www.safespot-eu.org
**Project Coordinator:** Centro Ricerche Fiat, Torino Italy
**Project partners:** http://www.safespot-eu.org/consortium.html
**Project start date and duration:** 01 February 2006, 48 Months
**Overall Cost Budget :** 38 M€ (European Commission funding 20.5M€)

**Summary- vision, objectives, applications**

SAFESPOT is working to design cooperative systems for road safety based on vehicle to vehicle (V2V) and vehicle to infrastructure (V2I) communication.
SAFESPOT will prevent road accidents by developing a:
"SAFETY MARGIN ASSISTANT" to detect in advance potentially dangerous situations and extend, in space and time, drivers' awareness of the surrounding environment.
**from autonomous intelligent vehicles**

**...to cooperative systems**

**SAFESPOT aims to:**

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


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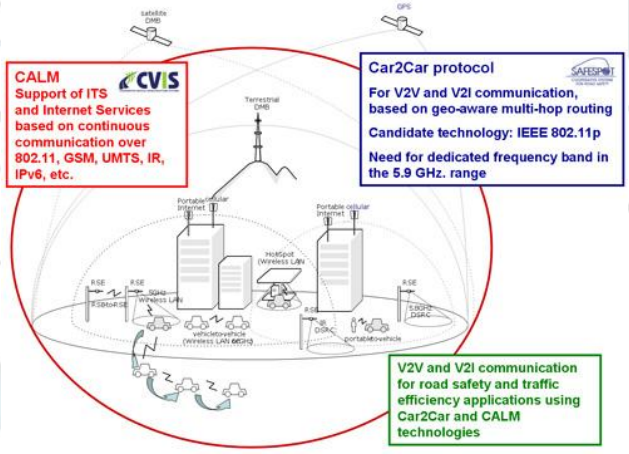
**The SAFESPOT co-operative system is composed by the following communicating elements:**

- Intelligent vehicles equipped with on board co-operative systems.
- Intelligent infrastructure including road side units
- Safety centre(s) and/or Traffic centre(s) that are able to centralize or forward safety information coming from the intelligent vehicle and/or the intelligent infrastructure.

**Key challenges of SAFESPOT are:**

- The availability of reliable, fast, secure, potentially low cost protocols for local V2V and V2I communication
- Candidate radio technology: IEEE 802.11p
- Need for dedicated frequency band for secure V2V and V2I, avoiding interference with existing consumer links
- Aligned to C2C-C and CALM standardisation groups
- The availability of reliable, very accurate, real-time relative positioning
- The availability of real time updateable Local Dynamic Map




**Main achievements/ or expected results- use cases**

<u>The SAFESPOT applications aim to:</u>

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

The SAFESPOT Vehicle based applications, are vehicular applications which are implementing the Safety Margin Assistance concept.

- Road Intersection Safety
- Lane Change Maneuver
- Safe Overtaking



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- Head On Collision Warning
- Rear End Collision
- Speed Limitation and Safety Distance
- Frontal Collision Warning
- Road Condition Status – Slippery Road
- Curve Warning
- Vulnerable Road User Detection and Accident Avoidance

The SAFESPOT infrastructure based applications are those where data is processed and decisions are taken by the road infrastructure in cooperation with vehicles. The applications defined are:

- Speed alert
- Hazard and incident warning
- Road departure prevention
- Intelligent Cooperative Intersection Safety
- Safety margin for assistance and emergency vehicles.

These applications aim to provide the most efficient recommendation to the driver through the onboard HMI and through road side communication devices like VMS or flashing lights.

Six Use Caces (UCs) have been collected regarding the Intersection Safety application:

- Accident at intersections
- Obstructed view at intersection
- Permission denial to go-ahead
- Defect traffic signs
- Other vehicle brakes hard due to red light
- Approaching emergency vehicle warning
- More at: http://www.safespot-eu.org/use_cases.html

Project's final results will be presented to the upcoming TRA 2010 event which will be held in Brussels 7-10 June 2010. TRA 2010 is an event for the alignment of the stakeholders of transport research and development.





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# 13. MOBILITY AND TOURISM IN URBAN SCENARIOS- MOTUS

**Concerned partner(s)**:

- PP4 - Center for Research And Telecommunication Experimentation for NETworked communities (IT)

**Project full name and acronym:** Mobility and tourism in urban scenarios- MOTUS
**Funding authority:** Industry 2015 Sustainable Mobility
**Project Coordinator:** Telecom Italia SpA
**Project partners:** ITS Napoli; Nexse ; Sistemi Informativi Srl – Liberologico; EDP-La Traccia; ISTI-CNR; Università di Pisa ; Università di Venezia ; PROSS ; Segesta ; Cosmic Blue Team ; Mediatica; Cpi Progetti ; Sineura ; Lanza & Thompson ; Fondazione Politecnico; Create-Net ; Magneti Marelli; Politecnico di Milano ; Università di Trento ; RadioLabs ; Distretto Tecnologico Trentino; Università Cattolica di Milano; SAI - Servizi Avanzati per le Imprese; Krupter
**Project start date and duration:** second semester of 2009; 36 month
**Total budget:** 19 000 000 euro

**Summary- vision, objectives, applications**

MOTUS aims to improve management. The Sustainability and l 'eco-compatibility of mobility Urban through a paradigm shift that might focus on the citizen as user and manufacturer of the traffic service. To do this MOTUS includes the development of a service platform able to detect, aggregate and interpret urban mobility in real time from information from heterogeneous infrastructures exist in the area and data from mobile devices present in the areas of interest. MOTUS will be able to develop in an innovative manner of mobility data in order to develop traffic models on which to build planning and monitoring services that can be used for planning interventions for the improvement of infrastructure.

**Main achievements/ or expected results- use cases**

We at CREATE-NET are involved with other local partners in the development of an eco-mobility service. What this means in more detail is the creation of instruments for the management of citizens' and tourists' mobility and for the analysis of the current and past traffic with the intention of understanding its environmental impact.

Such instruments will also have the ability to monitor the effects of the mobility strategies implemented (also considering the aims of reducing oil dependence) and give further means to foster environmental friendly behavior of end-users and ensure at the same time a "green" labeling for local administrations in touristic areas.

The subsystem developed by CREATE-NET and local Trentino partners will also be tested in Primiero Valley in collaboration with the local administration.





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# 14. THE SMART-VEHICLE (SMART-VEI)

**Concerned partner(s)**:

- PP4 - Center for Research And Telecommunication Experimentation for NETworked communities (IT)

European Commission Information Society and Media
SEVENTH FRAMEWORK PROGRAMME

**Project full name and acronym:** The smart-vehicle (SMART-VEI)
**Funding authority:** Funded under 7th FWP (Seventh Framework Programme)
**Project website**: www.smart-vei-project.com
**Project Coordinator:** SWORD TECHNOLOGIES SA, Luxembourg
**Project partners:** IDS SCHEER CR S.R.O., NEXENSE LTD, FERRARI SOCIETA PER AZIONI ESERCIZIO FABBRICHE AUTOMOBILI E CORSE, ALTRAN TECHNOLOGIES SA, SKODA AUTO A.S., HEWLETT PACKARD ITALIANA SRL, MAGNETI MARELLI SISTEMI ELETTRONICI S.P.A, TWT GMBH INFORMATION & ENGINEERING TECHNOLOGIES, TECHNISCHE UNIVERSITEIT DELFT, ANKO ANONYMOS ETAIREIA ANTIPROSOPEION EMPORIOU KAI VIOMICHANIAS, AMINIO AB, GOV3 LIMITED, SESA - COMMERCE HANDELSGMBH
**Project start date and duration:** 1st March 2008, 36 months
**Project Cost:** 5.45 million euro

**Summary- vision, objectives, applications**
Smart-Vei project aims to design, develop a portable "predictive-adaptive" learning system. Vehicles equipped with the Smart-Vei system will be able to provide an intelligent driver-assistance; the Smart-Vei will be portable devices able to detect and report characteristics and attitudes related to the driver's profile. The system will be a learning system as it will build the user profile (reported in the VEI-Pod device) by storing, monitoring, and analysis the user's behaviour while driving. The intelligent component of the system will use descriptive and explicative models for the car driver behavior and profile building. The Smart-Vei will be able to provide innovative control strategies based on the best input and cues (or other classes of services) to be provided to the specific user. The decision support system of the Smart-Vei will merge information from the users (real time state and behavior track record) together with the information from the road environment and the vehicle itself. Smart-Vei has been designed to be an effective driver-assistance system. In fact driver-assistance system has to continuously monitor not just the surrounding environment and vehicle state but also the driver's behaviours. That way, if a dangerous situation occurs that requires intervention; the vehicle can recognize it and accurately alert the driver. Moreover, an intelligent driver-assistance should provide support to the driver in a smart way: a rich and user-friendly informative environment without adding the driver's workload. In developing systems that proactively assist drivers (and occupants), human intent is a critical piece of information for determining whether the system's actions will help or hinder the user. By design a system with a lighter alerting mechanism in some instances, an alert might not arrive when the system encounters a situation beyond its design specifications.


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**Main achievements/ or expected results- use cases**

The key feature enhancing Smart-Vei System's innovation is that it encapsulates all the above aspects, utilizes and advances the scientific and actuators and processing power in order to monitor the driver, the vehicle (inside and outside) and the surrounding environment and actuate the corresponding car safety services, providing a context-aware application.

The Smart-Vei Pod is a portable and personalised device which is dedicated to building and updating the individual driver's profile and intelligently guiding the Smart-Vei

Platform into corresponding actions. It is mainly a Smart Personal Assistant, a customisable device which provides a range of useful functions to assist drivers into their driving experience. It will remind, give feedback to the driver and alert.

Smart-Vei aspires to:

*Improve driver-warning strategies:* by providing driver-tailored warnings able to capture user's attention and enhancing his ability to exploit them effectively.

*Improve hazard detection:* by incorporating the human variability factor into the system's ability to recognise unsafe situations.

*Improve actuation:* by exploiting the independent car safety systems and effectively customising and combining them according to the user' behavioural characteristics.

*Smooth driver-car safety systems interaction:* by adapting the vehicle's response to the driver's personal trait.





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# 15. ANTENNA RESEARCH AND TECHNOLOGY FOR THE INTELLIGENT CAR (ARTIC)

**Concerned partner(s)**:

- PP4 - Center for Research And Telecommunication Experimentation for NETworked communities (IT)

European Commission Information Society and Media
SEVENTH FRAMEWORK PROGRAMME

**Project full name and acronym:** Antenna research and technology for the intelligent car (ARTIC)
**Funding authority:** Funded under 7th FWP (Seventh Framework Programme)
**Project website:**
http://www.antennasvce.org/Community/Dissemination?action=area_view&id_area=34
**Project Coordinator:** I.D.S. - INGEGNERIA DEI SISTEMI - S.P.A.(Italy)
**Project partners:** SAAB SPACE, AB UNIVERSITAET KARLSRUHE (TECHNISCHE HOCHSCHULE), ALCATEL-LUCENT TELECOM LIMITED, Universidad Politecnica de Madrid, ECOLE POLYTECHNIQUE FEDERALE DE LAUSANNE, ASC ANTENNA SYSTEMS CONSULTING APS, UNIVERSITE DE RENNES I, KATHOLIEKE UNIVERSITEIT LEUVEN, IMST GMBH, UNIVERSITA DEGLI STUDI DI SIENA.
**Project start date and duration:** 1st April 2008, 24 months
**Project Cost:** 466540.00 euro

**Summary- vision, objectives, applications**

Antenna Research is a strategic enabling technology for intelligent vehicles and road safety services. Car-to-car communications, real time congestions localisation, obstacle and collision radars, on board sensor networks, etc. are based on novel antennas solutions and subsystems integration

Antenna Research in Europe received great benefits from the structuring efforts provided by the Network of Excellence ACE and its outstanding results, such as the Antenna cutting-edge research, the European School of Antennas (ESoA), the European Conference on Antennas and Propagation (EuCAP), the Virtual Centre of Excellence (ACE-VCE), the ACE Community (joined by over 300 European institutions and 1600 researchers). Moreover, ACE created the European Association on Antennas and Propagation (EurAAP) to support ACE results beyond the ACE duration (see www.antennasvce.org).

In this frame, the Coordination Action "Antenna Research and Technology for the Intelligent Car" (ARTIC) is proposed to support the transfer of antenna technology knowledge from ACE to the Intelligent Car Initiative and eSafety in particular, in order to enable the best implementation of the future subsystems for improved safety, higher transport system efficiency, reliable information to drivers, etc.

**Main achievements/ or expected results- use cases**

In particular ARTIC will operate in synergy and cooperation with the COMeSafety FP6 project to distribute information about latest radio links technology to the stakeholders, to present the best practices on antenna software and measurement procedures, to provide industrial training by the ESoA and to support dissemination by major International Conference. In addition, the ARTIC achievements will be spread to the stakeholders, scientist and the citizens by a dedicated section of the ACE Virtual Centre of Excellence.



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# 16. EUROPEAN FIELD OPERATIONAL TEST ON ACTIVE SAFETY FUNCTIONS IN VEHICLES) (EUROFOT)

**Concerned partner(s)**:

- PP4 - Center for Research And Telecommunication Experimentation for NETworked communities (IT)

European Commission Information Society and Media
SEVENTH FRAMEWORK PROGRAMME

**Project full name and acronym:** European Field Operational Test on active safety functions in vehicles) (EUROFOT)
**Funding authority:** Funded under 7th FWP (Seventh Framework Programme)
**Project website:** http://www.eurofot-ip.eu/en/the_project
**Project Coordinator:** FORD FORSCHUNGSZENTRUM AACHEN GMBH, Germany
**Project partners:** CENTRO RICERCHE FIAT - SOCIETA CONSORTILE PER AZIONI, (Italy); ALCOR DI GIANCARLO ALESSANDRETTI, (Italy); POLITECNICO DI TORINO, (Italy)
**Full list of partners:** http://www.eurofot-ip.eu/en/the_partners
**Project start date and duration:** 1st May 2008, 40 months
**Project Cost:** 21.57 million euro

**Summary- vision, objectives, applications**

The Intelligent Car Initiative has identified road safety, energy efficiency, and traffic congestion as the main challenges currently being faced by European transportation. Despite their severity, these issues may be improved with the use of new in-vehicle technologies currently not available in the market.

**The goal** of EuroFOT is to identify and coordinate an in-the-field testing of new Intelligent Vehicle Systems with the potential for improving the quality of European road traffic. This permits assessing their effectiveness on actual roads, while determining how they perform towards the intended objectives. In addition, this offers an early publicity of the technologies, and enables the analysis of the user acceptance and its subsequent potential for market penetration.

euroFOT is establishing a comprehensive, technical, and socio/economic assessment programme for evaluating the impact of intelligent vehicle systems on safety, the environment, driver efficiency. The project is assessing several technically mature systems using vehicles that include both passenger cars and trucks across Europe.

The objectives of the testing are to:

- Assess various aspects of in-vehicle systems, such as their capabilities and performance, and the driver's behaviour and interactions with those systems
- Gain a better understanding of the short- and long-term socio-economic impact of such systems on safety, efficiency and driver comfort
- Provide early publicity of the systems to the consumer and create wider acceptance of them

The results of euroFOT are expected to be a major contributor to the processes of deploying ICT systems for transport across Europe. The insights gained during the project will help



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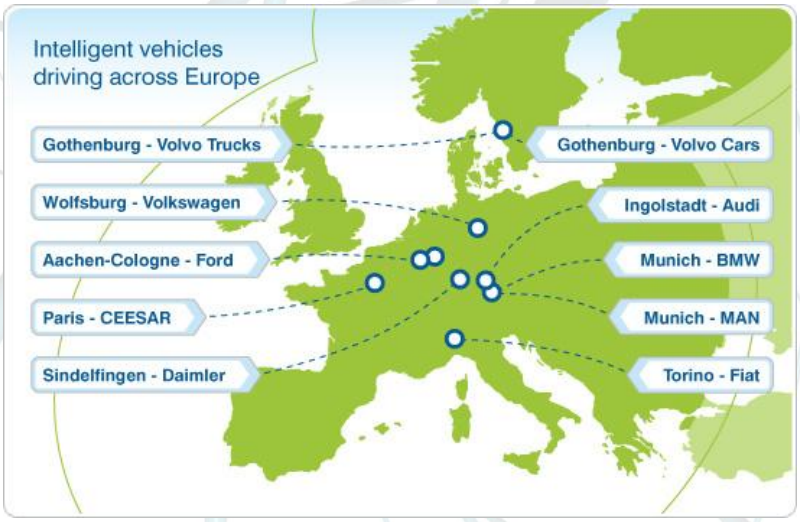
policymakers decide on the right policy framework, and business leaders to make informed decisions on the best way to bring these technologies to the market.

**Main achievements/ or expected results- use cases**

This will be accomplished through a series of discrete steps. First, EuroFOT will specify a test plan identifying proper driving scenarios, factors with maximum safety potential, and expected results. Subsequent steps will involve the recruitment and training of customers, with the necessary installation of data loggers into their vehicles. In this way, customers will drive and collect data under normal driving conditions.

During the final section, EuroFOT will analyse both objective and subjective data describing the driver behaviour and adaptation, vehicle dynamics, and system acceptance. This will permit EuroFOT to be considered representative of ordinary driving conditions in European roads, and ultimately evaluate the overall effectiveness and feasibility of Intelligent Vehicle Systems.

During the course of 2009-2010, more than 1500 vehicles will be driving across Europe equipped with intelligent vehicle systems. Several operations centres are set-up across France, Germany, Italy and Sweden:





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# 17. FIELD OPERATIONAL TESTS OF AFTERMARKET AND NOMADIC DEVICES IN VEHICLES- TELEFOT

**Concerned partner(s)**:

- PP4 - Center for Research And Telecommunication Experimentation for NETworked communities (IT)

European Commission Information Society and Media
SEVENTH FRAMEWORK PROGRAMME

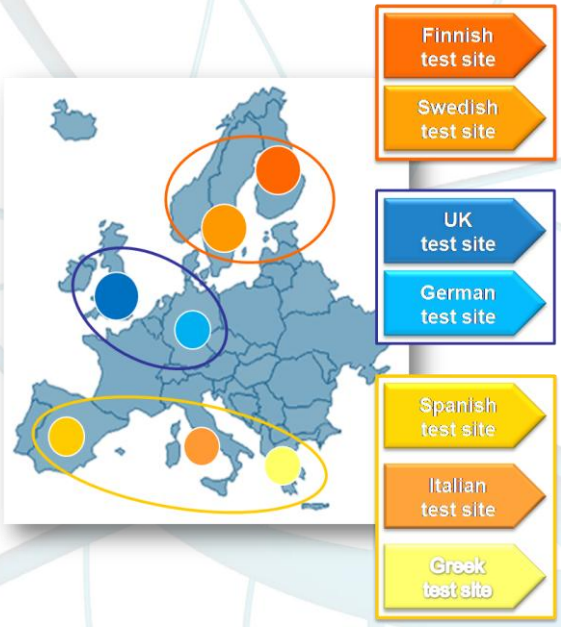
**Project full name and acronym:** Field operational tests of aftermarket and nomadic devices in vehicles- teleFOT
**Funding authority:** Funded under 7th FWP (Seventh Framework Programme)
**Project website:** http://www.telefot.eu/pages/index/?id=1
**Project Coordinator:** VTT Technical Research Centre of Finland
**Project partners:** CRF, Italy; Other partners: http://www.telefot.eu/pages/index/?id=11
**Project start date and duration:** June 1st 2008, 48 months
**Project Cost:** 14.44 million euro

**Summary- vision, objectives, applications**

The project aims to test the impacts of driver support functions on the driving task with large fleets of test drivers in real-life driving conditions.
In particular, TeleFOT assesses via Field operational Tests the impacts of functions provided by aftermarket and nomadic devices, including future interactive traffic services that will become part of driving environment systems within the next five years.
Field Operational Tests developed in TeleFOT aim at a comprehensive assessment of the efficiency, quality, robustness and user friendliness of in-vehicle systems, such as ICT, for smarter, safer and cleaner driving.

**Main achievements/ or expected results- use cases**

As part of the project, extensive field tests will be carried out throughout Europe.
The field tests will have two phases: first, short and long time testing will be done with a large number of vehicles. In the second phase, detailed testing with a limited number of subjects with instrumented cars will be carried out. In the tests, the drivers will have access to smart phones and navigators and the effects of the services they provide to support driving will be tested. Prior to any field operational tests, the usability and safety of the devices and services will be studied carefully in laboratory conditions.
A stakeholder forum will be created in connection with the project, to involve





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actors in the sector and invite them to monitor the tests and make use of the experience gained.

The benefits from this international project will be visible in the safety and smoothness of traffic, as well as a greater driving comfort when the driver is offered the possibility of anticipatory driving and planning the trip. The project will also gain relevant information about the correct use of equipment and their effects on safe and economical driving. Likewise, the type of traffic services wanted when driving and what people are prepared to pay for them will also be ascertained. The project will also assess how mobile terminals can be developed in terms of traffic use and what new features could be embedded in e.g. navigators and 3G phones.





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# 18. PREPARING FOR DRIVING IMPLEMENTATION AND EVALUATION OF C2X COMMUNICATION TECHNOLOGY- PRE-DRIVE C2X

**Concerned partner(s)**:

- PP4 - Center for Research And Telecommunication Experimentation for NETworked communities (IT)

European Commission Information Society and Media
SEVENTH FRAMEWORK PROGRAMME

**Project full name and acronym:** Preparing for driving implementation and evaluation of C2X communication technology- PRE-DRIVE C2X
**Funding authority:** Funded under 7th FWP (Seventh Framework Programme), PRE-DRIVE C2X is supported by EUCAR, the European Council for Automotive R&D
**Project website:** http://www.pre-drive-c2x.eu/index.dhtml/354ab772c013441185tj/-/deDE/-/CS/-
**Project Coordinator:** Daimler AG
**Project partners:** CRF, Italy; Other partners: http://www.pre-drive-c2x.eu/index.dhtml/354ab772c013441185tj/-/deDE/-/CS/-/consortium
**Project start date and duration:** 01/07/2008; 24 months
**Project Cost:** 8.52 million euro

**Summary- vision, objectives, applications**

**PRE-DRIVE C2X designs, develops and demonstrates** the envisaged common European architecture for vehicle-to-vehicle and vehicle-to-infrastructure communication. It proves the proper functioning and the expected benefits. The PRE-DRIVE C2X consortium performs a substantial step forward from the current research systems to a system prototype based on a common architecture. The prototype must be robust enough to sustain a real life field trial.
**This step will be done** by implementing the architecture designed by COMeSafety together with all running projects on cooperative systems. Here the vehicles that can be seen as moving nodes of a network. This is the key to really enable the interoperability with all needed communication means, and it is prerequisite for a sustainable deployment ramping up in short term.
**The project sets up** a prototype system that can easily be replicated for future field operational tests. It also provides a dedicated simulator for cooperative systems that allows a comprehensive system evaluation from a technical as well as from a safety and a traffic impact related viewpoint.

**Main achievements/ or expected results- use cases**

**The aim is the prototypical realisation** of the common European architecture for vehicle-to-vehicle and vehicle-to-infrastructure communication for system demonstration and functional verification. It includes also the integration of the prototype components for the test and demonstration phases.


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**A working prototype** of the common European architecture for a vehicular communication system based on the COMeSafety definition is provided by PRE-DRIVE C2X. At first the necessary hardware and software components as well as the testing, management and monitoring tools needed for system development are identified. Functional prototypes of these components are then realised and functionally verified on a suitable test bench. After they have successfully passed this functional verification all components are replicated in sufficient numbers in order to set up a test site and to equip a small vehicle fleet for demonstration and test of the PRE-DRIVE C2X vehicular communication system.

Particular focus is put on the **robustness of the system** with particular view on the envisaged test and evaluations in field operational trials. These require systems that exceed pure demonstrator status.

**Impact assessment and demonstration.** The objective is to demonstrate and functionally verify the prototype of the inter-vehicle and vehicle to infrastructure communication system developed on the basis of common European architecture. The aim is to proof, that the system fulfils the needs originated by the use cases and can be used as basis for the large scale field trials. The tests also serve to verify the methodologies developed in PRE-DRIVE C2X and to do a first analysis of the system impact that of inter-vehicle and vehicle to infrastructure communication system in Europe.

A **first assessment of the architecture prototype** and the evaluation methodologies will be conducted. This helps to identify gaps as well as technical limits. The assessment is accompanied by an application of the simulation tool set to give a first impression of the system benefits. One particular outcome is a reliable cost/benefit estimation. The assessment is combined with a system demonstration in order to promote the common European communication architecture and the planned field trials.

Based on the results of the tests and simulations conducted in PRE-DRIVE C2X the social impact of inter-vehicle and vehicle to infrastructure communication shall be determined by estimating the number of accidents which can be avoided through vehicle safety communication and the improvement of traffic flow, which is expected to result in less traffic jams and less environmental impact.





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## 19. AC CENTROPE

**Concerned partner(s)**:

- LP - Automotive Cluster – West Slovakia (SK)
- PP6 - Slovak Technical University (SK)

**See at 1. project**

## 20. PROFESSIONAL MBA AUTOMOTIVE INDUSTRY

**Concerned partner(s)**:

- PP6 - Slovak Technical University (SK)

**Project full name and acronym:** Professional MBA Automotive Industry - Cross-border cooperation Austria-Slovakia 2007-2011
**Funding authority:** European Union European Regional Development Fund
**Project partners:** ACVR Vienna, Technical University Vienna, Slovak University of Technology Bratislava
**Total budget:** 988 000 EUR
**PP's budget:** 156 000 EUR
**Duration:** 2008-2011 (36 months)

**Program Objectives**

The main goal of the Professional MBA Automotive Industry is to provide present & future managers
in the automotive or components supply industries with additional knowledge and to upgrade their skills. Graduates of this program will gain an in-depth knowledge of management within this field, which should enable them to:

- identify short-term and long-term challenges
- structure complex, dynamic projects
- independently manage a project, using project management tools
- make the right decisions in complex and difficult situations
- stay abreast of both national and international changes.

**Target Groups**

The program is primarily targeted at persons operating in the automotive and components supply industries:

- Company employees or self-employed persons who have positioned themselves as leaders, or who wish to do so.
- Employees who have taken their career steps and now want to prepare themselves for further career development by taking on a managerial function within the automotive and components supply industries.
- Potential company founders with a technical background.


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**Admission Requirements**
Admission will be granted to persons holding an internationally recognized degree, at least two years of relevant work experience, and a good knowledge of English.
In individual cases, and where there is good reason, interested applicants with equivalent qualifications may also be granted admission. This applies to persons holding a position equivalent to that normally held by a college graduate, or who have appropriate work experience.

**Final Degree**
The Professional MBA program is concluded with a Master's Thesis. The final degree "Master of Business Administration Automotive Industry (MBA)" is granted by the Vienna University of Technology in cooperation with Slovak University of Technology in Bratislava.

**Duration**
The part-time program is presented in modules and takes 4 semesters.

**Language of Instruction:** English

**Faculty**
Internationally renowned experts are members of this highly acclaimed faculty, based on their sound interdisciplinary specialized knowledge or on their extensive practical experience in the automotive and components supply industries.




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# 21. MAGFORGE

**Concerned partner(s)**:

- PP7 - Business interest association ACS, Automotive Cluster of Slovenia (SLO)

**Project full name and acronym:**
Magnesium Forged Components for Structural Lightweight Transport Applications, MAGFORGE
**Funding authority:**
European Commission (FP6)
**Project partners:**
Netherlands Organisation for Applied Scientific Research, Euroforge, Association Francaise de Forge, Industrieverband Massivumformung e.V., TECOS, SERNAUTO, GIZ ACS, KG Fridmann AB, Forgialluminio 3 S.r.l., Rasche Umfortechnik GmbH & Co KG, Kovinar d.o.o., Forja Neptun srl, Soraluce Sociedad Cooperativa, GKSS Forschungszentrum Geesthacht GmbH, UL – Fakulteta za strojništvo, IDEKO Sociedad Cooperativa, University Politechnica of Bucharest, International Magnesium Association – European Office
**Total budget:** 1,4 milion €
**PP's budget:** 50.585,71 €
**Duration:** 1.7.2006 - 30.6.2009

Forging is an industrial manufacturing method in which metal parts are shaped from feedstock by applying compressive forces through various tools and dies. This metalworking category includes such processes as closed-die forging, impact extrusion, coining and swaging. The main market for forged components is the automotive sector, the situation within which is characterised by increasing forging volumes, continuing price pressure, and an increasing demand for lightweight components. Within Europe, the forging industry consists mainly of SMEs, being sandwiched between material suppliers and end users. For the forging shops, there is a distinct need to stay ahead of the customer, for instance by developing into a "super specialist". The proposed project addresses the issue of lightweighting of structural components by using magnesium as product material (magnesium being 35% lighter than aluminium and 75% lighter than steel). Current constraints on the performance and cost-effectiveness of magnesium forging and the quality of the produced parts are to be resolved in order to prepare the European forging industry for this innovation.
To this end, the technological basis for the design and manufacture of magnesium forged parts needs to be reinforced, the light-weighting capacity of this category of products needs to be confirmed, and dissemination and training needs to be undertaken. S&T objectives are alloys and feedstock preparation methods with improved performance, a level of predictability of magnesium forging processes which is technically satisfying, and magnesium demonstrator components with considerable lower weight than aluminium versions. RTD activities will therefore focus on feedstock development (alloy composition, feedstock preparation,…), process development (materials' characterisation, FEM simulation,…), and validation (forge-ability assessment, functional evaluation,…). Stakeholders are the forging industry associations and their SMEs), but also the material suppliers and end users, as well as suppliers of auxiliaries (tools, furnaces, lubricants) and engineering services.


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Goal of the project is a tailored and cost-effective technology for the design and manufacture of magnesium parts produced by (closed-die) forging. To this aim, research and technological development work is required in several areas.

The tailoring of alloys (novel chemical compositions and modifications like grain refiners for micro-structural control) and feedstock preparation techniques (casting methods, preextrusion) should lead to better metal homogeneity, improved formability and/or enhanced mechanical properties (strength, toughness, fatigue).
Some classes of processes can be distinguished, entailing different types of parts and equipment. Here, a distinction between large forgings, small forgings, and can/tube forgings is made. With forging processes actually being complicated thermo-mechanical treatments, these do not only fix the geometry but also the resulting functional performance. Development of these processes is required in a sense that the interrelations between the mjor variables (alloy composition, temperature, deformation) have to be better understood, nvolving materials' characterisation, FEM process simulation, tribological testing and nstrumented forging trials. This is to enhance predictability and the design of the process in the preproduction stage with respect to process parameters (including lubrication) as well as the control over mechanical properties of the part. Being closely connected with the previous issue, product design needs to be addressed from the viewpoint that directionality of mechanical properties can also be used as an advantage. Regarding the process, metal flow should be assured to be directed so that maximum properties are developed where needed in the final part; as for product design, anisotropy in strength should be considered in arriving at an optimal solution. A further effort should be on post-forging operations (heat treatment, application of coatings, finishing).

In order to focus the RTD work and to demonstrate the achievements, typical components will be selected and developed for the purposes of forge-ability assessment and functional evaluation (property distribution, long-term stability, surface quality).

World-wide, the forging industry is mainly located in the USA/Canada, the far East/Japan and Europe, as can be gathered from the figure below. Within Europe, many countries are home to forging companies. Most of the approximately 1,000 European forging shops are small- and medium-sized enterprises – with about three-out-of-four being smaller than 200 employees – so this is a typical SME sector.

The main market for forged components is automotive. The forging industry is thus faced with some particular trends that relate to developments within this sector. The general platform strategies as well as the increase in diesel-engine powered cars and four-wheel driven sports-utility vehicles are implying volume increase for forged components.





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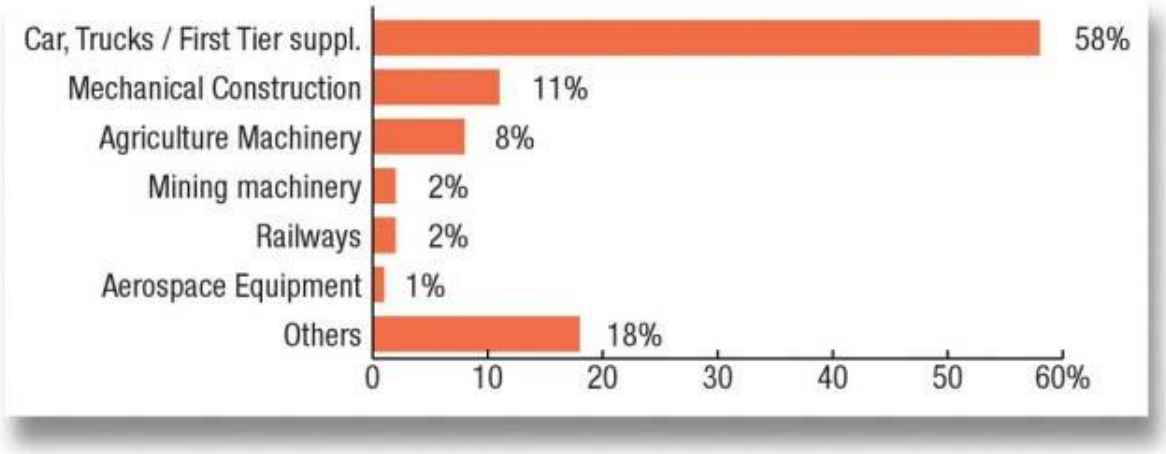


On the other hand, there is a continuing price pressure: where costs (for materials, labour, energy and the like) go up, the main customers and their system suppliers do not accept that these are passed on to deliveries. Further, the automotive industry has committed itself to substantially reduce fuel consumption and exhaust emissions (amongst others CO2), for which weight saving at all levels is crucial. Priorities in lightweight structure design are the un-sprung mass (wheels and their suspension), the front end before the front axle and the mass between the front axle and instrument panel. All these are typical areas where forged components are used.

In this respect, it is increasingly recognised that aluminium (with a density of 2,700 kg/m3) and magnesium (1,800 kg/m3) are attractive alternatives for steel (7,800 kg/m3). Notably magnesium is the lightest available engineering metal, being 75% lighter than steel and 35% lighter than aluminium. To further specify this aspect, figure 3 gives an overview of the intrinsic weight-saving potential for some magnesium wrought alloys as related to an aluminium reference alloy which is in use for forgings. The graph distinguishes between some distinct modes of loading a beam, taking into account the relevant material properties – modulus of (for other shapes and modes ofpelasticity E, yield stress YS and density loading, other design parameters apply). Although these data depend somewhat on the assumptions and the specific property values, this basic approach clearly demonstrates that benefits are anticipated for strength-related and in particular for bending-relevant parts, with a potential gain for magnesium of up to 36% over aluminium.





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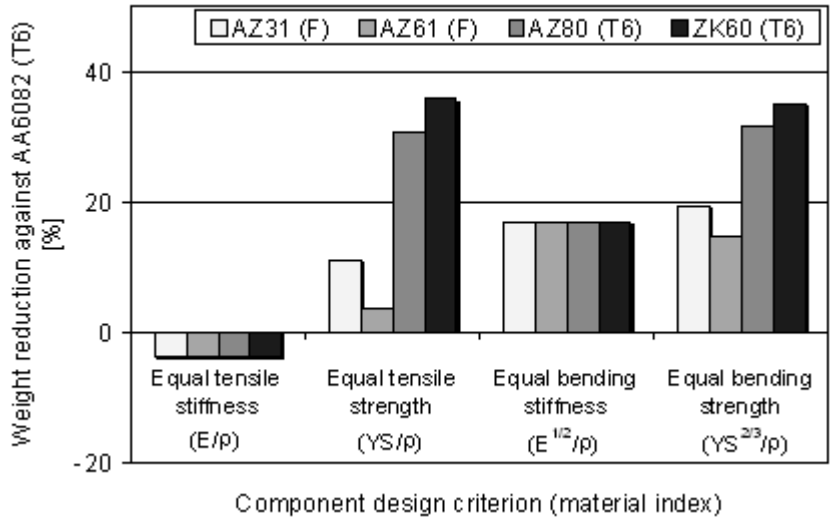


*Figure 3 - Weight-saving potential of magnesium over aluminium for some typical loading situations*

**Consortium**

This section provides an overview of all MagForge partners as well as a link to their own websites. The consortium consists of 23 partners, comprising of three types of partners. The IAG Partners will be mainly involved in technology transfer, the (initiation of) training modules and strategic matters and use their links with their SME members. The Core SME Partners will be actively involved in the RTD work on process development and validation and the RTD Performers will be conducting the basic and technological investigations into feedstock and process development.





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# 22. FACILITATING INTERNATIONAL MARKET ACCESS FOR MANUFACTURING SUPPLIERS IN THE AUTOMOTIVE COMPONENT INDUSTRY IN THE SAMARA REGION OF RUSSIA

**Concerned partner(s)**:

- PP7 - Business interest association ACS, Automotive Cluster of Slovenia (SLO)

**Project full name and acronym:**
Facilitating international market access for manufacturing suppliers in the automotive component industry in the samara region of Russia, UNIDO RUS
**Funding authority:**
United Nations Industrial Development Organization
**Project partners:**
Automotive Cluster of Slovenia, ACS members, Ministry of Economic Affairs (Republic Slovenia and region Samara), Automotive Clusters and Associations, and Companies from Sector.
**Total budget:** 800.000,00 €
**PP's budget:** 800.000,00 €
**Duration:** 12.12.2008 - 2012

The automotive (component) industry is of enormous importance for the economic development of many regions in the Russian Federation. It significantly contributes to GDP and foreign exchange earnings and employs a large number of people, directly and indirectly. In Samara Oblast alone, the automotive supplier industry includes about 360 registered companies, which provide work for more than 95.000 people. The Samara Region has become a global supplier of a wide range of components into both the Original Equipment Manufacturers (OEMs) and after-markets.

The Russian Federation (RF) is an important trading partner of Slovenia (ranked seventh in 2008). In 2008, exports from Slovenia to Russia totaled € 800.8 mln (an increase by 15.8% from 2007) and imports € 355.9 mln, which represents a reduction by 27.4% compared to 2007 due to lower imports of iron alloys, oil gases and its derivates). Overall, Slovenia has achieved a positive trade balance of € 444.9 mln in 2008.

Trends in the area of services exports are very encouraging. The volume of services exchange reached € 296.4 mln (exports of € 184.6 mln from Slovenia to Russia, imports of € 111.8 mln), which appears to reflect an increase by 84.6 % from 2007. However, since the methodology for measuring services exports was changed between these years, the data is not comparable and the actual growth or decline difficult to ascertain.

When considering investment figures, the importance of economic ties between Slovenia and RF also stands out. By the end of 2007, Slovenian investment into RF amounted to € 246.31 mln, which represents a growth of 103.7 % compared to the previous year. At the same time, Russian investment into Slovenia totaled € 33.46 mln EUR as opposed to a mere € 1.6 mln by


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the end of 2006. In fact, in 2007, the largest Russian investment in Slovenia was undertaken by the Russian group KOKS.

In terms of tourism, Slovenia has received 31% more tourists from RF in 2008 compared to 2007. In terms of overnight stays and arrivals, RF is ranked as the seventh most important market for Slovenian tourism.

The structure of trade between the two countries has remained almost unchanged during the overall time period. Data for 2008 shows that the export of pharmaceutical products, electrical machines and equipment, mechanical equipment and colors and varnishes represents approximately 52.2 % of total Slovenian exports to Russia (in 2007 this figure was 72.4%). Import of oil gases and its derivates and aluminum and aluminum products in 2008 represented 65.4 % of total imports from RF (in 2007 this figure amounted to 80.3%).

However, the recent economic crisis impacted the car industry severely. At the moment there are several hard-hitting factors affecting the industry: the recent higher plateau of fuel prices, increasing raw material prices and greater pressure from impatient investors, shareholders and banks. However, the most imminent and potentially the most damaging threat has now become the scarce availability of credit. The consequences are evident throughout the industry, with vehicle manufacturers cutting down on shifts, suppliers revising their earnings expectations, and auto dealers slashing prices. The stress is even greater on the smaller Tier 2 and Tier 3 suppliers who make parts for the Tier 1 suppliers. Many are likely to go out of business or to be consolidated because as the market pressure towards vehicle manufacturers augments, they tend to pass the pressure on to their suppliers in terms of price, quality and services.

In order to be able to face this situation, it is crucial that the lower tier suppliers enhance their productivity and competitiveness in the market. In this context, the main objective of this project is to strengthen the small and medium scale component supplier industry in Samara Oblast to meet the stringent requirements of the automotive industry and to facilitate their inclusion in regional and global supply chains. This is being achieved through a strong focus on networking and business partnership building; productivity and quality improvement skills and techniques; and further enhancing SMEs' performance.

The UNIDO Business Partnership and Cluster Programme for the automotive component industry in Samara Oblast aims to assist the automotive component suppliers in the Region to meet the requirements of vehicle and 1st tier automotive component manufacturers and to overcome the constraints arising from their small size and the resulting inability to realize economies of scale. At the same time, target beneficiaries will benefit from activities that help to accelerate a process of integrating them into local markets and the Central and Eastern European region, as well as in future global supply chains of domestic and multinational companies. Within this context, the programme envisages to support and strengthen the institutional framework for providing practical services to suppliers in the industry sector concerned, targeting three inter-related outputs: - Enhancing the performance of participating suppliers in the automotive component industry in Samara Oblast to ensure their international competitiveness through enterprises oriented direct shop floor interventions, at a first stage on a pilot-base, and finally through selected business support and advisory institutions. –



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Upgrading relevant business support institutions through strengthening of the institutional setup, optimizing of the service portfolio and developing a base of well-trained national engineers. - Developing a regional outsourcing base for automotive components through the creation of an interregional cluster initiative and building linkages and synergies to selected clusters in the South Eastern European region.

The overall objective of the UNIDO Business Partnership and Cluster Programme for the automotive component industry in Samara Oblast is to strengthen its suppliers to meet the requirements of vehicle and Tier 1 automotive component manufacturers so as to be able to access and sustainably participate in global supply chains and international markets, in particular in the European Union. Within this context, the programme envisages supporting and strengthening the institutional framework for providing practical services to suppliers in the industry sector concerned, achieving three inter-related objectives that are outlined below:

- • Enhancing the performance of suppliers (in particular local Tier 2 to Tier 4 suppliers that are directly linked to Tier 1 suppliers) in the automotive component industry in the Samara Region to ensure their international competitiveness through enterpriseoriented direct shop floor interventions.
  • Upgrading support institutions in the Samara automotive industry through strengthening of the institutional set-up and development of a pool of well-trained national engineers and market experts.
  • Creating the capability to develop an interregional network in the automotive component sector to facilitate access of suppliers in Samara Oblast to international markets by supporting their integration into global supply chains. This assistance will be based on existing cluster development expertise in the automotive industry in the wider region, and especially on the experience gained with the Slovenian Auto Cluster.

Regarding progress within the project, the following results have been achieved:

• Start-up activities were completed and key stakeholders determined, several meetings with key stakeholders were held to introduce and discuss the project, its objectives and the work plan;
• The Steering and Project Committees were formally set up;
• The preparation of detailed cluster assessment study and of the cluster vision and strategy have started, including the determination of the methodology and the preparation of initial analyses;
• Two initial training and awareness raising workshops were conducted with the participation of up to 30 public and private sector stakeholders;
• The company assessment phase to select 10-15 supplier enterprises to participate in counselling activities for company upgrading has begun and will be finalized by the end of May 2009.
• Candidates for the national expert positions in the area of productivity enhancement and cluster development were interviewed and a small group of candidates short-listed, with a view to having the national expert team in place by early June.


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# 23. FACILITATING INTERNATIONAL MARKET ACCESS FOR MANUFACTURING IN THE AUTOMOTIVE COMPONENT INDUSTRY IN SERBIA

**Concerned partner(s)**:

- PP7 - Business interest association ACS, Automotive Cluster of Slovenia (SLO)

**Project full name and acronym:**
Facilitating international market access for manufacturing suppliers in the automotive component industry in Serbia
**Funding authority:**
United Nations Industrial Development Organization
**Project partners:**
Automotive Cluster of Slovenia, ACS members, Ministry of Economic Affairs (Republic Slovenia and Serbia), Automotive Clusters and Associations, and Companies from Sector.
**Total budget:** 400.000,00 €
**PP's budget:** 400.000,00 €
**Duration:** 25.06.2007 – 31.12.2009

The automotive industry in Serbia is of great importance to transition economies in Serbia. It significantly contributes to their GDP and foreign exchange earnings and employs a large number of people directly and indirectly. In Serbia alone, the automotive supplier industry includes about 160 registered companies, amounts to an annual turnover of more than EUR 200 million and provides work for more than 38.000 people. Southeast Europe has become a global supplier of a wide range of components into both the Original Equipment manufacturers (OEMs) and after-markets.

As the market pressure towards vehicle manufacturers augments, they tend to pass on the pressure on their suppliers in terms of price, quality, and services. Nonetheless, there are additional changes in the supply system and structure, which affect the component suppliers. The number of parts, components and systems, which are outsourced by the vehicle manufacturers, is increasing continuously. Generally, this tendency leads to a growing prominence of suppliers in the automotive industry, which will change the relationship between OEMs and suppliers as well as among suppliers themselves. However, not all suppliers will be in the position to take advantage of these opportunities.

Within this scenario, there are three main tendencies, which are the most significant for the future viability of the Serbian automotive component suppliers, regardless of their size and location:

1. The continuously increasing demand for high quality,
2. The ability to integrate parts and components into comprehensive systems,
3. The growing strength of large 1st tier suppliers.

The overall objective of the UNIDO Business Partnership and Cluster Programme for the automotive component industry in Serbia aims at strengthening its suppliers to meet the


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requirements of vehicle and 1st tier automotive component manufacturers so as to be able to access and sustain in global supply chains and international markets, in particular in the European Union. Within this context, the programme envisages to support and strengthen the institutional framework for providing practical services to suppliers in the industry sector concerned, achieving three inter-related objectives that are outlined below: - Enhancing the performance of participating Serbian suppliers in the automotive component industry to ensure their international competitiveness through enterprises oriented direct shop floor interventions. - Upgrading the relevant institution through strengthening of the institutional set-up and development of well-trained national engineers. - Integrating Serbian automotive component suppliers into a regionally networked Southeast European cluster (interregional cluster) initiative in the automotive component sector based on the upgrading of the Serbian cluster approach and built-up of linkages between appropriate clusters in the region, in particular in conjunction with the Slovenian Auto Cluster.

The overall objective of the UNIDO Business Partnership and Cluster Programme for the automotive component industry in Serbia aims therefore at strengthening its suppliers to meet the requirements of vehicle and 1st tier automotive component manufacturers so as to be able to access and sustain in global supply chains and international markets, in particular in the European Union. Within this context, the programme envisages to support and strengthen the institutional framework for providing practical services to suppliers in the industry sector concerned, achieving three inter-related objectives that are outlined below:

• Enhancing the performance of Serbian suppliers in the automotive component industry to ensure their international competitiveness through enterprises oriented direct shop floor interventions.
• Upgrading the Serbian support institutions in the automotive industry through strengthening of the institutional set-up and development of a pool of well-trained national engineers and market experts.
• Creation of capability to develop and interregional network in the automotive component sector to facilitate access of Serbian suppliers to international markets through supporting their integration into global supply chains, based on existing cluster development expertise in the automotive industry in the region, in particular in conjunction with the Slovenian Auto Cluster.

The core target groups of this project are the Serbian Auto-Cluster and its members. In 2007, the total turnover of all 29 AC Serbia member companies amounted to €140 Mill., which represents approximately 31% of the total turnover the entire sector. In terms of workforce, the cluster members represent approximately 34% (8,500) of the about 25,000 people employed in the sector. All companies that form part of the company counselling activities make up for about 22,5% of workforce employed in the Serbian auto-component sector.

**Objectives of the Project:**

The programme envisages support and strengthen the institutional framework for providing practical services to suppliers in the industry sector concerned, achieving three inter-related objectives that are outlined below:

• *Enhancing the performance of participating Serbian suppliers in the automotive component industry* to ensure their international competitiveness through enterprises oriented direct shop floor interventions.



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• *Upgrading the Serbian Automotive Cluster Institute through* strengthening of the institutional set-up and development of well-trained national engineers.
• *Creation of a regionally networked Southeast Europe cluster in the automotive component sector* to facilitate access of Serbian suppliers to international markets through supporting their integration into global supply chains, based on existing cluster development expertise in the automotive industry in the region, in particular in conjunction with the Slovenian Auto Cluster.

In the course of the management board meeting of AC Serbia, the constitution of an official counselling body was decided. This body has an advisory function. It consists of following institutions:

- Ministry of Economy and Regional Development
- Serbian Chamber of Commerce
- Serbia Investment and Export Promotion Agency (SIEPA)
- Serbian Agency for Development of Small and Medium-sized Enterprises and Entrepreneurship
- Vojvodina Investment Promotion Agency (VIP)
- Deutsche Gesellschaft für Technische Zusammenarbeit - German Technical Cooperation (GTZ)
- USAID

During the last 2 years AC Serbia has cooperated with all institutions mentioned above in different ways. Due to the positive experiences in the past, these institutions have been selected as preferable partners since all of them can support the cluster development process in a positive way. They are covering different activity fields like export promotion, support of SME, realization of capacity building measures, organization of trainings, provision of contacts with international investors etc – all of these activities are crucial the development of the cluster.




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## 24. COIN

**Concerned partner(s)**:

- PP7 - Business interest association ACS, Automotive Cluster of Slovenia (SLO)

**Project full name and acronym:**
Enterprise Collaboration and Interoperability, COIN
**Funding authority:**
European Commission (FP7)
**Project partners:**
TXT e-solutions S.P.A., VALTION TEKNILLINEN TUTKIMUSKESKUS, Jozef Stefan Institute, IC FOCUS LIMITED, ATOS ORIGIN SOCIEDAD ANONIMA ESPANOLA, ASSOCIAZIONE ESOCE NET, CONSIGLIO NAZIONALE DELLE RICERCHE, Universitaet Innsbruck, SIEMENS, AKTIENGESELLSCHAFT OESTERREICH, TECHNISCHE UNIVERSITAET WIEN, SOLUTA.NET S.R.L., Fundación European Software Institute, STIFTELSEN SINTEF, DEUTSCHES FORSCHUNGSZENTRUM FUER KUENSTLICHE INTELLIGENZ GMBH, Bremer Institut für Produktion und Logistik GmbH, INGENIERIA Y SOLUCIONES INFORMATICAS DEL SUR, SOCIEDAD LIMITADA, POYRY FOREST INDUSTRY OY, Interactive Net Design Kft, VEN PROCESS LIMITED, GIZ ACS, SLOVENSKI AVTOMOBILSKI GROZD, SOCIETA FINANZIARIA LAZIALE DI SVILUPPO - FI.LA.S. S.P.A.
**Total budget:** 14,4 milion €
**PP's budget:** 168.780,00 €
**Duration:** 1.1.2008 - 31.12.2011





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# 25. STAR NET

**Concerned partner(s)**:

- PP7 - Business interest association ACS, Automotive Cluster of Slovenia (SLO)

**Project full name and acronym:**
European Network to Support the Sustainable Surface Transport SMEs, STAR NET
**Funding authority:**
European Commission (FP7)
**Project partners:**
INOVAMAIS (Portugalska), OSEO Innovation (Francija), CIDAUT (Španija), IPPT PAN (Poljska), PSPT (Poljska), CFA (VB), APRE (Italija), SenterNovem (Nizozemska), URTP (Romunija), TUBET (Turčija), ARC Fund (Bolgarija), SEDC (Litva), UNIZA (Slovaška), CLEPA (Belgija), EMEC (Bruselj),
**Total budget:** 1,1 milion €
**PP's budget:** 45.565,5 €
Duration: 1.4.2008 - 30.10.2010





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## 26. SID LOAN FOR SME'S IN AUTOMOTIVE SECTOR

**Concerned partner(s)**:

- PP7 - Business interest association ACS, Automotive Cluster of Slovenia (SLO)

EIB supports with EUR 380 million projects promoted by SMEs and automotive suppliers, infrastructure investments by local authorities, and projects aiming at environmental protection and improvement in Slovenia.

The project concerns co-financing of projects promoted by SMEs and investments by automotive suppliers aimed at the development of a new generation vehicle technology and emissions reduction.

The European Investment Bank (EIB) is providing four credit lines loans totaling EUR 380 million to the Slovene Export and Development Bank (SID).

Objectives are to support of small and medium sized SME projects and RDI projects by the automotive sector in Slovenia.

Mrs. Marta Gajęcka, EIB Vice-President responsible for lending in Central Europe, including Slovenia, commented: "EIB long-term finance is particularly aimed at small and mediumsized companies and automotive suppliers, which are increasingly suffering from the lack of liquidity due to the current crisis. This will contribute to the implementation of the anti-crisis measures by the Government of the Republic of Slovenia".

The EIB intermediated loans cover:
• The loan of EUR 150 million will co-finance small and medium-scale projects implemented by SMEs. This is a new generation of intermediated loans in line with the EIB's priority of strengthening its support for Europe's SMEs and helping to reduce the impact of the current credit crisis by improving the access of SMEs to medium and long-term funds on advantageous financial terms. As part of this, the Bank is also simplifying its procedures and broadening the scope of its financing. In addition, it is increasing transparency by working towards a more effective transfer of the advantage of EIB funds to final beneficiaries.
• The EUR 80 million loan will support investments of automotive suppliers focused on the development of new generation vehicle technology and car emissions reduction. It will provide long-term finance for the RDI activities of Slovenian companies in accordance with the EIB's transport policy. This is the first intermediated loan provided by the EIB to finance projects of automotive suppliers.
• The credit line of EUR 100 million will co-finance infrastructure projects of Slovenian local authorities, further strengthening EIB support to municipal investments.
• The EUR 50 million loan will support projects aiming at environment protection and improvement.





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The EIB, the European Union's long-term financing institution, finances economically viable investment projects that contribute towards the integration, balanced development and economic and social cohesion of the EU Member States.

Thanks to its Statute and shareholders, the 27 Member States, including Slovenia, the EIB has a AAA-rating and can therefore borrow funds on the capital markets on favorable terms, which it passes on via the loans that it grants to its clients and final beneficiaries. Since 1990, the EIB has signed loan contracts in Slovenia, including the current loans, amounting to some EUR 3.4 billion, of which some EUR 865 million supported SME and local authority projects.





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## 27. "FIREROB, THE AUTONOMOUS FIRE-FIGHTING ROBOTIC VEHICLE"

**Concerned partner(s)**:

- PP8 - Croatian Employers' Association (Croatia)

**Project full name and acronym:** "FIREROB, the Autonomous Fire-fighting Robotic Vehicle"
**Funding authority:** EU FP7 Program
**Project Coordinator:** SME DOK-ING d.o.o.
**Project Partners:** Besides Brodarski Institute (Croatia), DEFINET and KAMPAKAS (Greece), PRODUCTOS MESA (Spain), SCOT-ATRI (UK).
**Project budget:** 800KEUR
**Webpage:** www.firerob.info

Within EU FP7 program Brodarski Institut d.o.o. (BI) is successfully participating in several R&D projects, specifically in the 'Research for the benefit of SME' section of the FP7 funding program. One of the recently funded projects is the FIREROB, the Autonomous Fire-fighting Robotic Vehicle, which is approaching the final implementation phase. Project is performed in close cooperation with Croatian SME DOK-ING d.o.o., which is acting in the roles of technology beneficiary and the project coordinator as well.
Strategic overall objective of FIREROB project is to develop the prototype of the autonomous unmanned fire fighting vehicle that will be able to fight efficiently against fires in hazardous environments, particularly where men and firemen are highly jeopardized. This autonomous Robotic fire fighting system can be implemented in every situation where lives can be saved and fires can be extinguished.

Two challenging technological objectives are performed by Brodarski Institute within the project:

- Development, integration and adaptation of current SOA technologies in order to obtain acceptable level of operability of a vehicle in reduced visibility conditions. This assumes integration of positioning systems (GPS and INS) with modern of the shelf systems for the remote control.
- Development and integration of a new Software package based on pattern recognition algorithms that will be able to recognize different types of objects and environmental surfaces. This system should be based on modern thermal vision hardware systems.

Besides Brodarski Institute other project partners are DEFINET and KAMPAKAS from Greece as SMEs, PRODUCTOS MESA as SME from Spain and SCOT-ATRI as the second RTD performer from UK. Overall project budget is 800KEUR, where larger portion is provided by the EC and the rest is ensured by the SME's. More details can be seen on the www.firerob.info page.


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## 28. AUTOMOTIVE CLUSTERS - NETWORK OF SOUTH-EAST EUROPE

**Concerned partner(s)**:

- PP8 - Croatian Employers' Association (Croatia)

**Project full name:** "Export promotion of automotive industry suppliers by the networking of the automotive clusters from the western Balkans",
**Funding authority:** Open Regional Funds for Foreign Trade Promotion
**Project partners:** Automotive Cluster of Bosnia and Herzegovina - ACBiH, Automotive Cluster of Serbia - ACSerbia, Association of Automotive Industry of Macedonia, Automotive Cluster of Slovenia – ACS and Automotive Cluster of Croatia – ACC.
**Project start date:** October 2007
Overall project budget: 1.645.000,00 €

The "Export promotion of automotive industry suppliers by the networking of the automotive clusters from the western Balkans", is a project that was established within the Open Regional Funds for Foreign Trade Promotion in October 2007.

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

The Project aims to improve the positioning of automotive industry suppliers from SEE in the European and global markets. The Project primarily targets SMEs that can integrate into supply chains of the international automotive industry and therefore achieve higher value added.

Among other activities for promoting foreign trade in the automotive industry, the Project supported the establishment of this regional portal with the goal to increase the regional and international visibility of the automotive suppliers in SEE, and to provide opportunities for creating value-added partnerships.

The Project is jointly implemented by the automotive clusters in the participating countries: Automotive Cluster of Bosnia and Herzegovina - ACBiH, Automotive Cluster of Serbia - ACSerbia, and Association of Automotive Industry of Macedonia, in close cooperation with clusters from the partner countries: Automotive Cluster of Slovenia – ACS and Automotive Cluster of Croatia – ACC.





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# 29. CENTRAL AND EASTERN EUROPEAN CLUSTER AND NETWORK AREA – CEE CLUSTERNETWORK

**Concerned partner(s)**:

- PP8 - Croatian Employers' Association (Croatia)

**Project full name**: Central and Eastern European Cluster and Network Area – CEE ClusterNetwork
**Funding authority:** FP6 Sixth Framework Programme - Research and Innovation
**Project Type:** INNO-Net CA
**Project partners:** ecoplus – Business Agency of Lower Austria Ltd. (AT), West Pannon Regional Development Agency (HU), Innovations – und Technologietransfer Salzburg GmbH (AT), Tiroler Zukunftsstiftung (AT), Maribor Development Agency / Euro Info Centre Maribor (SI), Czechinvest – Investment and Business Development Agency (CZ), BIC Bratislava – Business and Innovation Centre Bratislava spol s.r.o. (SK), ARP – Agencja Rozwoju Przemyslu (Industrial Development Agency) (PL), TIS – Techno Innovation South Tyrol (IT), Croatian Employers' Association National Centre for Clusters (HR), Clusterland Upper Austria Ltd. (AT), Croatian Automotive Cluster (CAC), Croatian Employers' Association – National Center for Clusters (CEA NCC).
**Project website:** http://www.proinno-europe.eu/index.cfm?fuseaction=page.display&topicID=66&parentID=55
**Project duration:** 3 years
**Start Date / End Date:** September 2006 / October 2009
**Key words:** Central and Eastern Europe, Innovation and cluster policy.
**Total budget:** 1 934 000 euro

**Rationale and objectives:**
Clusters have so far operated mainly at a regional/local level. Cross border co-operation has only recently become a part of their operations, usually on a case-by-case basis. The CEE-Cluster Network consortium involves eleven neighboring cluster regions in Central and Eastern Europe who are keen to mobilise and support national and regional innovation policy actors to carry out and design co-operation activities together with other competent public authorities. The CEE-Cluster Network focuses on linking the eleven partner regions/countries whose innovation policies focus on cluster and network policy using an INNO-Net. The main objective is to find coherences in the different regional cluster policy implementation methodologies and to shape a common policy in defining common strategic issues, strategies and programmes.
The project aims for a coherent development of innovation and cluster policies in the strongest sectors of each regional economy at three levels: policy; administrative; and regional development agencies and cluster initiatives.

**Key activities:**

- Analysing existing innovation and cluster initiatives and programmes.
- "Quality Guidelines": agreement on a common understanding and common criteria.


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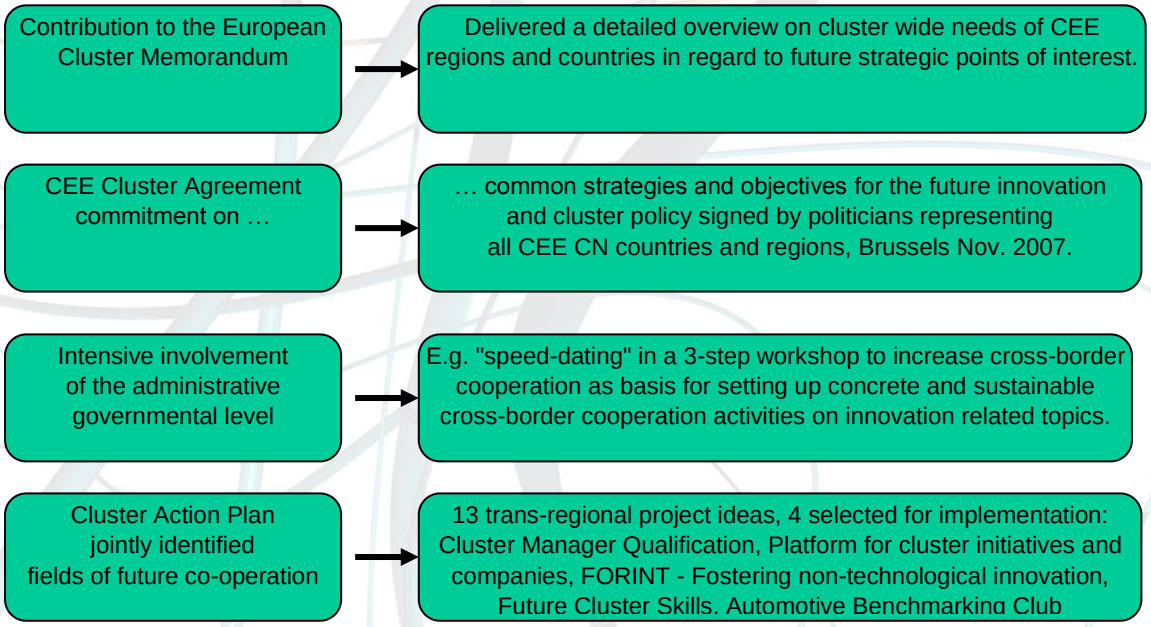
- "Strategic Cluster Memorandum" 2007: agreement of CEE-ClusterNetwork partner regions on common strategies and objectives for the future.
- Bringing together political and administrative policy makers.
- Operative „Cluster Action Plan" on basis of the „Strategic Cluster Memorandum".
- Planning, implementation and evaluation of two to three cross-border pilot actions.
- Development of trans-regional programmes for innovation and cluster activities.
- Establish close links with existing and planned European innovation programmes within the framework of the PRO INNO Cluster Alliance.

**Main achievements**




Croatian Automotive Cluster (CAC), Croatian Employers' Association – National Center for Clusters (CEA NCC), has actively participated in the project along with other cluster initiatives.

**Benefits** of the project on the level of cluster initiatives, including CAC, are:

- Established frame of policies, strategies and action plans for strategic projects in the region of Central and Eastern Europe
- Networking of cluster managers CEE - visions and missions of clusters, areas of cooperation on the level of clusters
- Identification of key sectors/industries and areas of cooperation within the CEE Cluster Network
- Identification of key problems and challenges in a certain sector, strategic points of interest and needs of clusters
- Identification of opportunities and new businesses for Croatian clusters through cooperation and strategic partnerships with regional partners

Information available on:http://www.proinno-europe.eu/index.cfm?fuseaction=page.display&topicID=66&parentID=55.



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# 30. UNIDO PROJECT "FACILITATING INTERNATIONAL MARKET ACCESS FOR MANUFACTURING SUPPLIERS IN THE AUTOMOTIVE COMPONENT INDUSTRY IN SERBIA"

**Concerned partner(s)**:

- PP9 - Automotive Cluster Serbia (Serbia)

**Project full name and acronym:** UNIDO project "Facilitating International Market Access for Manufacturing Suppliers in the Automotive Component Industry in Serbia", UE/YUG/06/002, BL 11-52 SERBIA
**Funding authority:** Government Republic of Slovenia
**Project partners:**
Automotive Cluster Serbia – AC Serbia
Ministry of Economy, Republic of Slovenia
Ministry of Economy and Regional Development, Republic of Serbia
UNIDO – United Nations Industrial Development Organization
Automotive Cluster Slovenia – ACS
**Total budget:** 300.000,00 EURO
**PP's budget:**
**Duration:** May 2007 – December 2009

The overall objective of the UNIDO business partnership and cluster programme for the automotive component industry in Serbia aims strengthening its suppliers to meet requirements of vehicle and 1st tier automotive component manufacturers so as to be able to access and sustain in global supply chains and international markets, in the particular in European Union. Within the context, the programme envisages support and strengthen the institutional framework providing practical services to suppliers in the industry sector concerned, achieving three inter-related objectives that are outlined below:

- *enhancing the performance* of Serbian suppliers in the automotive component industry to ensure their international competitiveness through oriented direct shop floor interventions
- *upgrading Serbian support institutions* in the automotive industry trough strengthening of the institutional set-up and development of a pool of well-trained national engineers and market experts
- *creation of regionally networked* Southeast Europe cluster in automotive component sector to facilitate access of Serbian suppliers to international markets through supporting their integration into global supply chains, based on existing cluster development expertise in the automotive industry in the region, in conjunction with the Slovenian Automotive cluster.

In the line with overall program objectives, the international consultant was expected to:

- Provide logistical suppport for the organization of training seminars for selected companies as well as local business support institutions
- Elaborate a vision and action plan of the Serbian Auto Cluster


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- Support R&D institutions of the auto cluster Serbia as providers of capacity building
- Provide technical input to the strategic analysis of the competitive position of the Serbian Automotive Cluster in the automotive component industry
- Support the project team in the development of a technical assistance package for the Serbian Automotive Cluster to maintain the upgrading services to companies in Serbia
- Carry out promotional activities in order to facilitate the incorporation into international automotive supply chains
- Help identifying market opportunities and developing positioning strategies for the Serbian Automotive Cluster with regard to the interregional cluster initiative

**Objective 1: Enterprise upgrading – implemented by individual companies coaching:**

- Memorandum of understanding clarifying relations in the group, responsibilities of the program management and the roles of participating stakeholders/parties

- Introductory seminar for selected companies (1 day for CEOs and 2 days for employees from each company (topics: automotive industry today and its most important requirements in the field of process management, continuous improvement, decision in management, working groups, visualization, standardization, 5S)

- Counseling work in selected companies (upgrading) in 2 geographical groups. Independent work of Serbian counselors, ACS expert would assist counselors in 2 working days.

- Organization of seminars for all participating companies on quality improvement, purchasing, cost reductions, innovations, 3M)

**Objective 2: Capacity building – upgraded capacity of support institutions:**

- Strategic analyses of competitive position of Serbian automotive cluster in automotive components industry based on Slovenian cluster experience in the automotive component industry

- Supporting RTD institutions, chamber and development agencies in Serbia as providers of capacity building in specific areas (collaborative projects with companies, incorporating students in companies projects, offering education and training capabilities according to the identified needs, productivity enhancement)

- Training of AC Serbia staff for the sustainable delivery of technical assistance on the developed material and potential cost recovery mechanisms, so as to enable them to independently undertake the training at the company level at the end of the project (facilitation of collaborative projects, development of business plans, project management, preparing proposals for national and EU calls, school of quality, new product development)

- Encourage environment friendly production to ensure sustainable development through cooperation with UNIDO NCC in Serbia



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**Objective 3: Cluster development – development and linkage with interregional cluster initiative:**

- Establishment of the Automotive Cluster South Eastern Europe together with partnering organizations from Slovenia, Croatia, Bosnia and Macedonia. Cluster would perform incorporation of Serbian companies into global supply chain.

- Establishment of cooperation portal www.automotive-see.eu as collaborative means of communication and information exchange to promote south Eastern Europe as global and development intensive supply base with company database.

- Organization of seminars for AC members - New product development





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## 32. AUTOMOTIVE CLUSTERS - NETWORK OF SOUTH-EAST EUROPE

**Concerned partner(s)**:

- PP9 - Automotive Cluster Serbia (Serbia)

**Project full name and acronym:** Automotive Clusters - Network of South-East Europe
**Funding authority:** GTZ WBF Project – German Organization for Technical Cooperation
**Project partners:**
GTZ WBF Project – German Organization for Technical Cooperation
Automotive Cluster Serbia – AC Serbia
Automotive Cluster Macedonia – ACM
Automotive Cluster Bosnia and Hercegovina
**Total budget:** 300.000,00 EURO
**PP's budget:**
**Duration:** 01/2008-12/2009

The "Export promotion of automotive industry suppliers by the networking of the automotive clusters from the western Balkans", is a project that was established within the Open Regional Funds for Foreign Trade Promotion in October 2007.

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

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The Project is jointly implemented by the automotive clusters in the participating countries: Automotive Cluster of Bosnia and Herzegovina - ACBiH, Automotive Cluster of Serbia - ACSerbia, and Association of Automotive Industry of Macedonia, in close cooperation with clusters from the partner countries: Automotive Cluster of Slovenia – ACS and Automotive Cluster of Croatia – HAK.

**General Project Concept**





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The automotive industry in the ex-Yugoslav countries has a relatively long tradition of over 50 years, and has achieved remarkable results in the past. Probably the most vivid examples of these results are the annual production figures realised in „Zastava" in Kragujevac (220.000 vehicles) and in „VW" in Vogosca nearby Sarajevo (35.000 passenger cars). Further, the trucks production in TAM and FAP, and the hundreds of companies that dealt with production of automotive components shows the automotive industry's potential in these countries.

After the transitional period over the past 18 years, the privatisation of the companies in this sector is completed and many companies managed to successfully switch to a new market oriented approach to work and management. Yet, many automotive suppliers lost their markets and are nowadays working below their capacities. For instance, the current annual production in "Zastava" is only 15.000 vehicles and "VW Sarajevo" about 3.500 passenger cars. Although there are positive trends in increasing production and exports, the process of improving the overall performance should be enhanced in order to regain and exceed past positions in the global automotive market.

The Project aims to contribute towards faster development of the regional automotive suppliers and to assist in fostering sales of products that meet the relevant quality standards. In that regard, the Project implements the following instruments:

- Establishment of a regional internet portal, which would increase the regional and international visibility of the automotive suppliers from SEE. The portal will provide bilateral platform for the players of the regions'automotive industry and will facilitate the regional and international cooperation.
- Establishment of an office in Germany, which acts as a representative office of the automotive clusters from Bosnia and Herzegovina, Serbia and Macedonia and implements pro-active marketing activities for the automotive suppliers from these countries. This office is also authorized to provide information about Slovenian and Croatian automotive industry.
- Support to joint participation in important fairs (Automechanika-Franfurt, International Automobile Fair in Belgrade etc.), organization of promotional events and B2B meetings, and organization of trips of business delegations to Western Europe as well as to the Western Balkans automotive suppliers.

Through this concept, based on three levels of activities, the automotive clusters from the region intend to overcome the weaknesses of the domestic automotive industries and to develop new perspectives of cross-country co-operation among the companies, and with other relevant public actors and bodies having responsibility for the automotive industry and business development in general.

**The levels A, B and C can be described as follows:**

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



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- **Level B** – Activities on cluster level to promote strategic co-operations and networks between companies and relevant bodies in the automotive sector on regional and national level.

- **Level A (‚Made in SEE')** – Supra-regional and trans-national exchange of marketing strategies and information for automotive suppliers from entire SEE region.





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# 33. USAID COMPETITIVENESS PROJECT – GTZ WBF PROJECT

**Concerned partner(s)**:

- PP9 - Automotive Cluster Serbia (Serbia)

**Project full name and acronym:** ISO/TS 16949 certification for selected Serbian auto parts companies
**Funding authority:** GTZ WBF Project – German Organization for Technical Cooperation and USAID Competitiveness Project
**Project partners:**
GTZ WBF Project – German Organization for Technical Cooperation
USAID Competitiveness Project
Automotive Cluster Serbia – AC Serbia
**Total budget:** 30.000,00 Euro
**PP's budget:** 15.000,00 Euro
**Duration:** June-November 2009

The program is proposed for supporting ISO/TS 16949 as a quality management system in auto-parts manufacturing.

- Financial support for certification for selected companies who are in the final process of introducing ISO / TS quality management system
- Training programmes and on site consultancy for selected companies

**Project description**

- The Automotive cluster was founded in 2005 with the support of the Ministry of Economy of The Republic of Serbia and the German Organization for Technical Cooperation GTZ. Within three years of its existence the Cluster has grown from 15 to 34 members, of whom 29 are companies and five of them are research institutions. GTZ&WBF is helping the Cluster in activities that as a result have higher competition of the companies and institutions in Serbia, which are active in the department of production of car parts and equipment.

- For the purpose of an optimal presentation of Automotive cluster AC Serbia and its members in international markets, this contract contains following activities:

  A. **Organization and realization of seminar**: Cost calculation for companies in the automotive industry, sector of production of car parts and components. the participating cluster member company representatives will be made familiar with actual cost calculation methods against the background of the global economic crisis. The lecturer is an well-known expert from Germany who will be financed by GTZ. At least 15 representatives of AC Serbia member companies will participate in


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the workshop. After finishing the workshop, they will be able to use and implement the cost calculation methods learned in their companies.

**B. Promotional activities of AC Serbia**

In order to ensure an adequate appearance of the cluster and its member companies in international markets, it is necessary to produce attractive promotional material and to add constantly actual information about cluster activities to the existing web site www.acserbia.org.rs. Promotional material consists of brochures and flyers containing information about cluster activities and its members. Contemporary, the collected information will be also used as a monitoring basis for the degree of performance of the WBF project indicators in the sector of producers of automotive parts and components.

**C. Organization of ISO TS 16949 seminar**

Based on the analysis of USAID the need for the organization of several ISO TS 16949 seminars occurred. Within a Memorandum of Understanding between GTZ/WBF project and USAID Competitiveness project, the particular workshops have been separated. The aim of the activities is that during 2009 AC Serbia will train internal auditors in at least 10 of its member companies who will supervise the implementation process of ISO TS standard 16949 in their companies in the future. In unison, the AC Serbia management will be trained.

With this contract GTZ/WBF Project will support the organization and realization of following workshops through financial subsidies:

- ISO / TS 16949 – Explanation of standard requirements and way of implementation
- Process management in automotive industry
- Problem Solving Methods (8D, 5 Why, Ishikawa, scatter diagram)
- Internal auditor for ISO / TS 16949 (including examination: practical and written)





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# IV. ACTIVITIES OF DG ENTERPRISE AND INDUSTRY

## THE EUROPEAN COMMISSION

The Commission is independent of national governments. Its job is to represent and uphold the interests of the EU as a whole. It drafts proposals for new European laws, which it presents to the European Parliament and the Council.
It is also the EU's executive arm – in other words, it is responsible for implementing the decisions of Parliament and the Council. That means managing the day-to-day business of the European Union: implementing its policies, running its programmes and spending its funds.

The Commission consists of 27 women and men — one from each EU country.

**What does the Commission do?**
The European Commission has four main roles:

1. to propose legislation to Parliament and the Council;
2. to manage and implement EU policies and the budget;
3. to enforce European law (jointly with the Court of Justice);
4. to represent the European Union on the international stage, for example by negotiating agreements between the EU and other countries.

**How is the Commission's work organised?**
It is up to the Commission President to decide which commissioner will be responsible for which policy area, and to reshuffle these responsibilities (if necessary) during the Commission's term of office.
The Commission meets once a week, usually on Wednesdays in Brussels. Each item on the agenda is presented by the commissioner responsible for that policy area, and the whole team then takes a collective decision on it.
The Commission's staff is organised in departments, known as **'Directorates-General' (DGs)** and 'services' (such as the Legal Service). Each DG is responsible for a particular policy area and is headed by a Director-General who is answerable to one of the commissioners. Overall coordination is provided by the Secretariat-General, which also manages the weekly Commission meetings. It is headed by the Secretary-General, who is answerable directly to the President.
It is the DGs that actually devise and draft legislative proposals, but these proposals become official only when 'adopted' by the Commission at its weekly meeting.
Once the proposal is fully ready, it will be put on the agenda of the next Commission meeting. If at least 14 of the 27 commissioners approve the proposal, the Commission will 'adopt' it and it will have the whole team's unconditional support. The document will then be sent to Council and the European Parliament for their consideration.


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## THE DIRECTORATE-GENERAL FOR ENTERPRISE AND INDUSTRY

The Directorate-General for Enterprise and Industry works to ensure that EU policies contribute to the sustainable competitiveness of EU enterprises and facilitate job creation and sustainable economic growth. It has the task of ensuring that the single market for goods runs smoothly and is a major contributor to the implementation of the Lisbon strategy for growth and jobs.

DG Enterprise and Industry pays particular attention to the needs of the manufacturing industry and to those of small and medium-sized enterprises. It manages programmes to encourage entrepreneurship and innovation, and ensures that EU legislation takes proper notice of businesses' concerns.

It employs over 1,000 people in its departments and units and is responsible for a budget of some €500m.





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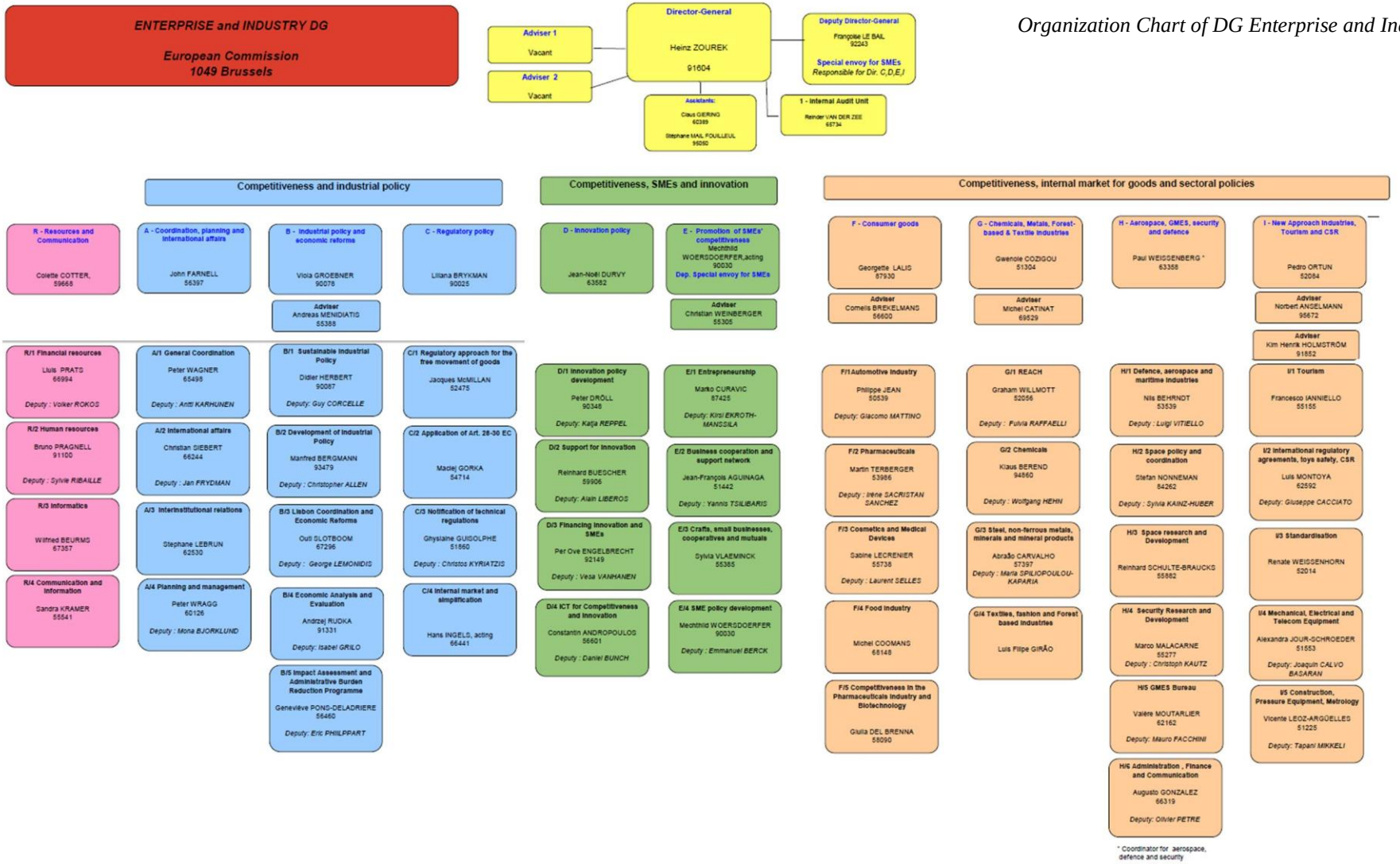


*Organization Chart of DG Enterprise and Industry*



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The activities undertaken are all underpinned by principles laid down in the EC Treaty. These principles are set out in the following articles:

- 28, 29, 30 on the free movement of goods,
- 95 on the single market
- 152 on public health
- 157 on competitiveness
- 211, 226 and 228(2) on Commission competencies
- title XVIII on innovation and research.

Promoting the European growth and jobs strategy; strengthening the sustainable competitiveness of industry; increasing innovation - these are just some of the DG Enterprise and Industry's **main objectives.**

The general objectives of DG Enterprise and Industry are:

- ✓ to promote the European growth and jobs strategy
- ✓ to strengthen the sustainable competitiveness of EU industry (industrial policy)
- ✓ to increase innovation
- ✓ to encourage the growth of small and medium-sized enterprises
- ✓ to make sure the single market for goods benefits EU industry and citizens
- ✓ to strengthen the space sector and improve security technology.

The **DG's 2009 annual management plan** presents in detail the DG's main goals for 2009. The activities and specific objectives are as outlined below.

➢ **Competitiveness, industrial policy, innovation and entrepreneurship**

The financial and economic crisis that unfolded throughout 2008 has dramatically changed Europe's economic outlook for the foreseeable future. In its European Recovery Programme of November 2008, the Commission proposed a set of short-term measures to be taken at Community level and by Member States. These are integrated into the Lisbon strategy for growth and jobs, making the realisation of its objectives even more relevant than before. In this recovery programme, the DG is responsible for the micro-economic pillar helping enterprises to stay competitive.

Under this activity, the DG pursues the following specific objectives, which are multi-annual:

- To promote economic and administrative reform and a better regulatory environment:
- To promote the competitiveness or EU companies through international activities:
- To promote the competitiveness of industrial sectors and support companies in addressing key sustainability issues:
- To promote innovation in Europe:
- To promote favourable framework conditions for small and medium-sized enterprises:
- To promote the competitiveness of the EU's Earth observation-based services industry.



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- **Internal market for goods**

  Ensuring the smooth functioning of the internal market for goods makes a fundamental contribution to help enterprises survive the economic downturn. The DG works to improve the internal market through new legislative or non-legislative action, whenever new barriers are detected; and it acts to ensure the correct application of Community law. This facilitates the operation and competitiveness of enterprises while providing European citizens with high levels of health, safety, environmental and consumer protection.

  Under this activity, the DG pursues the following specific objectives, which are multi-annual:

  - To ensure the correct application of Community law
  - To promote high levels of protection for health, safety and the environment without compromising industrial competitiveness
  - To improve the functioning of the Internal Market.

- **Space and security**

  The space and security sectors provide a stimulus to innovation and growth throughout the European economy. Both sectors are crucial if the EU wants to remain competitive in areas that require access to critical technologies. The DG supports these sectors with a view to generating applications and services that benefit European citizens (e.g. environmental monitoring, security), and to stimulate technology spin-offs that benefit other industrial sectors. Space technologies have been identified in the European Council as a key area of the Economic Recovery Plan.

  Under this activity, the DG pursues the following specific objectives, which are multi-annual:

  - To support the European presence in space, including the development of Earth observation information applications, through coordinated activities at EU and international level and through space related research
  - To support security in Europe through research and technological development.

An **annual activity report** presents how the DG's work has been carried out in a given year, the achievements reached and corresponding resources used by the DG during one year's activities. Follows up on the annual work programme. It is the "mirror" of the annual work programme. It is also a management report of the Director-General to the Commission on the performance of his/her duties as Authorising officer by delegation, in the management of the EU budget (details how the budget was spent).

**Evaluations** are also done regularly to determine the effectiveness of the projects undertaken. Evaluation is defined as "a judgment of interventions according to their results, impacts and the needs they aim to satisfy". In other words, evaluation is using common sense to form a factually based judgment on the value of an action.



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Evaluation is a way to verify if public action delivers the expected results and to offer guidance -based on evidence- on how to better fulfill objectives or redefine the objectives if needed.
The main strategic role of evaluation is to support policy development and the continuous improvement of the decision-making on priorities and resource allocation.

The purpose of evaluation is:

- to contribute to the design of future interventions, including providing input for setting political priorities;
- to guide prioritization and assist in an efficient allocation of resources;
- to improve the quality of the intervention by assessing the effectiveness, efficiency and impact of activities, and learning from this how future performance can be improved.
- to report on the achievements of the intervention (accountability).

A large volume of legislation (over 500 Directives and 200 Regulations) governing the single market for goods is managed by the DG. An information tool has been developed by the DG to set out all of the legislation in its remit by sector. This tool, called the Pink Book, is updated yearly with all the latest legislative developments.





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# GREEN AND WHITE PAPERS

**Green Papers**
Green Papers are documents published by the European Commission to stimulate discussion on given topics at European level. They invite the relevant parties (bodies or individuals) to participate in a consultation process and debate on the basis of the proposals they put forward. Green Papers may give rise to legislative developments that are then outlined in White Papers. Green Papers on entrepreneurship in Europe (2003), on demographic change and a new solidarity between the generations (2005) or, more recently on a European strategy for sustainable, competitive and secure energy (2006) are examples of topics discussed.

**White Papers**
Commission White Papers are documents containing proposals for Community action in a specific area. In some cases they follow a Green Paper published to launch a consultation process at European level. When a White Paper is favourably received by the Council, it can lead to an action programme for the Union in the area concerned.
Examples are the White Papers on Completion of the Internal Market (1985), on Growth, Competitiveness, Employment (1993) and on European Governance (2001). More recently, the White Paper on Services of General Interest (2004) and that on a European Communication Policy (2006) have also moulded the development of Community policies.

# DG ENTERPRISE AND INDUSTRY – GREEN PAPERS

## GREEN PAPER - TEN-T: A POLICY REVIEW - TOWARDS A BETTER INTEGRATED TRANSEUROPEAN TRANSPORT NETWORK AT THE SERVICE OF THE COMMON TRANSPORT POLICY 2009

INTRODUCTION
Trans-European transport network (TEN-T) policy aims to provide the infrastructureneeded for the internal market to function smoothly and for the objectives of the Lisbon Agenda on growth and jobs to be achieved. It also sets out to help ensure accessibility and boost economic and social and territorial cohesion. It supports every EU citizen's right to move freely within the territory of the Member States. Furthermore, it integrates environmental protection requirements with a view to promoting sustainable development.
The €400 billion invested so far in a network that was established by Decision of the European Parliament and the Council in 1996, and last amended in 2004,1 has helped to complete a large number of projects of common interest, interconnecting national networks and overcoming technological barriers across national borders. There is however still a long way to go to implement the initial plans fully – because of both the intrinsic long-term nature of the projects involved and the considerable delays in the completion of many projects.
Almost a third of the amount invested so far has come from Community sources. The individual European citizen may not however always find it easy to see the results of the overall TEN-T policy or the European added value generated by the contributions from the


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Community. Objectives have been rather broad, which has made it impossible to meet them in full with the instruments available. In certain respects, they may also have lacked specificity, which has made it difficult to focus action and generate effective impacts and visible results. The Commission therefore believes that it is not only time to ask why the objectives have only been partially achieved but also whether these objectives are still sufficient to give forward-looking answers to future problems, and what means are needed to fully achieve tomorrow's TEN-T policy objectives.

While transport policy aims to promote economically and environmentally efficient, safe and secure transport services within the internal market and beyond, TEN-T policy needs to ensure that they operate to best effect, based on an integrated and innovative infrastructure that keeps pace with technological developments in the energy, infrastructure and vehicle[3] sectors. It should reflect, more than it has so far, established European objectives – not only in the transport sector but also in the wider political, socio-economic, environmental and institutional context.

In addition to strengthening TEN-T's role within the Lisbon Agenda, Europe's growing global role requires due attention to be paid to the development of future TEN-T policy. Europe's economic growth and the creation of jobs also depend on its international competitiveness, which needs to be supported by good transport connections with other parts of the world. Good connections to all of Europe's immediate neighbours, including Africa, are furthermore vital from an economic, political and security point of view.

Over and above everything else, the fight against climate change requires Europe-wide measures to underpin Europe's leading role in the world. Transport and transport infrastructure are areas which offer considerable potential for positive contributions. Climate change objectives should be placed at the centre of future TEN-T policy and be reflected in a truly European approach. Through a process that integrates economic and environmental objectives, is clearly oriented towards the needs of efficient freight and passenger services on a co-modal basis and involves innovation, future TEN-T policy should provide a sound basis for an effective contribution to the Community's climate change objectives.

All this justifies undertaking a fundamental review of TEN-T policy rather than just reviewing and possibly updating outline plans and priority projects. While building on the experience gained and the results achieved so far, the policy approach needs first to be subject to a broad review. Given the scope of the task – in political, socio-economic, environmental, institutional, geographical and technical terms – the Commission seeks to involve stakeholders on as broad a basis as possible, so as to ensure that available expert knowledge, experience and views are duly taken into account. This is why the Commission is beginning the TEN-T review process with a Green Paper, summarising its current reflections and inviting contributions, before coming up with possible legislative and other proposals.

**Structural options for the shaping of TEN-T**

**Option Title**

*(1) Dual layer: comprehensive network and priority projects (current structure)*

**Description**

Layer 1: Comprehensive network (modal outline plans and traffic management systems as included in current TEN-T Guidelines) maintained in current form.

Layer 2: Priority project approach maintained in current form.



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Review and possible revision based on provisions of current TEN-T Guidelines, Articles 22 and 23(3):

Comprehensive network and priority projects may be revised as part of the review of the Guidelines on the basis of the twoyearly implementation reports.

Priority projects will be subject to a progress report by 2010; amendments to the project list may be proposed if necessary.

**Expected benefits/disadvantages to be addressed**
Benefits:
Layer 1: important "medium" for various transport policy objectives (implementation of interoperability, safety and other legislation) and, in the future, possibly, for new technologies, infrastructure charging, etc. Also ensures access function for regions.

Layer 2: "visible part" of TEN-T policy: subject to concentrated Community financial support and coordination initiatives of the Commission. Measurable results with noticeable effect on internal market, cohesion and sustainable transport objectives.

Disadvantages:
Layer 1: no means at Community level of ensuring full and timely implementation of projects.

Layer 2: network effect at European level is not optimised.

**Option Title**
*(2) Single layer: priority projects – possibly in extended form*

**Description**
Single Layer: Priority projects in current form (amended as necessary), complemented by priority infrastructure needs resulting from requirements of various transport services. Priority projects might possibly be connected, and amended as appropriate, into a priority network.

**Expected benefits/disadvantages to be addressed**
Benefits:
Allows concentration of Community instruments on highest priorities, offering better prospects for full completion of network within scheduled timeframe. High visibility and credibility of Community policy.

Disadvantages:
Comprehensive network with transport policy and access functions disappears as Community network due to the lack of means of ensuring proper implementation.

**Option Title**
*(3) Dual layer: comprehensive network and "core network"*

Layer 1: Comprehensive network (modal outline plans and traffic management systems as included in current TEN-T Guidelines) maintained in current form.


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Layer 2: "Core network" consisting of:
a) a "geographical pillar" (defined in concrete geographical terms). This includes a "priority network" (starting from the current priority project approach) which links up and extends as necessary major trans-national axes, important nodes as inter-modal connecting points (ports, airports, freight terminals, etc.) and major European action in the field of ITS;
b) a "conceptual pillar" providing the basis for the identification of projects, corridors and network parts over time; based on short, medium and long-term service needs; highly business-oriented. This pillar is defined through conceptual features such as objectives, criteria, etc., and provides a basis for transparent and objective project identification (also as a basis for possible Community funding).

**Expected benefits/disadvantages to be addressed**
Benefits:
Layer 1: as set out in option (1).

Layer 2: has greater potential for achieving true network effects and subsequent underscoring of MS commitment to completing this network. Also provides a reference basis for transport policies, future innovations (efficient infrastructure use, co-modality, logistics, new technologies, etc.) and emission reduction objectives.

Overall: Allows concentration of Community instruments (financial and coordination) on full network completion; enhances effectiveness, visibility and credibility of policy. Establishes sound basis for negotiations on Community budget for 2014-2020.

Disadvantages:
Layer 1: lack of means to ensure full and timely implementation, while ensuring important functions for transport policy and network access.

Layer 2: inclusion of "uncertain" factors in TEN-T planning, which can only be defined through objectives and criteria rather than concrete projects.

## GREEN PAPER ON INNOVATION 1995

The objective of this Green Paper is to identify the factors - positive or negative - on which innovation in Europe depends, and to formulate proposals for measures which will allow the innovation capacity of the Union to be increased.

**Routes of Actions**
An improvement in terms of quantity and quality of innovation in Europe - vital for the future - depends primarily on the initiatives of enterprises and individuals themselves. While the role of the authorities is thus by nature limited, it is nevertheless essential, in view ofthe number of obstacles identified earlierwhich discourage initiatives and curb their full development.
The Commission therefore proposes to launcha debate on the various actions which it considersnecessary to overcome the handicaps and obstacles facing innovation in Europe. Of course, with subsidiarity in mind, there is a need to distinguish clearly between responsibility


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at Community, national and local levels and how these levels should cooperate. Some measures therefore need to be undertaken at Community level for reasons of efficiency, for example to ensure the exchange of experience and a wider dissemination of good practice. With regard to possible measures supporting and supplementing national actions and actions undertaken by enterprises at Community level, the Commission is keen to point out that they will not require any new funding but may be financed by redirecting existing programmes. Although the actions which are proposed are not particularly numerous, they are nevertheless extremely varied. The debate should allow the validation of these propositions as well as the specification of the most suitable routes and levels of implementation.

**Route of Actions 1: Develop technology monitoring and foresight**

An initial requirement is the development of "technology watch" which provides reliable access to the best reports on technological information in the world.

It was for this purpose that the Institute for Prospective Technological Studies (IPTS) was founded in Seville. Its activities are permanently linked to the technology watch actions being carried out as part of the specific research programmes under the Fourth Framework Programme. The job of this institute is not to produce new studies. Its purpose is to carry out the prompt collection of the relevant available information and to process it into a codified format for subsequent use. The idea is that the data is then channelled and exploited to illustrate the situation in the Member States and their major industrial rivals.

An approach of this kind will encourage the organisation of exchanges of experience between countries, comparison of work, identification of areas of consensus and disagreement, and lastly the formulation of digests at Community level. These digests will make it possible for the European authorities, and industrial and scientific circles, to arrive at better decisions and policies.

At the same time, regular statistical surveys of technological innovation should be organised in the Member States. The surveys should make it possible to measure also the costs and the benefits stemming from innovative activities and to arrive at a better understanding of the factors which determine innovation.

Actions involving consultation and socioeconomic forecasting could also be launched as part of the ETAN network (European Technology Assessment Network), following a review of recent national initiatives (e.g. Technology Foresight in the United Kingdom, Delphi actions in France and Germany and the Foresight Committee in the Netherlands). They should make it possible to expand and update the knowledge base which decision-makers rely on for launching research programmes and actions.

Actions designed to measure and arrive at a better understanding of the relations between new technologies, their incentives for their introduction and the economic context could also be amplified and put to better use. Such needs are well illustrated by the energy-environment economy inter-relationship.

**Route of Actions 2: Better direct research efforts towards innovation**

The debate should focus on actions undertaken at national level in order:

- to establish ambitious objectives to increase the proportion of gross domestic product devoted to research, development and innovation;



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- to encourage national research by enterprises (especially the one financed by enterprises, or the one financed by governments, within the limits allowed by Article 92 of the Treaty);
- to the extent allowed by cuts in public deficits and statutory deductions, to boost the proportion of government spending on intangible investment (research and development, training) and innovation, especially among enterprises, favouring indirect tools;
- to refine the tools for technological forecasting and the instruments for coordination to facilitate the exploitation of research results;
- to strengthen the mechanisms linking basic research and innovation; focusing on markets with high growth potential, such as prime sectors and "green" markets;
- to introduce systems for monitoring the requirements of SMEs, with the dual mission reinforcing their capability to carry out their own research efforts and their capacity to absorb technologies regardless of origin.

**At Community level it appears necessary:**

- to prepare the extension of the task forces to cover other themes; a major part of funding allocated to the Fourth Framework Programme should be used for this. Existing or future task forces should allow for clear operational mechanisms to permit SMEs prompt involvement in applying results;
- to bolster the mechanisms which allow SMEs to be involved in and benefit from Community research, by encouraging in particular the management of research and technological development projects by technology-minded SMEs and the incorporation by traditional SMEs of new technologies;
- to boost inter-programme cooperation (in order to develop joint calls for proposals) and, in particular, to launch pilot schemes combining social and technological innovation in fields of specific interest to citizens (health, environment, municipal and local services, etc.).
- to introduce or to reinforce among the parameters for the monitoring and evaluation of research programmes and projects (from the Fourth Framework Programme in the field of research and technological development onwards) the criteria relating to their impact on innovation (including business start-ups) in addition to the direct benefits for those involved;
- to pay better attention to the needs of innovation and the most relevant experience gained from current SME actions in preparing the fifth framework programme. To better take innovation into account within Community policies other than the Framework Programme;
- to reformulate, in collaboration with end users, industry and researchers in the Member States, the methods of defining the content of Community research and development programmes; in order to improve the exploitation of research results and innovation. The Commission would like to see project evaluation increasingly include an enterprise plan for the use of results; this should in practice encourage efforts towards growth, innovation and internationalisation on the part of the most dynamic technological SMEs.

**Route of Action 3: Develop initial and further training**

1996 is the European Year of Lifelong Learning. The opportunity has to be taken to emphasise the importance of innovation becoming a permanent feature of initial and further



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training. The debate should concentrate mainly on the following objectives and on the best way to meet them:

**At national level:**

- a greater effort to instill young people in the education system with the spirit of creativity and enterprise. This could imply the introduction of education syllabuses which include: outline of the operation of an enterprise, knowledge of a market, familiarisation with materials, techniques, products, costs, tuition in the techniques of creativity and experimental methods, etc.;
- surveying more efficiently the new professions (e.g. financial analysts for innovation projects) in line with the needs of the economy with regard to innovation; identifying the new qualifications required by present and likely future technological changes; designing training courses which could be adopted by national education and training systems;
- promoting a general breakdown of barriers between disciplines: introduction of training modules on innovation management and communication into scientific and technical training syllabuses and technology management courses in business training programmes, etc.;
- stimulating further training, in particular in SMEs; developing and generalising training to new technologies and innovation and technology transfer among enterprises (support bodies for the social partners);
- exploiting the possibilities offered by distance learning and information technologies to stimulate and satisfy the demand for training;
- developing, through cooperation among establishments and companies, the training of engineers and technicians in the tertiary sector which is adapted to activities in the sector and to consumer needs (e.g. maintenance, servicing, repairs, etc.); training provided partly by enterprises could link science subjects with legal and economic studies, communications techniques and psychology;

**at Community level, the debate will allow to specify the conditions and modalities of:**

- the creation of a European network of new teaching media based on cooperation between industry and educational and training establishments;
- establishing a system of certification for basic technical and vocational skills, based on a cooperative effort between higher education institutions, enterprises, professional bodies and chambers of commerce.
- the possible creation of a European bservatory for innovative practices in ocational training in oder to disseminate new deas and best practice for modernisation ased on negotiation;
- the mutual recognition of training modules, favouring agreements between teaching and training institutions, as well as between professional branches;
- supporting the creation of sandwich courses inhigher education with a view to a better integration of general and vocational training, research and industry along the lines of "campus companies", with training geared primarily to the promotion of innovation and management of technology transfer;

**Route of Action 4: Further the mobility of students and researchers**

The Member States need to pursue, develop or implement actions to encourage various types of mobility: social mobility, mobility between professions, mobility between research



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institutes and enterprises, etc.. For its part, the Community has to make every effort to eliminate or reduce the regulatory barriers to mobility and intensify and expand its programmes in this area.

The following actions should be debated:
- adoption of rules (directives) designed among other things to create a mortgage payment market and to facilitate the transfer from one fiscal or social security system to another;
- the development of new ways for skills recognition beyond the diploma and formal education, in the first instance at national and local levels. At European level, a project for a personal skills smart card will be implemented.
- actions designed to encourage the mobility of students, engineers and research workers in connection with the LEONARDO and HUMAN CAPITAL AND MOBILITY programmes. It also seems desirable to specify criteria, conditions and modalities for:
- the creation of an association for the recipients of grants awarded to researchers under the training and mobility of researchers programme. It would contribute to the broad dissemination of the experience acquired and to suggest improvements to the existing system; from 1 January 1996 these awards will be known as Marie Curie scholarships;
- awarding the label "European research worker" to those who have been significantly involved in Community programmes and the title of "European project leader" to those who have coordinated Community projects involving partners from several different countries, in order to provide recognition which will stand them in good stead in their future career;
- encouraging the mobility of research workers and engineers to SMEs to facilitate the transfer of skills and technologies derived from Community projects;
- increasing the involvement of nationals from other Member States in the management or olicy eams of national or regional research and development centres;
- encouraging transnational partnerships for training in innovation management and the familiarisation of young people with basic technological ideas (ERASMUS and COMENIUS programmes);
- promoting the emergence of transnational apprenticeship partnerships.

**Route of Actions 5: Promote recognition of the benefits of innovation**

The action undertaken by the Community and the Member States should strive to persuade the general public of the benefits of innovation. The debate should specify the necessary actions.
Among them could figure:

- The launching of a project of Community interest covering an initial phase of five years and involving the Member States could be part of this. The project, administered by the Community, would be launched after selection by tender. Its object would be to exploit, a Community level, successfull experiences from the Member States and to produce information programmes using various media (videos, specialist press, CD-ROM, etc.) on the positive repercussions of European innovations and also from other sources. The project would be launched simultaneously in the various Member States.
- The recognition of creative individuals by providing European prizes or distinctions to reward original society in the fields of science, technology, society, design, training, etc.


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**Route of Actions 6: Improve the financing of innovation**

The mechanisms are presented below as an indication. One should consider their relevance and concrete modalities, which can vary with member states. The proposed actions for debate cover:

**At national level:**

- development of mechanisms for innovation risk insurance and/or mutual guarantee, especially for new technology based firms;
- creation of guarantee/insurance systems permitting, for example, an initial referral of newlyn formed technological enterprises to major clients (government departments, large enterprises, etc.) or encouraging banks to provide long-term loans, including equity loans, to enterprises for investment related to innovation or encouraging the partnering of banks with expert bodies on innovation for project appraisals;
- testing of innovation financing schemes such as the introduction of initial guarantee mechanisms to stimulate the financing of technology transfer based on fees;
- development of sources of long-term investment capital ("business angels", pension funds) and its channelling to innovation.

**At national and Community level:**

- creation of outline conditions for the effective development in Europe of stock markets, possibly pan-European, for "growth enterprises"; the Commission and the member States need to ensure that their establishment and operation are facilitated by the removal of any remaining obstacles before the end of 1996, especially by means of the immediate (and precise) transposition of the relevant directives throughout the Member States;
- creation of "one-stop shops" to facilitate access to national and Community financial support for innovation;
- study the existing securitisation mechanisms and the possibility to extend them at national and/or Community level and orienting them towards the financing of innovation. at Community level:
- development of actions by the European Investment Fund in favour of innovative SMEs by granting guarantees to banking intermediaries and venture capitalists, by possibly acquiring holdings in venture risk intermediaries (implementing the possibility opened to the Fund of investing in equity);
- the possible support to the creation of multi national seed capital funds to facilitate the birth and the European development of new technology based firms;
- study modalities and opportunity of launching of a pilot action to provide low-rate loans for
- short-term development work undertaken jointly by SMEs from different Member States.

**Route of Actions 7: Set-up fiscal régime beneficial to innovation**

The Community must encourage the Member States to adopt tax measures conducive to innovation, especially for venture capital and intangible investment, while bearing in mind the need to control public spending with a view to Economic and Monetary Union. Given the extremely sensitive nature of fiscal policies, any action will have to be taken with care. It is naturally the responsibility of the Member States with regard to tax and social security deductions to devise consistent strategies which reconcile the development of innovation and that of employment. An exchange of information on the benefits of the various systems



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should be the first stage. However, fiscal incentives have their advantages and drawbacks. A thorough study is needed in order to determine a suitable breakdown in the use of the various types of measure. They could cover:
- more equal fiscal treatment of intangible and tangible investment (e.g. possibility of creating depreciation allowances along the lines of those for tangible investments - a study is in progress);
- broadening of tax relief to encourage individual investors towards investment in innovation (e.g. the "research development limited partnership" arrangement which exists in two Member States, or tax rebates);
- promotion of fiscal transparency with regard to venture capital companies (to avoid double taxation), as indicated in the Communication of 25 May 1994;
- deductions linked to deposits of industrial and intellectual property titles along the lines of the measures in the United States ("small entity fees");
- encouragement of further training (for individuals but also for SMEs) through the introduction of tax allowances for training;
- reduction of regulations concerning the transfer of enterprises within the European Union in cases not covered by the "merger directive" the Commission Recommendation of 7 December 1994 on the transfer of SMEs could serve as a starting point for this study;
- approximation fiscal definitions relating to research and technological development and innovation in use in the Member States.

**Route of Actions 8: Promoting intellectual and industrial property The desirable actions that the debate should allow to better specify and further, include:**

**At national level:**
ratification by certain Member States of the Convention for the European Patent to allow its entry into force, which has not yet happened in spite of the 1989 agreement;
encouragement of the use of utility models by SMEs and raising of awareness among enterprises;
assistance to businessmen in defining a strategy for the protection of intellectual and industrial property, as well as for the acquisition and granting of licences;
the means of a greater assistance to businessmen and research institutes in combating piracy and copyright infringement;
reinforcing teaching on intellectual and industrial property as part of training for future research workers, engineers and business executives;

**At Community and international level:**
- the continuation of the efforts to harmonise arrangements on intellectual property, especially in the field of life sciences and technical fields related to software, telecommunications (information society) and utility models;
- reinforcement of the instruments to combat counterfeiting and copyright infringements;
- promotion of patent information services as a method of technology watch based, in particular, on the information system set up by the European Patent Office.


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**Route of Actions 9: Simplify administrative procedures**

The Commission is trying to streamline the procedures and formalities it requires, especially for access to its programmes, the authorisations it gives or the checks it carries out. With regard to research aid, for instance, following the increase in the number of Member States and associate countries, general concern has emerged about the delays affecting implementation and payment and about the variety and complexity of Commission procedures. In order therefore to arrive at an objective diagnosis and especially to identify the concrete measures to be taken, the Commissioner in charge of Research, has requested her services to organise a seminar
gathering together:
- the administrators and directors of the most industrially oriented programmes in the Framework Programme;
- senior representatives of enterprises involved in projects;
- an audit firm to act as referee and to suggest improvements.

The Commission will publish the operational findings of this seminar during the consultation phase which is proposed by this Green Paper. Streamlining of administrative procedures is also a priority at national level. For example, whereas the formalities for setting up a business are straightforward in the United States, in Europe it can take several months. This means that, while an American innovator can set up a business the same day in order to exploit a new product, in most of the EU Member States innovators are put off by the time it takes to register a new business and to complete the formalities of all kinds (in some cases the authorities responsible for supplementary pension schemes have to be dealt with even if the company has no management staff).
The Commission thus plans to put to the Member States a proposal for a programme of concerted actions to improve and simplify the business environment, especially with regard to business formation (under discussion) and the growth and transmission of enterprises. The Commission has announced its intention to devise in conjunction with the Member States methods of evaluating performance in the field of administrative simplification and to draft a recommendation to the Member States so that they adopt the best existing practices with regard to the streamlining of administrative procedures. These concerted actions might take the form of a recommendation to Member States:

- rationalisation of structures and formalities relating to fiscal matters and social protection (e.g. forms, declarations, obligation to maintain records);
- establishment of local “one-stop shops” to provide information and help with completing formalities;
- adoption of rules whereby government offices must reply by specific deadlines, failing which their agreement is presumed. The consultation launched by the Green paper will allow the identification of areas of priority with regard to innovation where simplifications are necessary and urgent.

**Route of Actions 10: A favourable legal and regulatory framework**

The debate should concentrte, in particular, on the need and means to
*company law*

- very rapidly adopt the regulation on a Europeancompany statute with the aim of removing the obstacles to innovation caused by fifteen different legal systems;


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- launch a study for a simplified EEIG and European company statute for innovative new enterprises;

*standards*

- generalise the system of performance standards emphasising innovation in compliance with the constraints of safety and environmental protection;
- support the establishment of voluntary agreements between enterprises and the authorities with the aim of achieving, at National or Union level, through technological innovation, high performance levels in economic, environmental and energy terms, while speeding up the introduction of ways of monitoring their application;

*public contracts*

- analyse and discuss means of stimulating demand for innovative products by existing means in the directives on public contracts;

*competition rules*

- continue the efforts to liberalise markets, in particular in the service sector;
- continue taking into account the globalisation of markets and of the features of technological and innovation activities in assessing cooperation agreements and concentrative operations;
- publicise the new Community arrangements for research aid adopted in December 1995, which takes into account the new WTO code, encourage intangible investment, takes into account the financial aspects of innovation and allow the inclusion for SMEs of the cost of filing and maintaining licences among the expenses eligible for national or Community aid for research and technological development;
- examination of a system of horizontal control for regional aid to major investment projects which would introduce inter-sectoral discipline;
- continue to facilitate the transfer of technology with respect to competition rules (block exemption regulation of technology transfer agreements).

*labour legislation*

- examination and possible adaptation of current rules concerning working conditions and employment, especially in the fields of home working, teleworking, protection of workers' privacy.

**Route of Actions 11: Develop "economic intelligence" actions**

It appears desirable to specify ways and means for:

**at national and regional level**

- intensifying the efforts to make enterprises, especially SMEs, more aware of the need for and methods of “economic intelligence”. These efforts could also aim at government departments, so that they are aware of their powers and responsibilities in this area;
- creating an environment favourable to the emergence of private-sector services offered to enterprises in this field;
- including in higher training for future managers, engineers, researchers and senior marketing staff familiarisation with economic intelligence to encourage ongoing motivation for this subject among enterprises;

- establishing up consultation bodies along the lines of what has been done in Sweden, France and the United Kingdom;



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- encouraging a reflexion at regional level on this area (if necessary, and if applicable, with the help of the Structural Funds, by using the lessons gained from experience with Regional Innovation strategies in Article 10 of the ERDF and the Innovation Programme);
- highlighting the successful experience of enterprises or groups of SMEs;

**at Community level**

- facilitating the possible interlinking of national bodies for consultation and guidance in this field and exchanges of good practice between regions and countries;
- reinforcing the scientific expertise of some of the Commission's delegations in third countries, in order to accomplish a mission of technology watch and to provide to the Union analyses on the evaluation of research conducted abroad;
- launching pilot actions of assistance for SMEs using existing programmes (e.g. the SME initiative in the Structural Funds or the Innovation Programme); this pilot action could include encouragement of joint action in this field or specific support for new enterprises offering innovation in the field of information on world markets; some of these actions introduced as part of the SME Initiative could, for example, be enhanced by organising exchanges of experience and cooperation schemes between regional or local bodies in different countries which provide help to SMEs on innovation;
- Increasing its efforts so that internal information sources and resources are put to better use and made more widely available. To that effect an invitation to tender could be organised in order to launch a project to compile an inventory of what exists, to define the specifications of a multilingual expert guidance system for large stores of information through the use of multimedia techniques, to assess feasibility and costs; this project would be based on a prior study of national practice in the Community and elsewhere, with an emphasis on concrete methods and procedures for collection, management, processing and pooling of information.

**Route of Actions 12: Encourage innovation in enterprises, especially SMEs, and strengthen the regional dimension of innovation**

The local or regional level is in fact the best level for contacting enterprises and providing them with the necessary support for the external skills they need (resources in terms of manpower, technology, management and finance). It is also the basic level at which there is natural solidarity and where relations are easily forged. It is therefore the level at which small enterprises can be encouraged and helped to pool their strengths in partnerships in order to compete with bigger
enterprises with greater resources or to make the most of the opportunities which these enterprises can offer. These issues are of special importance in the less favoured regions. The Green Paper would therefore offer a good opportunity to debate the suitability and the necessary conditions in order to:

**at local, regional or national level:**

- fostering cooperation among enterprises (large and small) and strengthening groupings based
on technology or sector in order to realise the potential of local know-how (in traditional activities as well as for top-of-the-range products);
- encouraging an internationally-minded approach among enterprises (in liaison with research centres and support services), facilitating acceptance of foreign investment with high value added and introducing procedures to absorb technology from other countries;
- improving or adding to business support structures by introducing:



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- tools for analysing the stated or unstated needs of enterprises;
- "one-stop shops" for access to information and services;
- mechanisms to facilitate dialogue between the various local partners involved in innovation and the follow-up and monitoring of aid measures;
- networks to link and rationalise support services (like the Nearnet and Supernet networks in the United Kingdom or the technology dissemination networks in France);
- reinforcing University Industry cooperation in order to facilitate transfers of technology, knowledge and skills.

**at Community level:**

- launching a pilot action designed to encourage the formation of new technology-based firms (NTBFs), especially by researchers and engineers from research institutes and universities;
- facilitating the dissemination of good practice, especially by:
- strengthening inter-regional cooperation networks for the promotion of innovation (including the services sector) and for help for researchers or engineers setting up innovative businesses;
- supporting innovation projects based on cooperation between enterprises at a European level, laboratories, intermediaries, financiers, etc., illustrating new approaches to innovation (in terms of technology, society, organisation, etc.), especially in order to take a much advantage as possible of the potential offered by the information society;
- developing support for regional innovation strategies and inter-regional technology transfer (joint actions involving regional policies - Article 10 of the ERDF - and the INNOVATION Programme);
- strengthening the role of the Business and Innovation centres (BICs) in identifying assistance requirements with regard to modernisation, help in carrying out modernisation plans for SMEs and their guidance towards specialist bodies which are best placed to help in their innovation efforts;
- introducing training for those responsible in national, regional and local government for innovation policy, investment planning, etc., if need be with the support of the Structural Funds for the eligible regions (see also Route of Action 13);

**Route of Actions 13: Update public action for innovation**

In most fields the role of the authorities is changing: they have to teach, persuade, involve, stimulate and evaluate rather than order. Public action also needs to be modernised and become simpler. According to the Ciampi Report, the State should become a moderate but effective regulator. This is also true in the case of innovation. If it is to be fully effective, public action also needs to be stable (involving regulations, but also financial support, especially for research and training where efforts need to be long-term) and it needs to be geared to satisfying collective needs. The authorities must also contribute, through forecasting and consultation, to indicating the path forward for those involved and to facilitating the emergence of common if not consensus views.

The promotion of innovation also requires the coordination and alignment of the efforts of many people, and especially the consultation of the social partners. The authorities and government need to develop new thinking with greater emphasis on consultation and partnership with the private sector.

Also, the pressure on public spending means that new solutions have to be devised, especially the move from direct to indirect support in the use of public intervention. Better results have to be achieved with fewer resources.



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In the Member States, as at Community level, innovation policies are usually the responsibility of several ministries, official bodies or services, which can result in some problems. It is often hard to find the right forum for discussion and even harder to find one which can provide the necessary overall view and ongoing coordination. In addition, public support for innovation still suffers in some cases of problems such as difficulties in taking into account needs and demand; difficulty to differentiate measures in function of the targeted beneficiaries and, accordingly, their lack of transparency; still inadequate information regarding "good practices"; the difficulty in carrying out evaluations because of the lack of suitable indicators; a dilatory adaptation of structures and procedures to changes in the economy, technology and society.

In order to improve the innovation environment – in line with the principle of subsidiarity and bearing in mind the variety of local, regional and national circumstances in order to make the environment more conducive to innovation the debate should allow the better definition of:

**How to make the environment more favourable to innovation**
**at regional, national and Community levels, by:**

- limiting regulations to the strict essentials, encourage liberalisation as much as possible and promote a modern approach to competition, i.e. competition which takes account of the beneficial horizontal effects of innovation;
- accelerating the streamlining of administrative procedures by simplifying them and making them clearer;
- providing basic information by supplying the forecasts and analyses which public and private operators need (forecasting, technology watch, economic intelligence, ex-ante evaluation);
- ensuring coordination and consistency of public actions and private initiatives (like the Community task forces), mobilise the range of available instruments in accordance with a coordinated and measured approach (regulations, public contracts, fiscal measures, incentives, etc.) and facilitate dialogue, training and consensus;
- developing, where appropriate and in order to reach SMEs in language they understand, the use of private operators (as is now customary in the United Kingdom or Germany) to administer business support procedures on behalf of the authorities;
- developing and apply criteria making it possible to adapt measures to different needs and different targets;
- identifying and disseminate good practice, facilitate experiments and encourage the use of evaluation methods.

**To better ensure concertation between decision makers and that those involved are consulted:**
**at Community level:**

- identifying the best forum for dealing effectivelywith innovation policies (e.g. “jumbo” Council bringing together the ministers of research, industry, and social affairs and appointment by each government of a minister responsible for innovation, similar to the situation with regard to the information society);
- initiating an inter-institutional dialogue on the means of better organising consideration of the horizontal nature of innovation policies;
- improving the pooling of resources for analysis and forecasting at Community and national levels (Institute for Prospective Technological Studies in Seville, programme of targeted socioeconomic research, European Innovation Monitoring System, Eurostat, etc.);


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- organising a dialogue at European level between decision-makers on successful cases of innovation, in order to implement concerted actions and the dissemination of good practice; on the basis of those exchanges, the Commission could draw up periodic reports on the state of innovation within the European Union, identifying the evolution and the weaknesses of the policies carried out; such a report would permit to encourage favourable policies in the Member States;
- developing the practice of evaluating public action, especially with regard to innovation, among local or regional authorities. In addition, improving the process of policy formulation can only result in greater effectiveness if the implementing procedures are also suitable and flexible. There is a need for "sound" administration (just as there is "lean" production).

The debate should indicate whether or not it would be appropriate to **streamline administrative procedures** as follows:

**at Community level:**

- by facilitating information and access by enterprises to support measures; this involves rationalising the various Community information sources and strengthening their linkages to arrive at "single entry points";
- by increasing, in the light of the experience of the industrial task forces, cooperation between programmes, especially in the fields of research, vocational training and regional action; this should lead to more joint calls for proposals;
- by significantly increasing efforts to simplify formalities and shorten times required for consideration, reply and payment (e.g. by extending the principle whereby failure to reply by a fixed deadline indicates acceptance or agreement in principle, especially in the case of
- State aid);
- by providing follow-up for enterprises, especially SMEs, which have been involved in Community research projects, thus enabling them to obtain advice and assistance in making the most both of the results and of the international contacts and experience acquired;

**at Member State level:**

- by systematically identifying the administrative procedures and rules of various official bodies which are likely to hinder or delay public or private initiatives in the field of innovation43;
- by continuing the reforms to modernise administrative structures and by extending them to regional and local level in order to ease the obstacles facing all those in industry regardless of size, especially innovators and those forming companies.



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# TOWARDS A NEW CULTURE FOR URBAN MOBILITY - 2007

„The Commission's Public consultation on the preparation of a Green Paper on Urban Transport has provided an excellent opportunity for an initial debate on the topic at EU level. It is also the first time that the Commission (pre-)consults stakeholders before a Green Paper is actually published. This is a transparent approach to consultation that we would like to encourage for the future. We now expect the results of the consultation and look forward to a balanced, fresh and "out of the box" document backed up by a sound impact assessment." – ACEA

## INTRODUCTION

In the European Union, over 60% of the population lives in urban areas. Just under 85% of the EU's gross domestic product is created in urban areas. Towns and cities are the drivers of the European economy. They attract investment and jobs. They are essential to the smooth functioning of the economy.

Urban areas now constitute the living environment of the vast majority of the population, and it is imperative that the quality of life in these areas should be as high as possible. That is why we must now pool our thoughts and consider the question of urban mobility.

***European towns and cities are all different, but they face similar challenges and are trying to find common solutions.***

Throughout Europe, increased traffic in town and city centres has resulted in chronic congestion, with the many adverse consequences that this entails in terms of delays and pollution. Every year nearly 100 billion euros, or 1% of the EU's GDP, are lost to the European economy as a result of this phenomenon.

Air and noise pollution is getting worse year by year. Urban traffic is responsible for 40% of $CO_2$ emissions and 70% of emissions of other pollutants arising from road transport. The number of road traffic accidents in towns and cities is also growing each year: one in three fatal accidents now happen in urban areas, and it is the most vulnerable people, namely pedestrians and cyclists, who are the main victims.

While it is true to say that these problems occur on a local level, their impact is felt on a continental scale: climate change/global warming, increased health problems, bottlenecks in the logistics chain, etc.

Local authorities cannot face all these issues on their own; there is a need for cooperation and coordination at European level. The vital issue of urban mobility needs to be addressed as part of a collective effort at all levels: local, regional, national and European. The European Union must play a leading role in order to focus attention on this issue.

***Europe has a capacity for reflection proposal-making and mobilisation for the formulation of policies that are decided and implemented locally.***



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In 2006, when the mid-term review of the Transport White Paper was presented, the European Commission announced its intention of presenting an Urban Transport Green Paper.
The Commission has carried out a broad public consultation in recent months. Two conferences and four workshops have brought together the main stakeholders. An Internet consultation has been launched. Numerous contributions have been received by the Commission, and the European Economic and Social Committee has also expressed its views.

This consultation process resulted in the avenues mapped out in this Green Paper. Above all, it confirmed the existence of strong expectations on the part of stakeholders for the formulation of a genuine European urban mobility policy. With this Green Paper, the Commission wishes to launch a broad public debate as to what a European policy on this issue might contain.

Rethinking urban mobility involves optimising the use of all the various modes of transport and organising "co-modality" between the different modes of collective transport (train, tram, metro, bus, taxi) and the different modes of individual transport (car, motorcycle, cycle, walking). It also involves achieving common objectives in terms of economic prosperity managing transport demand to guarantee mobility, quality of life and environmental protection. Lastly, it involves reconciling freight transport and passenger transport interests whatever the mode of transport used.

***A European urban mobility strategy that lives up to people's expectations.***

Urban mobility is recognised as an important facilitator of growth and employment with a strong impact on sustainable development in the EU. The Commission therefore has decided to present a Green Paper on urban mobility in order to explore if and how it can add value to action already taken at local level. Several EU policies have already addressed urban transport issues in past years. Legislative initiatives have been developed, sometimes in a rather fragmented way.

The consultations exercise organised by the Commission in view of the preparation of the Green Paper has provided information resulting in a set of policy options and 25 open questions about these options. With this Green Paper, the Commission launches a second consultation process until 15 March 2008, with a view to presenting, in early autumn 2008, an Action Plan which will identify a series of concrete actions and initiatives towards better and sustainable urban mobility. For each proposed action, the Action Plan will indicate a time line for implementation and the allocation of responsibilities between the various actors.

The Commission's role is to organise this debate with all the stakeholders with a view to proposing an overall strategy compatible with the principle of subsidiarity. The target audience of the new consultation process will be, amongst others, social groups like citizens living in towns or cities, users of urban transport (public or not), employers and employees in collective transport organisations; economic groups like business at local level, including SMEs, the urban transport industry, the car industry; national, regional and local authorities, stakeholders' representatives and associations in the relevant fields.

This strategy will be based on the past and future consultations and the experience already acquired by the Commission in the urban transport field since 1995 and its Green Paper and



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Communication on a Citizens' Network6. In addition, use will be made of the numerous lessons that have been learned from research and development projects.

However, there is one overriding idea that constantly recurs: To be effective, urban mobility policies need to be based on an approach which is as integrated as possible, combining the most appropriate responses to each individual problem: technological innovation, the development of clean, safe and intelligent transport systems, economics incentives and amendments to legislation.

This overall strategy will take into account all the relevant initiatives undertaken in the context of Community policies, the constant concern being to make a practical contribution to implementing the Lisbon Strategy.

The European Union must play a facilitating role in helping to bring about this change, but without imposing top-down solutions which may not necessarily be appropriate for the diverse local situations.

European added value may take various forms: promoting the exchange of good practice at all levels (local, regional or national); underpinning the establishment of common standards and the harmonisation of standards if necessary; offering financial support to those who are in greatest need of such support; encouraging research the applications of which will make it possible to bring about improvements in mobility safety and environmental; simplifying legislation and, in some cases, repealing existing legislation or adopting new legislation.

Any strategy formulated at European level can only be successful if decisive action is taken at the local level; concrete actions will be taken over and implemented by local authorities.

***Creating a new urban mobility culture.***

The challenge facing urban areas in the context of sustainable development is immense: that of reconciling the economic development of towns and cities and accessibility with improving the quality of life and with environmental protection, on the other.

In order to address these issues, which have many and varied implications, a joint effort will make it possible to encourage the search for innovative and ambitious urban transport solutions with a view to arriving at a situation where towns and cities are less polluted and more accessible and where traffic within them flows more freely.

Working together, we must seek ways of achieving better urban and suburban mobility, sustainable mobility, and mobility for all the inhabitants of Europe, while allowing economic operators to play their role in our towns and cities.

Urban mobility should make possible the economic development of towns and cities, the quality of life of their inhabitants and the protection of their environment. To this end, European towns and cities face five challenges which need to be met as part of an integrated approach.:



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1. Free-flowing towns and cities
2. Greener towns and cities
3. Smarter urban transport
4. Accessible urban transport
5. Safe and secure urban transport

## GREEN PAPER - TOWARDS A EUROPEAN STRATEGY FOR THE SECURITY OF ENERGY SUPPLY

The European Commission addresses the main issues relating to Europe's ever increasing energy dependence: the challenges posed by climate change and the internal energy market, measures relating to the supply of and demand for energy resources, the role of renewable energy and nuclear energy, etc.

**ACT**
Commission Green Paper of 29 November 2000 Towards a European strategy for the security of energy supply.

**SUMMARY**
The European Union's (EU) external energy dependence is constantly increasing. The EU meets 50% of its energy needs through imports and, if no action is taken, this will increase to 70% by 2020 or 2030. This external dependence involves economic, social, ecological and physical risks for the EU. Energy imports account for 6% of total imports and, in geopolitical terms, 45% of oil imports come from the Middle East and 40% of natural gas imports come from Russia. The EU does not yet have all the necessary means to change the international market. This weakness was highlighted by the sharp rise in oil prices at the end of 2000.
One solution recommended by the Green Paper for tackling this problem is to draw up a strategy for security of energy supply aimed at reducing the risks linked to this external dependence.

**New challenges**
In tackling this problem, the EU will have to face many challenges, and these must be taken into account when drawing up the strategy. The two greatest new challenges are:

- environmental concerns influencing energy choices, most significantly efforts to combat climate change;
- the development of the internal market, which has given a new place and a new role to energy demand and could lead to political tensions, e.g. falling prices could undermine efforts to combat climate change. It is up to our societies to find satisfactory compromises.

**A European strategy**
Nowadays, energy policy has assumed a Community dimension: Member States are interdependent, both with regard to combating climate change and in terms of the completion of the internal market. However, this has not been reflected by new Community powers. The Community is empowered to intervene in several areas, notably in the internal market, harmonisation, environment and taxation.


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Nevertheless, the lack of political consensus on a Community energy policy limits the scope for action. It is worth considering whether it would be advantageous to extend Community powers with regard to energy issues to enable the EU to have more control over its energy destiny. It is not a question of proposing a complete strategy for security of supply, but rather of launching a debate on these issues.

**A long-term energy strategy**

According to the Green Paper, the main objective of an energy strategy should be to ensure, for the well-being of its citizens and for the proper functioning of the economy, the uninterrupted physical availability of energy products on the market at an affordable price for all consumers, whilst respecting environmental concerns and looking towards sustainable development. It is not a question of maximising energy self-sufficiency or minimising dependence, but rather of reducing the risks linked to this dependence. The energy resources that are being used right now must be taken into account in the debate. The EU relies heavily on fossil fuels such as oil (the dominant resource). This is a problem that must be addressed.

The Green Paper outlines a long-term energy strategy in which the EU is to take action in the following areas:

- **Rebalancing its supply policy by taking clear action in favour of a demand policy**
  There is more room for manoeuvre to address demand than to increase Community supply. An attempt should be made to control the growth of demand, notably by using taxation, for example, to bring about a real change in consumer behaviour. With regard to supply, priority should be given to combating global warming, for example by promoting new renewable energy sources, using profitable energies to finance their development.
- **Assessing the contribution to be made by nuclear energy in the medium term**
  If no action is taken, the contribution of nuclear energy will decrease still further in the future. Whilst assessing the future contribution of nuclear energy, the debate should also look at issues such as global warming, security of supply and sustainable development. Whatever conclusions are drawn, research in the area of safe management of nuclear waste must be actively pursued.
- **Providing a stronger mechanism to build up strategic stocks and to secure new import routes for increasing amounts of oil and gas.**





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# DG ENTERPRISE AND INDUSTRY – WHITE PAPERS

## EUROPEAN TRANSPORT POLICY FOR 2010

This document aims to strike a balance between economic development and the quality and safety demands made by society in order to develop a modern, sustainable transport system for 2010.

ACT
White Paper submitted by the Commission on 12 September 2001: "European transport policy for 2010: time to decide" [final - Not published in the Official Journal].

SUMMARY
The Commission has proposed 60 or so measures to develop a transport system capable of shifting the balance between modes of transport, revitalising the railways, promoting transport by sea and inland waterway and controlling the growth in air transport. In this way, the White Paper fits in with the sustainable development strategy adopted by the European Council in Gothenburg in June 2001.
The European Community found it difficult to implement the common transport policy provided for by the Treaty of Rome. The Treaty of Maastricht therefore reinforced the political, institutional and budgetary foundations for transport policy, inter alia by introducing the concept of the trans-European network (TEN).
The Commission's first White Paper on the future development of the common transport policy, published in December 1992, put the accent on opening up the transport market. Ten years later, road cabotage has become a reality, air safety standards in the European Union are now the best in the world and personal mobility has increased from 17 km a day in 1970 to 35 km in 1998. In this context, the research framework programmes have been developing the most modern techniques to meet two major challenges: the trans-European high-speed rail network and the Galileo satellite navigation programme.
However, the more or less rapid implementation of Community decisions according to modes of transport explains the existence of certain difficulties, such as:

- unequal growth in the different modes of transport. Road now takes 44% of the goods transport market compared with 8% for rail and 4% for inland waterways. On the passenger transport market, road accounts for 79%, air for 5% and rail for 6%;
- congestion on the main road and rail routes, in cities and at certain airports;
- harmful effects on the environment and public health and poor road safety.

Economic development combined with enlargement of the European Union could exacerbate these trends.

Road transport
- Objectives: To improve quality, apply existing regulations more effectively by tightening up controls and penalties.


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- Figures: For carriage of goods and passengers, road transport dominates as it carries 44% of freight and 79% of passenger traffic. Between 1970 and 2000, the number of cars in the European Union trebled from 62.5 million to nearly 175 million.

- Problems: Road haulage is one of the sectors targeted because the forecasts for 2010 point to a 50% increase in freight transport. Despite their capacity to carry goods all over the European Union with unequalled flexibility and at an acceptable price, some small haulage companies are finding it difficult to stay profitable. Congestion is increasing even on the major roads and road transport alone accounts for 84% of CO2 emissions attributable to transport.

- Measures proposed: The Commission has proposed:

- to harmonise driving times, with an average working week of not more than 48 hours (except for self-employed drivers);
- to harmonise the national weekend bans on lorries;
- to introduce a driver attestation making it possible to check that the driver is lawfully employed;
- to develop vocational training;
- to promote uniform road transport legislation;
- to harmonise penalties and the conditions for immobilising vehicles;
- to increase the number of checks;
- to encourage exchanges of information;
- to improve road safety and halve the number of road deaths by 2010;
- to harmonise fuel taxes for commercial road users in order to reduce distortion of competition on the liberalised road transport market.

Rail transport

- Objectives: To revitalise the railways by creating an integrated, efficient, competitive and safe railway area and to set up a network dedicated to freight services.

- Figures: Between 1970 and 1998 the share of the goods market carried by rail in Europe fell from 21% to 8.4%, whereas it is still 40% in the USA. At the same time, passenger traffic by rail increased from 217 billion passenger/kilometres in 1970 to 290 billion in 1998. In this context, 600 km of railway lines are closed each year.

- Problems: The White Paper points to the lack of infrastructure suitable for modern services, the lack of interoperability between networks and systems, the constant search for innovative technologies and, finally, the shaky reliability of the service, which is failing to meet customers' expectations. However, the success of new high-speed rail services has resulted in a significant increase in long-distance passenger transport.

- Measures proposed: The European Commission has adopted a second " railway package " consisting of five liberalisation and technical harmonisation measures intended for revitalising the railways by rapidly constructing an integrated European railway area. These five new proposals set out:



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- to develop a common approach to rail safety with the objective of gradually integrating the national safety systems;
- to bolster the measures of interoperability in order to operate transfrontier services and cut costs on the high-speed network;
- to set up an effective steering body - the European Railway Agency - responsible for safety and interoperability;
- to extend and speed up opening of the rail freight market in order to open up the national freight markets;
- to join the Intergovernmental Organisation for International Carriage by Rail (OTIF).
- This "railway package" will have to be backed up by other measures announced in the White Paper, particularly:
- ensuring high-quality rail services;
- removing barriers to entry to the rail freight market;
- improving the environmental performance of rail freight services;
- gradually setting up a dedicated rail freight network;
- progressively opening up the market in passenger services by rail;
- improving rail passengers' rights.

Air transport

- Objectives: To control the growth in air transport, tackle saturation of the skies, maintain safety standards and protect the environment.

- Figures: The proportion of passenger transport accounted for by air is set to double from 4% to 8% between 1990 and 2010. Air transport produces 13% of all CO2 emissions attributed to transport. Delays push up fuel consumption by 6%.

- Problems: To sustain such growth, air traffic management will need to be reformed and airport capacity improved in the European Union. Eurocontrol (the European Organisation for the Safety of Air Navigation) is limited by a decision-making system based on consensus.

- Measures proposed: Creation of the Single European Sky is one of the current priorities, due to the following measures:

- a regulatory framework based on common rules on use of airspace;
- joint civil/military management of air traffic;
- dialogue with the social partners to reach agreements between the organisations concerned;
- cooperation with Eurocontrol;
- a surveillance, inspection and penalties system ensuring effective enforcement of the rules.
- Besides this restructuring of the airspace, the Commission wishes to harmonise the qualifications for air traffic controllers by introducing a Community licence for air traffic controllers.
- Alongside creation of the single sky, more efficient use of airport capacity implies defining a new regulatory framework covering:
- the amendment of slot allocation in 2003. Airport slots grant the right to take off or land at a specific time at an airport. The Commission will propose new rules on this subject ;



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- an adjustment of airport charges to encourage the redistribution of flights throughout the day;
- rules to limit the adverse impact on the environment. The air industry must get to grips with problems such as the noise generated by airports. The European Union must take account of the international commitments entered into within the International Civil Aviation Organisation (ICAO). With this in mind, the European Commission recently adopted a proposal for a directive to ban the noisiest aircraft from airports in Europe. In 2002 the ICAO will have to take specific measures to reduce greenhouse gas emissions. Consideration is also being given to taxes on kerosene and the possibility of applying VAT to air tickets;
- intermodality with rail to make the two modes complementary, particularly when the alternative of a high-speed train connection exists;
- establishment of a European Aviation Safety Authority (EASA) to maintain high safety standards;
- reinforcement of passenger rights, including the possibility of compensation when travellers are delayed or denied boarding.

Sea and inland waterway transport

- Objectives: To develop the infrastructure, simplify the regulatory framework by creating one-stop offices and integrate the social legislation in order to build veritable "motorways of the sea".

- Figures: Since the beginning of the 1980s, the European Union has lost 40% of its seamen. For all that, ships carry 70% of all trade between the Union and the rest of the world. Each year, some two billion tonnes of goods pass through European ports.

- Problems: Transport by sea and transport by inland waterway are a truly competitive alternative to transport by land. They are reliable, economical, clean and quiet. However, their capacity remains underused. Better use could be made of the inland waterways in particular. In this context, a number of infrastructure problems remain, such as bottlenecks, inappropriate gauges, bridge heights, operation of locks, lack of transhipment equipment, etc.

- Measures proposed: Transport by sea and transport by inland waterway are a key part of intermodality, they allow a way round bottlenecks between France and Spain in the Pyrenees or between Italy and the rest of Europe in the Alps, as well as between France and the United Kingdom and, looking ahead, between Germany and Poland.
The Commission has proposed a new legislative framework for ports which is designed:

- to lay down new, clearer rules on pilotage, cargo-handling, stevedoring, etc.;
- to simplify the rules governing operation of ports themselves and bring together all the links in the logistics chain (consignors, shipowners, carriers, etc.) in a one-stop shop.
- On the inland waterways, the objectives are:
- to eliminate bottlenecks;
- to standardise technical specifications;
- to harmonise pilots' certificates and the rules on rest times;
- to develop navigational aid systems.



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Intermodality (combined transport)

- Objectives: To shift the balance between modes of transport by means of a pro-active policy to promote intermodality and transport by rail, sea and inland waterway. In this connection, one of the major initiatives is the " Marco Polo " Community support programme to replace the current PACT (Pilot Action for Combined Transport) programme.

- Figures: The PACT programme launched 167 projects between 1992 and 2000. The new "Marco Polo" intermodality programme has an annual budget of 115 million euros for the period between 2003-2007.

-Problems: The balance between modes of transport must cope with the fact that there is no close connection between sea, inland waterways and rail.

- Measures proposed: The "Marco Polo" intermodality programme is open to all appropriate proposals to shift freight from road to other more environmentally friendly modes. The aim is to turn intermodality into a competitive, economically viable reality, particularly by promoting motorways of the sea.

Bottlenecks and trans-European networks
- Objectives: To construct the major infrastructure proposed in the trans-European networks (TENs) programme, identified by the 1996 guidelines, as well as the priority projects selected at the 1994 Essen European Council .

- Figures: Of the 14 projects selected in Essen, three have now been completed and six others, which are in the construction phase, were expected to be finished by 2005, states the Communication.

- Problems: The delays in completing the trans-European networks are due to inadequate funding. In the case of the Alpine routes which require the construction of very long tunnels, it is proving difficult to raise the capital to complete them. The Commission has proposed, in particular, completion of the high-speed railway network for passengers, including links to airports, and a high-capacity rail crossing in the Pyrenees.

- Measures proposed: The Commission has proposed two-stage revision of the trans-European network guidelines. The first stage, in 2001, was to revise the TEN guidelines adopted in Essen to eliminate bottlenecks on the main routes. The second stage in 2004 will focus on motorways of the sea, airport capacity and pan-European corridors on the territory of candidate countries. The Commission is looking at the idea of introducing the concept of declaration of European interest where specific infrastructure is regarded as being of strategic importance to the smooth functioning of the internal market.

- The priority projects are:
- completing the Alpine routes on grounds of safety and capacity;
- making it easier to cross the Pyrenees, in particular, by completing the Barcelona-Perpignan rail link;


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- launching new priority projects, such as the Stuttgart-Munich-Salzburg/Linz-Vienna TGV/combined transport link, the Fehmarn Belt linking Denmark and Germany, improving navigability on the Danube between Straubing and Vilshofen, the Galileo radionavigation project, the Iberian high-speed train network and addition of the Verona-Naples and Bologna-Milan rail links plus extension of the southern European TGV network to Names in France;
- improving tunnel safety by having specific safety standards for both railway and road tunnels.
- On infrastructure funding and technical regulations, the Commission has proposed:
- changes to the rules for funding the trans-European network to raise the maximum Community contribution to 20%. This would apply to cross-border rail projects crossing natural barriers, such as mountain ranges or stretches of water, as well as to projects in border areas of the candidate countries;
- establishment of a Community framework to channel revenue from charges on competing routes (for example, from heavy goods vehicles) towards rail projects in particular;
- a directive designed to guarantee the interoperability of toll systems on the trans-European road network.

Users

- Objectives: To place users at the heart of transport policy, i.e. to reduce the number of accidents, harmonise penalties and develop safer, cleaner technologies.

- Figures: In 2000 road accidents killed over 40 000 people in the European Union. One person in three will be injured in an accident at some point in their lives. The total annual cost of these accidents is equivalent to 2% of the EU's GNP.

- Problems: Road safety is of prime concern for transport users. However, spending fails to reflect the severity of the situation. Users have the right to know what they are paying and why. Ideally, the charge for use of infrastructure should be calculated by adding together maintenance and operating costs plus external costs stemming from, for example, accidents, pollution, noise and congestion. Finally, non-harmonisation of fuel taxes is another obstacle to smooth operation of the internal market.

- Measures proposed:

On road safety, the Commission has proposed:
- a new road safety action programme covering the period 2002-2010 to halve the number of deaths on the roads;
- harmonisation of penalties, road signs and blood-alcohol levels;
- development of new technologies such as electronic driving licences, speed limits for cars and intelligent transport systems as part of the e-Europe programme. In this connection, progress is being made on protection of vehicle occupants, on making life safer for pedestrians and cyclists and on improving vehicle-speed management.


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On charging for use of infrastructure, the Commission has proposed:

- a framework directive to establish the principles of infrastructure charging and a pricing structure, including a common methodology to incorporate internal and external costs and aiming to create the conditions for fair competition between modes.
  (a) In the case of road transport, charges will vary according to the vehicle's environmental performance (exhaust gas emissions and noise), the type of infrastructure (motorways, trunk and urban roads), distance covered, axle weight and degree of congestion.
  (b) In the case of rail transport, charges will be graduated according to scarcity of infrastructure capacity and adverse environmental effects.
  (c) In the case of maritime transport, the measures proposed will be linked to maritime safety;
- a directive on the interoperability of toll systems to be put in place on the trans-European road network.

On fuel tax, the Commission has proposed:

- separating fuel taxes for private and commercial uses,
- establishing harmonised taxation of fuel used for commercial purposes.

Other measures have been proposed to improve intermodality for multimodal journeys, in particular for those using rail and air successively, including integrated ticketing and improvements in baggage handling.

## WHITE PAPER ON INTERNATIONALLY COMPATIBLE BIOFUELS STANDARDS

This White Paper was drafted by an international Task Force consisting of experts on biofuels standards from the standardisation bodies of the Tripartite Agreement amongst Brazil, the European Union and the USA. The executive summary concludes with recommendations to further disseminate the White Paper to the standardisation bodies, to the International Biofuels Forum as well as the governments of Brazil and USA, and the European Commission.

The governments of the United States, Brazil and the European Union (EU)—the world's major producers of biofuels—today released an analysis of current biofuel specifications with the goal of facilitating expanded trade of these renewable energy sources. Spurred by increased market demands, this report was solicited by the U.S. and Brazilian governments and the European Commission (EC) on behalf of the EU, with the work conducted by an international group of fuel standards experts.

Biofuels—derived from biological materials such as plants, plant oils, animal fat and microbial byproducts—are gaining popularity worldwide as both energy producers and users seek ways to reduce greenhouse gas emissions, move away from dependence on fossil fuels and invigorate economies through increased use of agricultural products. As a result, biofuels are becoming an increasingly important commodity in the global marketplace.



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One potential obstacle to achieving greater efficiency in the global biofuels market is confusion over differing—and sometimes conflicting—standards for characterizing the make-up and properties of biofuels. To clarify the current situation and identify potential roadblocks to improved compatibility, the U.S. and Brazilian governments and the EC convened a task force of experts from standards developing organizations (SDOs) to compare critical specifications in existing standards used globally (factors such as content, physical characteristics and contaminant levels that govern a fuel's quality) for pure bioethanol and biodiesel, two key biofuels. The White Paper published today identifies where key specifications in the standards are:

- similar (and can be considered compatible);
- different, but could be reconciled in a short period; or
- irreconcilably different as they stand.

The "White Paper on Internationally Compatible Biofuels Standards" was requested by the governments of the United States and Brazil and the EC, and was produced by the joint task force after a six-month review process that considered thousands of pages of technical documents produced by ASTM International, the Brazilian Technical Standards Association (Associação Brasileira de Normas Técnicas or ABNT) and the European Committee for Standardization (Comité Europeén de Normalisation or CEN). Standards developed by these three SDOs are currently being used in support of biofuels commodities trading between nations.

The experts found that these three sets of bioethanol and biodiesel standards, and the specifications they contain, share much common ground and, therefore, impose few impediments to biofuel trade. Nine of the16 ethanol specifications reviewed, the task force states, are "in alignment" and all but one of the remaining specifications could be aligned in the short term. For biodiesel, the report lists six specifications as compatible. It suggests that many of the remaining differences could be handled by blending various types of biodiesel to create an end product that meets regional specifications for fuel quality and emissions.

In formal transmittal letters to representatives of the standards community, the U.S. and Brazilian governments and the EC on behalf of the EU applauded the efforts of the technical experts and encouraged the SDOs to consider the results of those efforts.

Recognizing that many of the issues relating to variations in specifications can be traced to different measurement procedures and methods, two leading metrology institutes—the U.S. National Institute of Standards and Technology (NIST) and Brazil's National Institute of Metrology, Standardization and Industrial Quality (Instituto Nacional de Metrologia, Normalização e Qualidade Industrial or INMETRO)—are collaborating on the development of joint measurement standards for bioethanol and biodiesel to complement the efforts of the SDOs. Initial efforts focus on creating certified reference materials to support development and testing of bioethanol and biodiesel, and analytical measurement methods for source identification (to determine if a fuel comes from a renewable or non-renewable source and the source of origin of biodiesel, e.g., soy, palm oil, animal fat, etc.) by the end of 2008.

The United States, Brazil and the EU are all members of the International Biofuels Forum (IBF) and will continue to engage other IBF governments in future work. The named SDOs



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will also seek to involve their counterparts in the other IBF member countries—China, India and South Africa—in the effort to make biofuels standards compatible worldwide.

Brazil, the world's biggest exporter of ethanol, already requires up to a 25 percent blend of ethanol with all gasoline that is sold. The EU has established a bioethanol blend mandate for its member states of 5.75 percent by 2010, and at least 10 percent of all vehicle fuels by 2020. In the United States, the Energy Policy Act of 2005 sets a 7.5 billion gallon goal for national biofuel consumption (usually ethanol) by 2012.





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# KEEP EUROPE MOVING - SUSTAINABLE MOBILITY FOR OUR CONTINENT - MID-TERM REVIEW OF THE EUROPEAN COMMISSION'S 2001 TRANSPORT WHITE PAPER COM(2006) 314 FINAL

Opinion of the European Economic and Social Committee on the Communication from the Commission to the Council and the European Parliament — Keep Europe moving — Sustainable mobility for our continent — Mid-term review of the European Commission's 2001 Transport White Paper

On 22 June 2006, the European Commission decided to consult the European Economic and Social Committee, under Article 262 of the Treaty establishing the European Community, on the above-mentioned communication.

The Section for Transport, Energy, Infrastructure and the Information Society, which was responsible for preparing the Committee's work on the subject, adopted its opinion on 21 February 2007. The rapporteur was Mr Barbadillo López.

At its 434th plenary session, held on 14 and 15 March 2007 (meeting of 15 March), the European Economic and Social Committee adopted the following opinion by 144 votes to three, with 24 abstentions.

## 1. Conclusions and recommendations

1.1 Since the Transport White Paper was published in 2001 the general situation has developed in a very different way from what was expected. Economic growth has been lower, the oil price has risen sharply, enlargement has given the EU a continental dimension, new technological developments are transforming transport into a cutting-edge technological sector, there is a constant terrorist threat and the modal breakdown of the transport market has changed. All of these factors require a re-orientation of transport policy.

1.2 But the overall objectives of transport policy have remained unchanged: competitive, sustainable, safe, environment-friendly mobility of persons and goods offering higher-quality employment. These objectives are fully in line with the revised Lisbon Agenda for growth and employment but have not yet fully engaged with the longer term objectives of the revised strategy for sustainable development and the climate change challenge. In particular the revision does not yet set out a coherent longer term strategy for achieving the first objective for sustainable transport set out in the revised sustainable development strategy of "decoupling economic growth and the demand for transport".

1.2(a) While supporting all the measures which the Commission proposes for making the different transport methods more energy efficient and less carbon-intensive the Committee questions whether this will ultimately be sufficient to achieve all the reductions of carbon emissions needed from Europe by the middle of the century. They therefore urge the Commission to put in hand now studies of the kind of measures that may be needed to achieve a reduction in the overall level of demand for transport in the longer term. This should include consideration of appropriate pricing signals; and a recasting of urban spatial and planning policies to encourage more local provision and access to goods and services of all kinds, and



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less reliance on ever longer distance of transportation of people and goods. It should also include consideration of how to open up a broader public debate on these issues, and an exploration of how responsible individuals and businesses can best contribute to long term sustainability through their own transport and travel decisions and behaviour.

1.3 The EU is highly diverse, with very different orographic, territorial and demographic characteristics, with both central countries with high levels of congestion and transit traffic and very extensive peripheral areas without this constant pressure on their infrastructure. The Committee highlights the need to bring a geographically differentiated approach to transport policy.

1.4 The EESC supports the aims of the revised White Paper, which aims to optimise all modes of transport, on their own and in combination, enhancing the specific potential of each, the aim being less polluting and more efficient transport systems which guarantee the sustainable mobility of persons and goods.

1.5 The EESC considers it necessary to improve interoperability between transport modes and increase the competitiveness of rail, maritime and inland waterway transport in order to boost their effectiveness and efficiency, and to increase their share of the transport market in order to underpin their long-term viability. It also considers that the public authorities can promote coordination between the different modes.

1.6 The Committee recommends that account be taken of public inter-city road passenger services, as a way of achieving the objectives set by the Commission, such as reducing congestion, pollution and fuel consumption and improving road safety, on the basis of this transport mode's high passenger-carrying capacity, with a significant increase in the role of public transport vis-à-vis private cars.

1.7 Air transport has undergone a major expansion in the last ten years, as a result of the opening up of the market, but the uneven application of the third package in the various Member States and existing restrictions in the internal market are leading to distortions of competition. The operation of the internal market therefore needs to be improved.

1.8 The absence of an internal maritime transport market is preventing the EU from optimising regulations on internal traffic and thus simplifying internal trade, with all of the attendant damaging repercussions for integrating this traffic into internal modal chains.

1.9 Transport is one of the EU's major employers, but the lack of staff is leading to more recruitment of third-country workers, which suggests that efforts are needed to improve the training, image and quality of transport-related vocations among young people, which is an area where the social partners can play a role.

1.10 The common transport policy should continue to have an impact on the technical, fiscal and social harmonisation of each transport mode on its own and of all of them in combination, in order to promote a framework that ensures a genuinely level playing field.

1.11 Service quality needs to be improved to make transport modes attractive to users. The Committee notes with satisfaction the attention paid in the mid-term review of the White



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Paper to the rights of passengers of all modes of transport, especially the rights of persons with reduced mobility, while taking account of the specific characteristics of each mode.
1.12 The protection of modes of transport should be a priority objective, and security measures should be extended to all modes of transport and their infrastructure, while avoiding unnecessary security checks and safeguarding the human rights and privacy of users.

1.13 Transport is a major consumer of fossil fuel energy, and reducing its dependence on these energy sources and reducing CO2 emissions from transport should be priorities, to which end a specific R&D and innovation programme should be drawn up for transport, with appropriate funding, which is able to stimulate the use of alternative sources of energy, primarily in urban areas; in addition a policy should be implemented that distinguishes between modes, especially as regards taxation, and which encourages the adoption and use of new, environmentally-friendly technologies.

1.14 Infrastructure provides the physical network needed for the development of the internal transport market and optimising this requires that two objectives be met: reducing congestion and increasing accessibility by mobilising all sources of funding.

1.15 Transport infrastructure, particularly in urban areas, should support the development of public transport. Investment policy should be used to gradually limit the space available for private car transport.

**2. Introduction and Commission proposal**

2.1 The aim of the Commission's 1992 Transport White Paper, entitled The future development of the common transport policy, was to create a single market for transport, facilitating mobility in general, by opening up the market. In ten years, except in the rail sector, the aims have broadly speaking being achieved.

2.2 In September 2001, the European Commission published a new White Paper, entitled European transport policy for 2010: time to decide, which proposed 60 measures for shifting the balance between modes of transport, eliminating bottlenecks, placing users at the heart of transport policy and managing the effects of globalisation.

2.3 In order to speed up decision-making and to evaluate the results achieved, the 2001 White Paper established a review mechanism requiring the Commission to present a timetable with specific aims, to make an overall assessment in 2005 of the implementation of the measures set out in the White Paper and, where necessary, to make changes. The result is the Commission communication under consideration in this opinion.

2.4 The approach adopted in the mid-term review of the White Paper is based, amongst other things, on the reorientation of transport demand towards more environment-friendly modes, in particular as regards long-distance transport, urban areas and congested transport corridors. At the same time all modes of transport are required to become more environment-friendly, safe and efficient from the energy point of view.

2.5 The Commission communication entitled Keep Europe moving — Sustainable mobility for our continent was drawn up on the basis of consultations held in the course of 2005. These



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consultations highlighted transport's central role in economic growth and the need to re-adjust policy measures.

2.6 The overall objectives of transport policy remain the same: a competitive, secure, safe, and environmentally friendly mobility for persons and goods, with better employment conditions. These objectives are fully in line with the revised Lisbon agenda for jobs and growth and with the revised Sustainable Development Strategy.

2.7 Innovation is one of the most important tools for achieving these objectives: introducing intelligent, communications-based transport systems and more advanced engine technology to achieve greater energy efficiency and promoting and using alternative fuels.

2.8 The key to the mid-term review of the White Paper, however, lies in co-modality, in other words, the efficient use of different modes on their own and in combination, which "will result in the optimal and sustainable utilisation of resources". This approach is the best guarantee of achieving a high level of mobility and of environmental protection at the same time.

**3. General comments**

3.1 The EESC maintains and reiterates the view set out in its opinion on the White Paper of 19 June 2002, that the current mid-term review should make it clear that, given developments in the transport sector and in the economic, political and social situation of the Union, there needs to be an effective and immediate adaptation of the common transport policy to take account of the changes that have occurred during the period under review and of foreseeable future developments.

3.2 It also endorses the policies aimed at improving technological potential to find innovative solutions that will contribute directly to the European competitiveness, safety, environmental and social agendas.

3.3 The context is very different from the one imagined at the time the 2001 Transport White Paper was drawn up: lower than expected economic growth, geopolitical tensions, rising oil prices, the effects of EU enlargement, globalisation, new technological developments, the ongoing terrorist threat and changes in the balance between transport modes. The Commission communication aims at adapting EU transport policy to the context in which future growth and policies must be determined.

3.4 The rationale for the mid-term review of the 2001 White Paper is not only the new context described above but also the much-needed reorientation of EU transport policy that the White Paper sets out. The review of the White Paper, must focus just as intently on a transport policy designed to optimise all modes of transport, through processes that make them more competitive, sustainable, socially beneficial, environmentally-friendly and safe, with sustainability that is anchored in their close relationship with progress and economic growth, and on the necessary coordination between the different modes, which can be promoted by the public authorities.



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3.5 The review also makes a very welcome proposal to bring transport into line with environmental priorities, under the concept of "sustainable transport", and does this in a similar way for the different modes of transport. Unfortunately, however, the studies made by the Commission in section 3 of the communication's Annex II, concerning transport and the environment, are not broken down by type of road transport, with separate figures for public and private transport use, which would provide a model showing the detrimental effects of, primarily, intensive and unbridled car use on congestion, safety, pollution and energy consumption, amongst other things.

3.6 Given the continuity of this transport policy, the EESC considers that a more realistic position should be advocated, and this would mean:
a) speeding up the regulatory processes for introducing a maritime transport system and a rail transport system based on regulated competition, as a way of making these more effective and efficient;
b) the effects of road transport, caused by traffic congestion and pollution, mainly from private vehicles, together with the relentless growth predicted by the Commission for the period 2000-2020, must be subject to specific measures that tackle these problems so as to allow for growth while reducing the harmful effects of road transport (new infrastructure, technology, etc.);
c) public passenger transport is essential for obtaining the results envisaged by these policies;
d) determining precisely the effects that commercial vehicles of less than 3.5 tonnes have on safety, the environment, working conditions and the economy.

3.7 There is, therefore, a need to boost the effectiveness and efficiency of maritime, inland waterway and rail transport, by promoting the competitiveness of these sectors, strengthening coordination and intermodality, with measures in place enabling it to continue to provide its services with the appropriate flexibility and pricing.

3.8 In the Committee's view the studies so far undertaken also fall short in that they do not directly address the fundamental goal adopted in the revised sustainable development strategy of decoupling economic growth and the demand for transport. Moreover they do not work through the implications of the climate change challenge and the level of CO2 reductions that will be needed in the next 50 years. Given the rapid growth in mobility over the last 50 years, and the apparently continuing appetite for yet more growth of movement (both in Europe and still more in the developing world) the Committee has serious doubts as to whether it will be possible to achieve the carbon reductions needed from the transport sector to avoid climate catastrophe simply by promoting greater energy efficiency in the different transport modes and optimisation of the balance between them, desirable though all those objectives are. They believe that the Commission needs to put in hand as a matter of urgency studies of the kind of measures that may be needed soon to discourage the growth in demand for ever greater mobility. This should include appropriate pricing signals, and appropriate urban spatial and planning policies to encourage more local provision of goods and services of all kinds to meet peoples' aspirations without requiring them to travel ever greater distances to satisfy them. It should also include consideration of how to open up a broader public debate on these issues, and an exploration of how responsible individuals and businesses can best contribute to long term sustainability through their own transport and travel decisions and behaviour.


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3.9 Transport policy must demonstrate commitment to quality, safety, the environment and transport efficiency and guarantee users' a choice of transport modes. Transport must achieve economically and socially sustainable levels of coverage, not forgetting, where appropriate, public service obligations and the right to mobility, which is enshrined in the Treaties.

3.10 Population is distributed unequally within the EU. With an average of 116 inhabitants per km2, population density varies from 374 inhabitants per km2 in the Netherlands to between 15 and 21 in the Nordic Countries. The percentage of a country's total population living in urban areas also varies. The European average is 80 %, and ranges from Belgium's 97.2 % to 59.9 % in Greece. The problems of captive transport users in rural areas should be highlighted.

3.11 The EESC wishes to emphasise the need to adopt a geographically differentiated approach to transport policy, since the EU is a highly diverse territory with very different topographical, territorial and demographic etc., characteristics, in which core countries, containing areas with high levels of congestion and significant through-traffic, coexist with very large peripheral or rural areas that do not face the same constant pressure on their infrastructure. These two models require different and specific approaches, within the framework of the common transport policy.

3.12 There is also the problem of the peripheral countries, far from the large population and production centres, which have higher transport costs and consequently, higher costs for producing and marketing their products — one of the disadvantages of remoteness. The EESC therefore considers that improved accessibility must be a priority tool for increasing countries' or regions' competitive capacity and for strengthening territorial cohesion.

3.13 Both the Commission communication and the 2001 Transport White Paper are documents that need to be fleshed out, in that: a) they provide no clear economic/financial or budgetary analysis of the issues that the Commission considers should be addressed; b) transport policy does not give regulated competition the leading role that the Commission itself claims it should have and c) more detailed work needs to be done on breaking down environmental and other studies by modes and particular types of transport, in order to study the effects and possible solutions.
The EESC considers that consultation measures should be adopted, setting out initiatives that will, once the problems have been studied, give the EU a cohesive and sustainable transport policy for the future.

3.14 The Commission communication states that most of the measures set out in the White Paper have been adopted or proposed, and that their impacts are described and evaluated in Annex 3, which is not included in the communication. The EESC requests that a detailed chronological list of the measures be adopted and their impact included, or that the address of the Internet page on which they are published be clearly provided.

**4. Specific comments**

4.1 In order to carry out a systematic analysis of the communication on the mid-term review of the 2001 Transport White Paper, some general aspects will now be set out on which the



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EESC considers it necessary to make constructive contributions, following the communication's own format.

4.2 Sustainable mobility in the internal market — connecting Europeans

4.2.1 The Commission states that "the EU's internal market is the main instrument for achieving a vibrant transport industry which brings growth and jobs. As the aviation sector and other sectors such as telecommunications have shown, the process of liberalisation of the internal market stimulates innovation and investment to bring better service at a lower cost. The same success can be achieved throughout the transport sector". In air transport the results have been more choice for users and lower fares.

4.2.2 Road transport: in order to analyse the issue of road transport objectively, it must be broken down by mode and by specific characteristic, since the largest share of intra-EU transport is carried by road, which accounts for 44 % of freight and around 85 % of passenger transport. Motor vehicles in the EU 25 are distributed as follows: 212 million passenger cars, 30.702 million commercial vehicles, 25.025 million powered two-wheelers and 719400 buses and coaches. This clearly shows where the main responsibility for the EU's major congestion and environmental problems lies.

4.2.2.1 The communication makes no reference to public intercity road passenger transport, thus seriously undermining the potential solution of getting car passengers to switch to this mode of transport, which would generate all kinds of benefits and savings relating to safety, the environment, land use, flexibility etc. The EESC considers that account should be taken of this mode of transport in order to achieve the stated aims. Consequently, legislation is needed to permit the development of regulated competition, so that regular intercity road passenger transport services can be established, which would have to comply with EU and Member State rules on advertising and competition.

4.2.2.2 The Commission looks at ways of reducing excessive differences in fuel tax levels for road transport instead of adopting a more general approach to the issue by introducing a common tax policy for all modes of transport, which does not penalise any mode of transport more than another, to ensure equal treatment.

4.2.3 Rail transport: Since 1970 the railways' market share has declined from 10 % to 6 % of passenger transport and 21 % to 8 % of goods transport. International goods trains cross the EU at an average speed of 18 kph. The main challenges facing the railways are competition with the other modes, the interoperability of the different systems and the fact that the railways specialise in transporting certain goods.

4.2.3.1 The EESC considers that making rail transport more competitive is the only way to ensure that it achieves the desired level of efficiency and effectiveness, thus increasing demand for this mode of transport and restoring its long-term viability; this would require an in-depth review of all legislation on this matter and of its implementation in the various Member States.

4.2.3.2 Nevertheless, as it stated in its opinion on the 2001 Transport White Paper, the Committee shares the view that the principle of "regulated competition" should apply to



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services of general economic interest, including public rail and road passenger transport, which under Article 16 of the EC Treaty are considered essential to promoting social and territorial cohesion.

4.2.4 Air transport: The framework of liberalisation created by Regulations (EEC) No 2407/92, 2408/92 and 2409/92, the internal market in aviation's "third package", has helped to achieve the transformation of air transport services, making them more efficient and affordable. However, the third package's differing implementation in the different Member States and the remaining restrictions on intra-Community air services create distortions of competition (for example, different requirements for granting operating licences, discriminatory treatment on routes to third countries, discrimination against airlines on grounds of nationality, etc.). The operation of the internal market therefore needs to be reviewed, changes must be made to eliminate potential distortions and the "single sky" regulatory framework must be completed, thus making air transport in the EU more efficient.

4.2.5 Maritime transport: More than 90 % of transport between Europe and the rest of the world passes through seaports, and 40 % of intra-European transport goes by sea. Maritime transport, especially short sea shipping, has experienced growth similar to that in road haulage and it has great development potential given the EU's long coastline following enlargement. The EESC considers that the Commission ought to monitor the movement of goods by sea and take the measures necessary to adapt to this development.

4.2.5.1 The lack of an internal market for sea transport, due to the fact that journeys by sea between two Member States are considered to take place outside the Union under international law, is preventing the EU from optimising the regulation of internal traffic and simplifying internal trade, with negative repercussions for the integration of this into the internal modal chains.

4.2.5.2 The EESC considers the better integration of port services to be an essential basis on which to draw up and introduce a common maritime transport policy, which will help to develop the "motorways of the sea" and to promote "short-sea shipping", making maritime transport more efficient and competitive within the logistics chain, which will help to improve sustainable mobility.

4.3 Sustainable mobility for the citizen — reliable, safe and secure transport

4.3.1 Employment and working conditions: transport is one of the main employers in the EU, accounting for 5 % of all jobs, but employment levels are now stabilising. In some sectors, such as rail and road transport, a lack of skilled workers has appeared, which has contributed to an increase in third-country labour. The EESC shares the Commission's view on the need to step up efforts to improve training and quality of employment for those working in the sector, in order to make transport-related vocations more attractive to young people.

4.3.1.1 To achieve these aims, there must be training programmes, guided by the social partners, that reflect the specific characteristics and needs of each mode of transport (initial and ongoing training) which must have the necessary funding.



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4.3.1.2 The social legislation covering road transport must preserve equal treatment for workers, whether they are employees or self-employed and, therefore, Directive 15/2002 of 11 March 2002, on the organisation of working time of persons performing mobile road transport activities must apply immediately to self-employed workers, without a transitional period, since the aim of this Directive is to ensure road safety, to avoid distortion of competition and to promote better working conditions.
For the reasons given above, commercial vehicles of less than 3.5 tonnes used for freight services should be included in the different regulations covering goods transport by road,

4.3.2 Passenger rights: strengthening users' rights is essential to ensuring that all modes of transport improve the quality of their service, (including frequency, punctuality, the comfort of all categories of user, safety, ticketing, prevention of over-booking, pricing policy and compensation etc.). The Committee urges that these changes be introduced as soon as possible, whilst taking into account each mode's specific characteristics, especially those of modes which have to share infrastructure.

4.3.2.1 The Committee welcomes the particular attention that the review of the White Paper pays to access to transport for persons with reduced mobility and to the quality of such transport. It wishes to state, however, that conditions of access concern not only modes of transport but also infrastructure, whether for air, sea, inland waterway, rail or road transport and also the particular problems arising from trans-shipment.

4.3.3 Safety: the introduction of a comprehensive set of regulations has resulted in improved safety in all modes of transport, especially in air and maritime transport. These measures include the introduction of a blacklist of unsafe airlines and the creation of European agencies for all modes of transport, including the European Maritime Safety Agency (EMSA), the European Air Safety Agency (EASA) and the European Railway Agency (ERA). The only exception is road transport. In order to achieve the stated aim of halving the number of accidents, a common road safety policy is therefore needed, establishing a common system of standardising offences and sanctions, and introducing the "European penalty points driving licence", which would enable any offence, in any EU Member State, to result in penalty points.

4.3.3.1 It should not be overlooked, however, that technical progress, new vehicle design, vehicle-infrastructure cooperation (known as eSafety) and better infrastructure, by eliminating black spots, are all factors that will contribute to improving road safety.

4.3.3.2 The EESC wishes to state that road accident statistics should be broken down by mode, especially those which come into contact with private cars, because it is these which have the highest accident rate.

4.3.4 Security: air transport security was tightened following the events of 11 September 2001. The Committee considers that, in the wake of the Madrid and London attacks and the ongoing terrorist threat, protecting all transport resources and infrastructure must be a priority for the Union. Security regulations must therefore be extended to all modes of transport, and to intermodal chains. When introducing security inspections and rules, however, care must be taken to avoid unnecessary and costly checks and to safeguard users' human rights and privacy.



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4.3.5 Urban transport: the Commission plans to publish a Green Paper on urban transport. This must focus on the promotion of public transport and contain a list of best practices. Furthermore, as the Committee stated in its Opinion on the 2001 Transport White Paper, there is a need for investment and transport plans to improve the quality of public transport in the large congested conurbations, along the lines of the CIVITAS initiative, the TranSUrban project and the Thematic Strategy on the Urban Environment, which should receive more financing from Community funds, whilst fully respecting the principle of subsidiarity, because urban transport is an area for which local and regional authorities should logically be responsible. These measures will prove inadequate, however, without an urban transport policy that makes it possible and easier to involve private enterprise in the provision of public urban passenger transport services, which will help free up and optimise the use of public resources.

4.4 Transport and Energy

4.4.1 Transport is one of the main consumers of energy and accounts for approximately 70 % of the EU's total oil consumption, with road transport using the most (60 %), owing largely to the stock of privately-owned vehicles, which equates to over 465 saloon cars per 1000 inhabitants. Air transport accounts for approximately 9 % of oil consumption and the rail sector uses approximately 1 %. Fair competition between different modes of transport requires equal taxation of oil consumption. Consequently, removal of the non-taxable status of aviation fuel must be considered.

4.4.2 Reducing dependency on fossil fuels and reducing CO2 emissions must therefore be priorities. To achieve these aims, — the Commission estimates that transport has an energy savings potential of 26 % by 2020, — a properly funded R&D and innovation programme must be drawn up, which can promote the use of alternative energies, especially in the area of urban surface transport.

4.4.3 A differentiated transport policy is needed to promote the exploitation of new technological advances that help to reduce CO2 emissions and oil dependency, focusing on taxation and promotion of the acquisition and use of new technologies that can reduce pollution and increase energy savings. A specific fuel for public transport must also be introduced, with a lower rate of taxation exclusively for this type of less-polluting vehicle (Euro IV and in future Euro V), as exists for other modes of transport. The approach to environmental issues must not be based on punitive taxation. Quite the opposite is required, in other words, to prioritise transport that makes use of new technologies designed to reduce pollution and save energy.

4.5 Optimising infrastructure

4.5.1 The trans-European Transport Networks (TENs) provide the physical infrastructure for the internal market, but their levels of development vary across the EU and congestion is not a problem everywhere.

4.5.2 The Committee supports the idea of co-modal logistics chains as a more efficient solution to congested road corridors, which optimise the use of transport infrastructure within



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and across the different modes, including transalpine tunnels, rail corridors and intermodal transport nodes.

4.5.3 The problems arising from the remoteness of peripheral or ultra-peripheral regions and countries must be reiterated. To ensure that these areas located far from the centre of the EU can benefit fully from the internal market, the Trans-European Transport Networks must be completed within the agreed deadlines. This will require increasing the funding that the EU has earmarked for developing the most congested already-existing networks, especially cross-border links. The Commission gives the examples of bottlenecks in the Pyrenees, Spain-France links and the Alps. In short, improving accessibility leads to improved competitiveness as well as greater expectations for regional development.

4.5.4 Together with the above budget increases, the European Union must make a firm commitment to promoting the mixed-financing system of infrastructure provision, which offers stability and legal guarantees for the involvement of private capital in building and operating transport infrastructure.

4.6 Intelligent mobility

4.6.1 As described above, intelligent transport systems help to ensure a more efficient and rational use of infrastructure and therefore to reduce accidents and congestion and to protect the environment.

4.6.2 The European satellite navigation system, Galileo, which will be operational as of 2010, will provide future applications for all modes of transport, such as the Intelligent Car, promoting the new technologies in vehicles, the SESAR programme, which will help to improve air traffic management in the single European sky, and the ERTMS system, which will enhance interoperability between national rail networks.

4.6.3 The EESC fully supports the co-modality approach, as transport's response to the phenomenon of globalisation and the opening-up of world markets. Building on this approach will require adapting infrastructure, so that interconnections are boosted to permit transport continuity and to avoid delays and breaks in the logistics chain. Promoting co-modality will help to strengthen all modes of transport, especially ones that may be currently underused.

4.7 The global dimension

4.7.1 The EESC reiterates what it has already stated in its opinion on the 2001 White Paper, to the effect that international transport policy is an integral part of trade policy and even, in some respects, of the Common Foreign and Security Policy (CFSP). It thus believes that in this area the Commission should have powers similar to those conferred on it by the Treaties for the negotiation of international trade agreements, in that, acting on the mandate of the Council, it should represent, where possible, the Union on questions of transport in all international organisations competent on transport policy issues and should have the power to negotiate transport agreements with third countries on behalf of the Member States.

4.7.2 At the same time, the Committee considers it crucial to work on simplifying customs procedures so that, without impairing service quality, the costs of providing the service are not increased, as well as to guarantee the principles applying to internal EU frontiers, e.g. under agreements such as Schengen or any subsequent agreements.



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# OTHER EU POLICIES AND STRATEGIES RELATED TO THE AUTOMOTIVE INDUSTRY

## DG ENTERPRISE AND INDUSTRY POLICIES RELATED TO AUTOMOTIVE INDUSTRY

The EU is the world's largest producer of motor vehicles. The automotive industry is therefore central to Europe's prosperity. It is a huge employer of skilled workforce and a key driver of knowledge and innovation. It represents Europe's largest private investor in research and development (R&D). It also makes a major contribution to EU's Gross Domestic Product (GDP), and exports far more than it imports.

The main objectives of the European Commission regarding the automotive sector are:

**1) To strengthen the competitiveness of the automotive industry**
The aim is to identify and assess policy issues of significant importance to the competitiveness of the EU automotive industry and to suggest solutions that take into consideration economic, social and environmental objectives.
**2) To complete, adapt and simplify the Internal Market regulatory framework**
The work on improving the Internal Market is built upon the introduction of the EC Whole Vehicle Type-Approval System which allows manufacturers to have a vehicle "type" approved in one Member State and then be able to market the vehicle in all other Member States without further tests.
**3) To promote globalisation of the technical regulatory framework through UNECE**
Global technical harmonisation is a key factor in strengthening the competitiveness of the European automotive industry world-wide. The EU is a Contracting Party to two agreements of the United Nations Economic Commission for Europe (UNECE): the 1958 Agreement on Uniform Technical Prescriptions for Vehicles, and the Global Agreement of 1998.

### 1. Competitiveness & CARS 21

Competitiveness of the automotive industry contributes to the strategic objective of the Community to work towards creating long-term prosperity in Europe through sustainable and dynamic growth. This objective is further defined in the Commission's modern industrial policy and the Lisbon Strategy for Growth and Jobs.
These strategic orientations with respect to the automotive industry are translated and formulated into policy and regulatory actions with the help of the CARS 21 process. This process started as a High-Level Group that has later evolved into a permanent forum providing input in policy-making related to the automotive industry.

**Competitiveness**
The automotive industry has been affected by the current recession affecting the global economy, and the sector is at present facing a serious situation, putting at risk a very significant number of jobs.


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In 2008 there were about 8% fewer cars sold in the EU than in 2007. The current forecasts for the motor vehicle market in the EU are a 15% slump for passenger cars and a 30% decline in sales of commercial vehicles. In the short term in the field of competitiveness policy for the sector, work needs to focus on recovery from the crisis. This is facilitated by the Community financing of innovation, improving access to liquidity, promotion of fleet renewal schemes and by tackling the social cost of restructuring as presented in the European Economic Recovery Plan and the recent Communication " Responding to the crisis in the European automotive industry", adopted on 25 February 2009.

**Competitive Automotive Regulatory System for the 21st century**

As part of the Commission's modern industrial policy, the CARS 21 (Competitive Automotive Regulatory System for the 21st century) process, which was launched in 2005, aims to make recommendations for the short-, medium-, and long-term public policy and regulatory framework of the European automotive industry. This framework enhances global competitiveness and employment, while sustaining further progress in safety and environmental performance at a price affordable to the consumer.

**2. Technical harmonisation**

Technical harmonisation for motor vehicles and their trailers, implemented at Community level pursuant to Article 95 of the Treaty establishing the European Community, is based on the Community Whole Vehicle Type-Approval system (EC WVTA).

Under this system, manufacturers can obtain approval for a vehicle type in one Member State if it meets the Community technical requirements, and then market it EU-wide with no need for further tests or checks. Registration must be granted on simple presentation of a certificate of conformity.

Total technical harmonisation has already been achieved in many vehicle categories (light and heavy duty vehicles, motorcycles and some agricultural and forestry tractors) and will soon be extended to other vehicle categories (other tractors and their trailers and towed equipment).

It is essential that European manufacturers be ensured access to as large a market as possible. While the Community type-approval system allows manufacturers to benefit fully from the opportunities offered by the internal market, worldwide technical harmonisation in the context of the United Nations Economic Commission for Europe (UNECE) offers them a market which extends beyond European borders.

**3. Approval authorities and technical services**

The approval authorities of Member States have competence for all aspects of the approval of a type of vehicle, system, component or separate technical unit, or of the individual approval of a vehicle. They issue and withdraw approval certificates. One of their main tasks is designating technical services.

**4. Safety**

The European Commission's work on motor vehicle safety covers the safety of drivers, passengers and pedestrians.

The Commission aims to enhance overall motor vehicle safety through the Regulation on general safety of motor vehicles. The majority of measures will become mandatory for new cars by 2014.



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Regarding the pedestrian and other vulnerable road users safety, requirements are set out in the Regulation on the type-approval of motor vehicles with regard to the protection of pedestrians and other vulnerable road users.

Furthermore, requirements on the safety of hydrogen-powered vehicles are set out in the Regulation on type-approval of hydrogen-powered motor vehicles.
The environmental and safety requirements applicable to agricultural and forestry tractors and two and three- wheel motor vehicles (motorcycles) will be included in framework legislation covering those types of vehicles.

*General safety of motor vehicles*
The Regulation on general safety of motor vehicles foresees mandatory fitting of the following safety features:

- Electronic Stability Control Systems on all vehicles;
- Advanced Emergency Braking Systems and Lane Departure Warning Systems on heavy-duty vehicles;

It also foresees the mandatory fitting of Tyre Pressure Monitoring Systems on passenger cars and introduces requirements on tyres with regard to their rolling resistance.

The Regulation sets more stringent noise emission limit values for tyres and introduces new wet grip requirements to ensure that this important safety aspect is not overlooked in the pursuit of more energy-efficient, quieter tyres.

It significantly simplifies the existing regulatory environment by repealing 150 Directives on the type-approval of vehicles and replacing them with corresponding UNECE regulations.

**5. Environment**
The focus of DG Enterprise and Industry's work on environment is first and foremost protecting air quality.

The work so far has been accomplished with respect to cars and light commercial vehicles, for which new emission limits (Euro 5 and Euro 6) have been introduced. The work on reducing emissions is also in progress for heavy duty vehicles (buses and trucks) with the Euro VI standards.

Furthermore the environmental requirements applicable to agricultural and forestry tractors and two and three- wheel motor vehicles (motorcycles) will be included in framework regulations covering those types of vehicles.

**6. Working groups and committees**
The Commission is assisted in preparing legislative proposals and policy initiatives by two types of advisory bodies:

1. Comitology committees, which are set up on the basis of regulations, directives or decisions.
2. Working groups, which are established informally by the Commission services.


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The comitology committees related to the work of the automotive industry unit:

- Technical Committee - Motor Vehicles
- Committee for the Adaptation to Technical Progress - Agricultural or Forestry Tractors

Working groups are set up by the Commission to assist it in proposing EU legislation or exercising tasks of monitoring and coordination/cooperation in relation with EU policies. These groups provide expert advice to the Commission. They may consist of national experts but also experts or stakeholders from business, NGOs, trade unions, academia, etc.

The working groups related to the work of the automotive industry unit:

- Motor Vehicles Working Group
- Motorcycle working group
- Motor Vehicle Emissions Group (MVEG)
- MVEG Motorcycles
- Working Group on Agricultural Tractors
- Working Group on Hydrogen
- PEMS Pilot Programme
- Light Duty OBD Experts Working Party





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# CARS 21 A COMPETITIVE FRAMEWORK FOR THE 21ST CENTURY

The automotive industry is a major pillar of the European economy, representing 3% of the European GDP and 7% of employment in the manufacturing sector, amounting to twelve millions jobs in total. The automotive industry in Europe is currently characterised by cut-throat price competition, high raw material and energy prices, a strong emphasis on cost management and a restructuring of production processes. In line with its policy to improve the quality of lawmaking and to face the challenges of a more global competition the Commission in 2004 asked the High Level Group CARS 21, which brought together all the main stakeholders (including consumer and environmental organisations), to advise on future policy.
As part of the Commission's modern industrial policy, the CARS 21 (Competitive Automotive Regulatory System for the 21st century) process, which was launched in 2005, aims to make recommendations for the short-, medium-, and long-term public policy and regulatory framework of the European automotive industry. This framework enhances global competitiveness and employment, while sustaining further progress in safety and environmental performance at a price affordable to the consumer.

## CARS 21: A Roadmap for a Competitive Automotive Industry in the 21st Century

On 7 February 2007 the Commission came forward with a strategy for the long term viability of the European car industry as a Commission's response to the report presented by the CARS 21 Group. Its aim is to keep the manufacturing of motorcars viable on a long term basis, at prices affordable to consumers. The strategy encompasses a variety of areas, such as reduction of administrative burdens, environmental sustainability, road safety, trade and overseas markets and research. It outlines to the European Parliament and Council the direction in which the Commission intends to steer future automotive policy and includes the following elements:

### Reduction of administrative burdens:

The Commission will propose replacing 38 EC directives with corresponding global UN/ECE regulations, for instance on tyres, safety glass, fog lamps and seatbelts. In addition, self testing and virtual testing will be introduced for 25 directives and UN/ECE regulations to reduce compliance costs and make administrative procedures less costly and time consuming.

### Reduction of CO2 emissions:

The Commission strategy is based on an integrated approach, involving not only engine technology, but also technological improvements (e.g. setting mimimum requirements for air-conditioning systems, the compulsory fitting of tyre pressure monitoring systems, setting maximum tyre rolling resistance limits and the use of gear shift indicators) and increased use of bio-fuels. It also focuses on additional efforts by Member States like traffic management, improvement of driver behaviour and infrastructure as well to further reduce CO2 emissions.


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**Road safety:**

The Commission believes an effective road safety strategy should be based on a combination of improvement in vehicle technology, road infrastructure, driver behaviour and enforcement.

**Trade:**

The Communication proposes to assess the potential of using bi-lateral trade agreements (particularly in the Asian region) to improve market access and reinforces the need to enforce intellectual property rights globally.

**Research and development:**

Clean renewable fuels and vehicles and intelligent vehicles and roads have been identified as core research priorities. With approximately 20 billion Euro, about 5% of the industry's turnover, invested into research and product development the automotive industry is the largest R&D investor in Europe in absolute terms. Vice President Verheugen will present the strategy to Ministers which will be followed by an exchange of views.





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# CLEPA – EUCAR CONTRIBUTION TO THE EUROPEAN GREEN CAR INITIATIVE

**The European Green Car Initiative** aims to sustain progress towards a breakthrough in the use of renewable and non-polluting sources of energy, road safety and traffic fluidity. The initiative covers passenger cars as well as trucks and buses and transport systems, intelligent infrastructure and the availability of a fuelling and/or charging infrastructure.

**Funding** will be spread over four years. EUR 1 billion (from a total of EUR 5 billion) will come from the existing EU 7th Framework Programme for R&D funding and includes EUR 500 million to be financed by the industry. The remaining EUR 4 billion will become available in EIB loans to individual projects from manufacturers and suppliers. These loans usually cover 50% of the total investment.

CLEPA and EUCAR, the European Council for Automotive R&D, two major actors of the European automotive industry have submitted clear and concise R&D priorities to the European Commission to shape the European Green Car Initiative, announced by the EU.

The Green Car Initiative, a part of the European economic recovery plan, aims to allocate EUR 5 billion through a Public Private Partnership to bolster innovation in the automotive sector and sustain its focus on environmental progress. The initiative complements the European Clean Transport Facility which, through the European Investment Bank, serves to provide more immediate financial relief to the sector.

The Green Car Initiative concentrates on long-term R&D, largely combining existing projects under a clear policy focus and underlining the importance of a joint approach between industries and policy makers. The European automotive manufacturers and suppliers play a key role in research, development and innovation of products and services to evolve towards greener vehicles and transport systems. They are determined to extend their substantial track record of R&D achievements, through progress in:

**Mobility & Transport** (deploying information and communication technologies (ICT) and Intelligent Transport Systems (ITS) for traffic and transport management, involving vehicles as well as route planning)
**Energy & Environment** (exploring primary energy sources which are renewable, secure, sufficient and environmentally compatible; the electrification of vehicles and the road transport system as a whole; lightweight structures and new vehicle concepts for high energy-efficiency)
**Safety** (ensuring safety of new vehicle concepts and types; development of cooperative systems for efficiency and safety based on communication between vehicles and infrastructure)
**Affordability & Competitiveness** (achieving green objectives at an affordable level, taking into account the availability and use of raw and rare materials; (energy-) efficiency of production processes; handling of alternative materials; use of virtual tools)

All of these areas are equally important and none of them can be considered independent from the others.


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Automotive manufacturers and suppliers call on the EU to adopt these priorities and implement them as soon as possible. It is, in particular, important that the Commission ensures that further work on vehicle technologies is done in parallel to and in close cooperation with the development of a compatible infrastructure for energy sources and future fuels, as part of a comprehensive mobility strategy.

The automotive sector has been particularly hard hit by the current financial and economic crisis as vehicle demand has slumped and access to finance is severely limited. EU and national government support is essential to help the sector bridge the extraordinary economic downturn and sustain investments in R&D.

The automotive industry is the backbone of the manufacturing industries in Europe and directly and indirectly supports the jobs of over 12 million employees.





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## ROAD SAFETY

Improving road safety and meeting users' demands is a challenge that automotive suppliers have taken up for decades. Today, many of the most common and useful innovations for vehicles com e from CLEPA member s , such as: safety belts, airbags, ESP etc.

The challenge is still there and CLEPA companies are continuing to innovate to better protect all road users from vehicle occupants to pedestrians.

Here is a non - exhaustive list of the fields where automotive suppliers make a vital contribution:

**Passive Safety**

- Improving restraint systems;
- Improving vehicle crash - worthiness and vehicle-to-vehicle compatibility;
- Improving pre-crash protection;
- Improving child protection.

**Active Safety**

- Improving vehicle braking and stability systems;
- Developing driver assistance systems;
- Developing collision avoidance and mitigation systems.

**eSafety**

- Integrating passive and active safety systems, communication with other vehicles and infrastructure to offer road users the best protection.

On the other hand, vehicle safety as well as environmental performance, are heavily regulated by governmental minimum requirements. CLEPA member companies are selling world-wide and a strategic action is to make sure that these requirements are harmonized as much as possible. The harmonization started 50 years ago with the emergence of the EU Internal Market and the 1958 Agreement of the United Nations. CLEPA has been and still is an active actor in these forums, bringing its expertise to the legislators. The aim is now global harmonization between Europe, Japan, North America and emerging countries in the automotive sector.





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## EUROPEAN GREEN CARS INITIATIVE

The European Green Cars initiative is one of the three PPPs included in the Commission's recovery package. The envelope for this initiative is foreseen at €5 billion to boost to the automotive industry in a time of economic hardship, and support the development of new, sustainable forms of road transport. Of this financial envelope, € 4 billion will be made available through loans by the European Investment Bank (EIB), and € 1 billion through support to research, with equal contribution from the Seventh Framework Programme for Research (FP7) and from the private sector. The scope of this initiative is broader than the two other PPP, and research is just one part of it. Several coordinated calls for research proposals should be launched in July this year. These financial support measures will be supplemented by demand-side measures, involving regulatory action by Member States and the EU, such as the reduction of car registration taxes on low CO2 cars to stimulate car purchase by citizens.

**Developing greener road transport**

Greening road transport is necessary to achieve EU and world targets in emissions reductions. In the EU, 19% of total EU greenhouse gas emissions and 28% of CO2 emissions in 2005 are linked to the transport sector. More than 90 % of total EU transport emissions are due to road transport. While total EU emissions declined, transport emissions increased continuously between 1990 and 2005 due to high growth in both passenger (28 %) and freight transport (62 %).

Research is the way to develop the sustainable transport methods we need. Such "eco-innovation" will serve both to protect the environment, and to offer competitive advantage to those seeking to create new innovation-driven markets.

**Measures** contained in the European Green Cars Initiative

The European Green Cars Initiative contains three streams of action:

- R&D, mainly through FP7 grants for research on greening road transport. Budget: € 1 billion, of which € 500 million from the Commission, matched by € 500 million from industry and Member States
- Support to industrial innovation through EIB loans. Budget: € 4 billion (in addition to existing loans)
- Demand side measures & public procurement, such as reduction of circulation and registration taxes for low-CO2 cars

Despite its name, the Green Cars Initiative is not only for passenger cars. Under the Green Cars Initiative, the research topics include:

- Research for trucks;
- Research on greening internal combustion engines;
- Research on bio methane use;
- Logistics, transport system optimisation; and
- Research on electric and hybrid vehicles, notably research on:
    - High density batteries;



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- Electric engines; and
- Smart electricity grids and their interfaces with vehicles.

**Next steps**

Under FP7, four Calls should be launched in July 2009 to implement the Green Cars Initiative, with an overall budget of around € 100 million. The Commission's Directorates-General for Research, Transport and Energy, and Information Society will each launch Calls that focus on electrification of road transport, along with a fourth, joint call on Electric Batteries. In other words, the funding for road transport projects under FP7 in 2010 will all be focused on the electrification of road transport and research into hybrid technologies; a critical mass which is expected to produce a step change in innovation in these technologies.

In the following FP7 Calls, in 2011, the topics for projects to be funded should broaden to the other areas of the Green Cars Initiative: research into trucks, internal combustion engines, logistics, and intelligent transport systems. In 2011, there could be also a Joint Call on "smart grid and recharging systems" between several services of the Commission.

**EIB loans**

In addition to grants received from FP7 funding, organisations involved in transport research can also apply for loans from the EIB. These will be the best tools for projects that involve greater risk.

Two EIB loan mechanisms will provide the bulk of financing under the EGCI:

- The Risk-Sharing Finance Facility (RSFF); and
- The European Clean Transport Facility (ECTF); a loan instrument which has been specifically designed for the transport industry.

The RSFF is a guarantee fund for research, development and innovation. The scope of eligible activities extends from "traditional" investments in basic or applied research and demonstration activities, to equipment and soft investments such as R&D operating cost, salaries of researchers, management and support staff, and IPR acquisition or protection costs. Any organisation can apply for an RSFF loan – large corporations and SMEs, universities and research institutes, publicly or privately owned.

While the RSFF is a financing instrument that existed before the current financial crisis, the ECTF has been created in response to the crisis and its effect on the transport industry, aimed specifically at transport research, and at one research goal: lowering emissions in transport. The European Clean Transport Facility will support investments in research, development and innovation aimed at emission reduction and energy efficiency in the European transport industry.

Both the RSFF and ECTF loans are attractively priced, and with long maturities.





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**Other existing EU research actions in greening transport**

*The Hydrogen and Fuel Cells JTI*

The EGCI, focusing as it does on electrification of road transport, is complementary to the Hydrogen and Fuel Cells Joint Technology Initiative launched last year. This public-private joint technology initiative (JTI) will implement the EU target-oriented research and development to support the broad market introduction of these technologies. Founding members are the European Community and a non-profit association of European industry interests composed of a major share of Europe's fuel cells and hydrogen companies of all sizes from micro to large multinationals. The Commission is expected to fund 470 M€ from the Seventh Framework Programme for a period of six years which will be at least matched by industry contributions.

*Past collaborative projects*

The objectives of the European Green Cars Initiative are achievable: under EU-financed projects under FP6, for example, a research project entitled POMEROL developed and tested a new lithium ion car battery which, as well as producing no greenhouse gas emissions, achieved a charge of close to 3000 watts per kilo, for a cost of only € 20 per kilowatt of energy produced. The ILHYPOS and HyHEELS projects, meanwhile, developed four different hybrid architectures, from small to medium sized vehicles, which are both technologically innovative, and cost competitive for mass production. These and more technological developments can be deepened with the financing support of the European Green Cars Initiative, to produce a step change in research in order to bring to market the sustainable transport systems in the next decade.

**Future ERA-NET+**

Member States have also expressed a desire to work more closely together to support research into eco-innovation for road transport. The European Commission is therefore preparing to launch a new tool to support the coordination national research programmes – an "ERA-NET Plus" action – in road transport greening. This will allow Member States' own research funds to align their research strategies and issue joint calls for proposals, supported by EU financing.





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# R&D PRIORITIES FOR THE GREENING OF VEHICLES AND ROAD TRANSPORT

A contribution by CLEPA and EUCAR to the European Green Car Initiative (May 2009)

**Executive summary**
This document expresses major R&D priorities for the greening of vehicles and road transport as seen by the European automotive manufacturers and suppliers. The purpose of this document is for the automotive industry itself to harmonise the R&D directions and priorities, to communicate these to relevant authorities and bodies at national and EU level and to other key partners. In particular this document is intended as an input to the European Green Car Initiative (EGCI). It should be understood that its scope is therefore adapted and narrowed to the domain of the EGCI, and it does not claim to cover the broad spectrum of automotive and transport R&D.

The R&D domain in this document is structured into four major areas described below.

**Mobility and Transport**
The challenge is the high and still increasing demand for mobility and transport of people and goods, in urban and rural regions. R&D should address these issues by exploring:

- Information and Communication Technologies and Intelligent Transport Systems for traffic and transport management, for the single vehicle and its route planning,
- Increased use of all modes of transports, their interfaces, and efficiencies,
- Novel concepts for individual and collective mobility and transport.

**Energy and Environment**
The principal task is to transfer from fossil energy dependency, and its environmental impact, to primary energy sources that are renewable, secure, sufficient, and environmentally compatible. R&D should explore:

- Alternative primary energies, their related fuels and drivetrains,
- The electrification of the vehicles and the road transport system as a whole,
- Lightweight structures and new vehicle concepts for high-energy efficiency.

**Safety**
The introduction of new types of vehicles based on low weight materials and designs, alternative fuelled and electric drivetrains, etc. requires also adapting the safety features of these vehicles to ensure, at least, zero degradation of the safety of vehicles. R&D should focus on:

- Exploring how passive/active/ICT systems should be adapted and extended to the future vehicle concepts,
- Studying the safety characteristics offered by new vehicle types, e.g. electric drivetrain,
- Development of cooperative systems for efficiency and safety, based on communication between vehicles and infrastructure.



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**Affordability and Competitiveness**

Green vehicles and green road transport are achievable only if there are competitive manufacturers and service providers that offer them at an affordable price level to the user. Challenges for the automotive industry, that R&D should address, are

- Availability and use of raw and rare materials,
- Efficiency and energy use in the production and manufacturing processes,
- Handling of low weight, mixed materials and alternative drivetrain,
- Flexible production and manufacturing for small series and tailored vehicles,
- Use of virtual tools and ICT from order to delivery, service and maintenances.

**Purposes**

Challenges in terms of CO2 emissions together with customer demands for enhanced energy efficiency will encourage the automotive industry to move towards green vehicles.

To achieve global leadership in this domain, and to shape a consistent and efficient approach towards the future traffic and transport systems considerable efforts in precompetitive and cooperative research, innovation and deployment are inevitable.

This inspired the European Council for Automotive R&D (EUCAR) and the European Association of Automotive Suppliers (CLEPA) to further strengthen and enhance their collaboration.

This document is one result of that collaboration between EUCAR and CLEPA. The intention is to clarify and communicate the automotive and road transport R&D needs as seen by the European Automotive Industry for their engagement and contribution to greening of the vehicle and the road transport system.

For short-term actions, this document will be used to point at high priority topics that fit under the R&D part of the EU Commission's European Green Car Initiative (EGCI). CLEPA and EUCAR have been in discussion and collaboration for many years, and the EGCI has strengthened and shown the relevance of this manufacturers-suppliers effort in finding common strategies and sharing R&D resources to reach solutions for the present and future challenges.

**Outline of major R&D areas**

Future automotive and road transport R&D should lead to a traffic and transport system that provides efficient mobility and transport of people and goods, consumes energy and resources in a responsible way, improves safety and security, and is accessible, attractive and affordable for the ordinary citizen.

In this perspective we identify four major areas of challenges and R&D needs:

- Mobility and Transport,
- Energy and Environment,
- Safety,
- Affordability and Competitiveness.

All of these areas are equally important and none of them can be considered independent from the others. The following pages outline the challenges and R&D needs for these four areas.

The European automotive manufacturers and suppliers acknowledge that they have key roles as contributors in research, development, innovations, products and services in these four areas. And they are dedicated to actively fulfil these roles.



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# EU COMMUNICATION ON FUTURE OF COMPETITION LAW FRAMEWORK FOR MOTOR VEHICLE SECTOR

A few month ago the EU Commission has adopted a **Communication (COM(2009) 388 final)** setting out the key elements of the competition regime which will apply to the motor vehicle sector after the expiry of the current **Block exemption Regulation N° 1400/2002** of July 31, 2002 on the application of Article 81(3) of the Treaty to categories of vertical agreements and concerted practices in the motor vehicle sector. The Commission's Communication is accompanied by an **Impact Assessment Report**.

According to the communication, Motor vehicle manufacturers distribute and ensure the repair and maintenance of their products through authorised dealer and repairer networks. The bundles of similar vertical agreements which make up these networks may require assessment pursuant to Article 81 of the Treaty. Block exemption regulations create safe harbours for categories of agreements that are caught by the prohibition in Article 81(1), relieving the contracting parties from the need to analyse whether those agreements can benefit from the exception provided for in Article 81(3). Block exemptions thus contribute to legal certainty and to the coherent application of EU competition rules across the EU. Agreements not covered by a block exemption are not presumed to be illegal, but instead have to be assessed individually.

In the light of the detailed findings in the Communication (COM(2009) 388 final), the Commission proposes:

- As regards agreements for the sale of new motor vehicles, to apply the general rules as currently reflected by the proposed new block exemption for vertical agreements. Given that stakeholders in the motor vehicle sector have been accustomed to sector-specific regulations since 1985 and that market players have expressed a wish for legal certainty, the Commission will adopt sector-specific guidelines concerning prevention of the foreclosure of competing vehicle manufacturers and safeguarding their access to the vehicle retailing and repair markets, protection of intra-brand competition, and preservation the deterrent effect of Article 81. In order to allow all operators time to adapt to the general regime, the Commission proposes that the provisions of the Regulation that apply to agreements for motor vehicle distribution will remain in force until 31 May 2013.
- As regards agreements for repair and maintenance services and/or for the supply and distribution of spare parts, to apply the general rules as currently reflected by the proposed new block exemption for vertical agreements complemented by either sector-specific guidelines, or a focused block exemption regulation, or a combination of the two instruments with a view to reinforce competition authorities' ability to respond to competition concerns in a wider and more comprehensive manner. In particular, as regards the following concerns: (i) access to technical information; (ii) access to spare-parts; (iii) misuse of warranties; and (iv) access to networks of authorised repairers. Because the application of the new regime to the aftermarket may bring immediate benefits to businesses and consumers, the Commission proposes that it will apply to vertical agreements for the provisions of repair and maintenance services as well as for the supply and distribution of spare parts as from 31st May 2010.



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# INTELLIGENT CAR INITIATIVE

COMMUNICATION FROM THE COMMISSION TO THE COUNCIL, THE EUROPEAN PARLIAMENT, THE EUROPEAN ECONOMIC AND SOCIAL COMMITTEE AND THE COMMITTEE OF THE REGIONS On the Intelligent Car Initiative"Raising Awareness of ICT for Smarter, Safer and Cleaner Vehicles"

## 1. PURPOSE AND SCOPE OF THIS COMMUNICATION

The present Communication is an answer to the need of the citizen, the industry and the Member States to solve transport related societal problems and improve Information and Communication Technologies (ICT) take up. The Communication presents the Intelligent Car Initiative as a policy framework for actions in this area. The Intelligent car initiative is composed of 3 pillars: the eSafety Forum, the ICT research programme and the awareness raising actions.

## 2. INTRODUCTION

On 1 June 2005 the Commission adopted the initiative "i2010: European Information Society 2010 for growth and employment" as a comprehensive strategy for modernising and deploying all EU policy instruments to encourage the development of the digital economy. i2010 consists of three pillars: a Single European Information Space, Innovation and Investment, and an Inclusive European Information Society. The "Intelligent Car" is one of the 3 Flagship initiatives proposed within the third pillar with the objective to raise the visibility of the vital contribution of ICT to the quality of life . The "Intelligent Car Initiative" on smart, safe and clean transport, focuses on road vehicles and addresses safety and environmental challenges caused by increased road use.

## 3. RATIONALE: WHY A EUROPEAN INITIATIVE ON THE INTELLIGENT CAR?

There are an estimated 300 million drivers in the EU Member States, who wish their driving to be easier with less trouble, less delay, and less chance of getting injured. Of all daily activities, driving is crucial as our entire life could change in an instant or even end because of a road accident. The present activity responds to the need to move towards a new situation, where cars don't crash anymore, and traffic congestion is reduced. The pollution of the environment, traffic safety and congestion are truly European problems affecting all 25 Member States and therefore, European solutions need to be found.

### 3.1. Description of the Problem

Modern societies depend heavily on mobility, but transport entails severe problems, such as congestion of road networks and urban areas, harmful effects on the environment and public health, waste of energy and, above all, accidents which cause fatalities, injuries and material damage.

In the EU, Congestion costs amount to 50 billion € per year or 0.5 % of Community GDP, and by 2010 this figure could go up to 1% of EU GDP. The number of cars per thousand persons has increased from 232 in 1975 to 460 in 2002. The overall distance travelled by road vehicles has tripled in the last 30 years and, in the last decade, the volume of road freight grew by 35% contributing to 7 500 km or 10 % of the network being affected daily by traffic jams.



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Concerning energy efficiency and emissions, in 2002 the transport sector consumed 338 million tonnes oil equivalent (MToe) representing 31% of the total energy consumption in the EU. Road transport consumed 281 MToe, or 83% of the energy consumed by the whole transport sector. Road transport CO2 emissions account for 835 million tonnes per year representing 85% of the total transport emissions. Investigations show that up to 50% of fuel consumption is caused by congested traffic situations and non optimal driving behaviour.
Of all transport problems, Safety is the one with the most serious impact on the daily lives of citizens. It also has a high impact on most of the socio-economic indicators. With its "White Paper" of September 2001, the European Commission set the target to half road fatalities by 2010. Although the situation has improved thanks to the road safety action programmes, there are still over 40.000 fatalities on the Euro 25 roads every year, with 1.4 million accidents with a cost of around 200 billion €/year representing 2% of the EU GDP Concerning the causes of accidents, current research indicates that human error is involved in almost 93% of accidents and that, in almost three-quarters of the cases, the human mistake is solely to blame. As an example, a recent study concluded that if we have an accident when driving at a speed of 50 km/h and we could brake half a second earlier, we could reduce the crash energy by 50%, but an analysis of German accidents showed that 39% of passenger vehicles and 26% of trucks do not activate brakes before a collision and some 40% more do not brake effectively, underlying our limits as drivers .

### 3.2. The potential of intelligent cars

Information and Communication Technologies (ICT), which enable building Intelligent Cars, provide new intelligent solutions that contribute to solving the key societal challenges described above by increasing road safety, the overall efficiency of the transport systems and by contributing to a more efficient use of fuel. These intelligent systems can assist the driver in the driving functions preventing or avoiding accidents, they can provide drivers with real time information about the road network avoiding congestion, and they can optimise a journey or the engine performance improving overall energy efficiency. These intelligent systems address the interaction between the driver, the vehicle and the road environment, in an integrated approach where the autonomous on-board systems are complemented with vehicle-to-vehicle and vehicle-to-infrastructure co-operative technologies and improved traffic network management.

What is the potential of these intelligent systems?
Why should the EU propose a plan to raise their awareness?

- The SeiSS study, estimated that if all vehicles were equipped with eCall (emergency call automatically triggered by the vehicle in case of an accident) by 2010 a reduction in fatalities between 5% and 15% could be achieved in the EU saving up to a maximum of 22 billion €. Moreover, eCall could reduce congestion times between 10% and 20% with additional cost savings of between 2 to 4 billion €.
- The same study estimated that Adaptive Cruise Control (ACC) that performs longitudinal control (thus avoiding rear-end collisions) could save up to 4.000 accidents in 2010 if only 3% of the vehicles were equipped.
- In the case of Lateral Support (lane departure warning and lane change assistant) 1.500 accidents could be saved in 2010 given a penetration rate of only 0.6%, while a penetration rate of 7% in 2020 would lead to 14.000 fewer accidents.


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- AWAKE, a project that developed a Driver hypovigilance system , estimated that a warning to the driver in case of drowsiness could play an important role in avoiding 30% of fatal crashes on motorways and 9% of all fatal accidents.
- The SMART NETS project demonstrated that improved software and real-time traffic data in urban traffic control centres could lead to better traffic management and achieve a reduction of up to 40% in traffic standstill and congestion, thus resulting in considerable energy savings.
- Other systems like "speed alert", " alcohol-lock " and " charging systems " can have also, under certain circumstances, an important impact on cleaner, safer and more efficient transport.

### 3.3. Need for action at European Level

Considering the problems described, it appears that intelligent car systems could contribute substantially to overcome some of the current transport problems. Unfortunately, despite their potential, most of these intelligent systems are not yet on the market and the vehicles that are fitted with telematics or with new generation active safety features are mainly luxury cars representing a small percentage of the market. For some successful active safety systems, for example, large-scale deployment faced several problems and took very long periods of time. This has been the case with the introduction of the ABS (20 years); the ESP (10 years to reach 40% of market penetration) and ACC (more than 25 years since the start of the development phase and yet a very low penetration rate). The main reasons are legal barriers, the extremely competitive situation of the automotive sector with narrow margins and low return on investment, the high cost of intelligent systems and the consequent lack of customer demand, the lack of information, throughout society, about the potential benefits of these systems and a clear business case.
A survey done by EUROTEST on a representative sample of almost 2800 drivers showed that only half the drivers surveyed were familiar with existing basic in-vehicle technologies providing active and passive safety (only 50% of them, for example, knew what an antilock braking system (ABS) does,). The same survey also concluded that "more needs to be done, on both the European and national level, to raise the awareness about safer, cleaner and more economical driving". Citizens and policy makers cannot be expected to invest or promote technology unless its benefits and usefulness are clear. In order to stimulate the users' demand for intelligent car systems, it is therefore important to establish a consistent awareness raising programme being careful not to create distortion of competition in the after-market or false expectations on systems capabilities

Moreover, European transport problems need harmonised solutions at European level. Bottlenecks to market implementation need to be removed, product demand needs to be stimulated and consensus needs to be built among key players. The eSafety Forum underlines that the wide-spread take-up of Intelligent Car Systems cannot depend on the private business case only. This take-up needs the full support of the public sector especially in the initial phase of market penetration of mature technologies, if they contribute to solving European societal problems and represent excellence in innovation. The Cars21 initiative that focuses on a competitive automotive regulatory system for the 21st Century also identifies eSafety as a key initiative to reach the objective of reducing fatalities on European roads. The Intelligent Car links to Cars21 and complements it through a number of awareness raising actions and research. The actions proposed in the present Communication will also contribute


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significantly to the overall reduction in the emission of pollutants and would help industry to fulfil its commitment to reduce average new car CO2 emissions to 140 g/km in 2008.
To ensure interoperability and the harmonisation of technical solutions throughout the Union, a comprehensive European approach is needed. In addition to standardisation and in line with the ongoing work on co-operative systems, public authorities have a particular role in the implementation of the appropriate infrastructures, including intelligent features, and putting forward targeted actions enabling the wider deployment of ITS.
Further action is needed in research and development. During the last decades, major investments have been made in Europe in the use of ICT for intelligent vehicle technologies, also thanks to the European Framework Programmes. Several technologies contributing to higher road and vehicle safety, less congestion and more rational energy consumption were developed and tested in these programmes. Additional efforts are needed to follow up the appropriate research priorities activities developed so far by focusing on assessment programmes and refinement of technologies and systems to make them smarter, cheaper and more reliable. It is also important to maintain European industry competitiveness towards Japan and the US where similar research programmes exists.

## 4. OBJECTIVES

The three needs for action at European level in the area of intelligent cars as identified above, define the following objectives of the Intelligent Car Initiative:
1. Coordinate and support the work of relevant stakeholders, citizens, Member States and the Industry, in the Intelligent Car Initiative.
2. Support research and development in the area of smarter, cleaner and safer vehicles and facilitate the take-up and use of research results.
3. Create awareness of ICT-based solutions to stimulate users' demand for these systems and create socio-economic acceptance.

## 5. ACTIONS PROPOSED

### 5.1. Support and co-ordinate the work of the Member States and of the other relevant stakeholders.

The first objective of the Intelligent Car Initiative is implemented with the support of the eSafety Forum. The eSafety Forum activities are described in two Commission Communications on eSafety. The Forum aims at removing the bottlenecks that prevent Intelligent Vehicle Systems entering the market, through consensus building among stakeholders and recommendations to the Member States and the EU. It was established in 2003 and has now over 150 members representing all road safety stakeholders. It has established so far eleven industry-led Working Groups that work on priority topics. The Forum has produced a consistent number of valuable reports that constitutes an important input for industrial initiatives and policy activities. The Forum will ensure the links with parallel and complementary activities in the domain of intelligent transport systems like Cars21, the European Road Safety Action Programme in particular the European Road Safety Charter, the "Intelligent Transport Systems for logistics and intermodality" initiative announced in the Community Lisbon Programme and, in the field of the environment, the European Climate Change Programme working group on light vehicles. As the Intelligent Car Initiative develops, the Commission will consider extending the activities of the eSafety Forum to cover ICT for cleaner as well as safer transport.


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The Forum becomes one of the pillars of the Intelligent Car Initiative and it will be the essential link to decision makers.
Within the first objective of the Intelligent Car Initiative, the eSafety Forum will continue to support the Commission through its working groups. In addition, the following specific actions are proposed:

4. Follow up and report on the specific actions proposed in the 2nd eSafety Communication "Bringing eCall to Citizens" mainly in relation to the signature of the eCall Memorandum of Understanding by the Member States, the state of implementation of the single emergency number 112 and E112, the status of the PSAPs (Public Service Answering Points) upgrading for the handling of location-enhanced E112 calls and eCalls and on the provision of adequate location-enhanced emergency services and language support.

5. Produce Commission Recommendation on the design and safe use of Human Machine Interfaces (HMI) for intelligent vehicles systems. The recommendation updates the Commission Recommendation of 21 December 1999 on safe and efficient in vehicle information and communication systems, taking also into account the evolution of technology during the past 5 years.

6. Investigate the possibility to use appropriate incentives schemes at national level in order to support the purchase of vehicles equipped with advanced safety functions and after-market installations. Fiscal Incentive schemes should be introduced by Member States in a coordinated manner across the EU to avoid fragmentation of the internal market, and mainly take the form of tax differentiation, aimed at influencing consumer's behaviour towards a well defined category of vehicles, which will be equipped with the preferred advanced safety functions and after-market installation. Any incentive plan including national support to Intelligent Car technologies will be carefully elaborated in conformity with State aid rules.

7. To address the issues of spectrum needs in the context of vehicle-to-vehicle communication and to organise a workshop to discuss spectrum implications of the Intelligent Car Initiative. The spectrum needs require coordination with the proper bodies at an early stage of technical development to ensure the necessary frequency band availability.

8. To follow up the recommendation on the establishment of a European Code of Practice for the development and testing of Advanced Driver Assistance Systems.

**5.2. Research and development in the area of smarter, cleaner and safer vehicles**
The Intelligent Car Initiative activities build upon the achievements and results of EU Framework Programmes on research and technological development.
The long-term objectives of the Intelligent Car Initiative can only be achieved through co-operative research and will be part of the ICT priority in FP7: ICT meeting societal challenges, contributing to the development of ICT-based transportation systems and services enabling people and goods to move safely, ecologically, comfortably and efficiently. The research priorities of the Intelligent Car fully support the ERTRAC (European Road Transport Research Advisory Council) strategic research agenda. Within the second objective of the Intelligent Car the following actions are proposed:


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9. Co-operative Research in Europe has allowed system suppliers and car manufacturers to develop active safety systems to mitigate or avoid accidents. Future research in this area should continue the work done so far and look at the needs for the next generation of driver assistance systems, such as enhanced performance, reliability, security and reduced fuel consumption, including potential risks of Electromagnetic compatibility failure, based on cheaper, smarter and faster components.Under FP6 a first group of projects looking at the potential of vehicle-to-vehicle and vehicle-to-infrastructure communication have been launched. Further research on co-operative systems is needed to evolve from basic conceptual models towards integrated systems enabling functional testing and validation to take place. Traveller and traffic informatio n have become key services for improving access to transport services. Open platforms are under development enabling travellers to access information in a seamless way. Market uptake is slow and further RTD is needed to overcome issues linked to business cases and user acceptability. ICT research should also help to achieve transport across transport modes , in particular in the case of freight transport where increased capacity management has a direct impact on fuel consumption. ICT should also help to overcome the economical barriers of multi-modal transport by improving the overall information flow.The research mentioned above, needs to be complemented with actions demonstrating the benefits and use of intelligent vehicle systems.

10. Establishment through FP7 of a comprehensive, technical and socio/economic assessment program, based on Field Operational Tests (FOT) to assess in real environments the impact of ICT-based Intelligent Car systems on driver behaviour and on driving dynamics. The FOT will also serve as the basis for a cost-benefit analysis of advanced, intelligent systems and for an overall assessment of their impact on traffic safety and on the efficiency of the transport system.The deployment of these systems requires the commitment of the automotive industry and investments in the infrastructure that is under the responsibility of public authorities. Any engagement from their side will be based on impact assessment studies, where costs/benefits play an important role. The FOT will provide real operational data to carry out this analysis. The programme should target close-to-the-market systems that can rapidly be made available in a sufficiently large fleet of vehicles. The results of the Assessment programme will strongly depend on the commitment, involvement and participation of the Member States in the identification, setting-up and follow-up of the tests. The same applies for the work on co-operative systems, where the road operators, both urban and inter-urban, play a key role in achieving the expected benefits.

11. Support and promote the setting up of an independent conformance testing and performance assessment programme in the EU, by using the existing means and capacity available in major European research centres. Whereas in the field of passive safety and emissions there are clear testing methods to verify design performance (i.e. crash worthiness), harmonised performance testing methods of ICT based systems do not exist. It is therefore urgent to start the reflection on criteria and methods to measure their performance. A number of European test centres have gained a lot of experience on performance testing of ICT based traffic safety and efficiency systems, and a comprehensive initiative can be started in close co-operation with the automotive industry, its suppliers, European Standards Organisations, Member States and EuroNCAP
. The initiative will include the launching of a feasibility study which will investigate the most appropriate methodology for testing and the organisational structure of the programme. In the


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second phase, a project could be started in FP7 for the proper application of the methodology, to carry out preliminary performance tests and to link with the standardisation bodies.

### 5.3. Create awareness of ICT based solutions for intelligent Cars

The awareness pillar of the Intelligent Car Initiative will promote, active information dissemination to a wide audience to raise drivers and policy maker's knowledge about the potential of intelligent vehicle systems, stimulate user's demand and create socio-economic acceptance. The following specific actions under the third objective of the Intelligent Car Initiative are proposed:

12. Hold appropriate and regular " Intelligent Car Initiative Events ". These events aim at maximising media attention through result-oriented activities e.g. demonstration days, Integrated Projects road shows, showcases, workshops.

13. Support and launch targeted activities to raise intelligent car systems awareness including the production of short, well targeted TV series or documentaries on specific ICT based systems, and the launching of a comprehensive benchmarking study on ongoing activities in promoting and deploying intelligent vehicle systems in the Member States and in the industry.

14. Promote the establishment of an "eSafety Communication Platform" with the aim to improve, coordinate and harmonise the end-user communication of the different stakeholders. This platform has been proposed by the User Outreach Working Group of the eSafety Forum. In this working group a number of industrial partners identified the need to establish a formal organisation as a prerequisite for raising user awareness at EU level. This work will make use of best practise toolbox and pilots for user campaigns to be tested in several Member States.

15. Support and promote with the i2010 branding and other targeted actions, stakeholders' initiatives which pursue the objectives of the Intelligent Car Initiative.

### 5.4. Monitoring of the Intelligent Car Initiative

In order to measure the progresses of the Intelligent Car Initiative a monitoring exercise will be put in place at European, national and industrial level, focusing on specific indicators to regularly assess the progress on the proposed actions.

## 6. CONCLUSIONS

The present Communication focuses on the third pillar of the i2010 initiative, the building of an inclusive European Information Society that offers better quality of life and improved public services. It proposes an Intelligent Car Initiative with three specific objectives: Coordination of the work of stakeholders through the eSafety Forum, supporting research and development and raising the user's awareness about intelligent vehicle systems and their potential benefits, and to accelerate their deployment in the market.

The Communication emphasises the strategic importance of Information and Communication Technologies, which enable building of smarter, safer and cleaner vehicles that help to solve the road transport related societal problems. It presents the Intelligent Car Initiative as the policy framework that will guide the stakeholder's efforts in this area, aiming at accelerating the deployment of intelligent vehicle systems on the European and other markets through



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clearly defined actions that encompass the use of policy, research and communications instruments.

The Member States are key stakeholders of the Intelligent Car Initiative. The Commission invites the Member States to support the objectives expressed in this Communication, and stresses the need to act together at the European level. To this effect, the Member States are invited to play an active role in the execution of the proposed actions, together with the Commission, industry and other stakeholders.





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## A NEW ERA: ACCELERATING TOWARD 2020 — AN AUTOMOTIVE INDUSTRY TRANSFORMED

A report published yesterday by Deloitte's Global Manufacturing Industry Group says that by the year 2020, vehicle manufactures based in six major markets, will account for 90 per cent of global automotive sales.

The report **A new era: Accelerating toward 2020 — an automotive industry transformed** details a new global balance that will have more competitors headquartered in emerging manufacturing hubs such as China and India, shifting away from the mix of 15 major players today in four markets.

Deloitte Manufacturing partner, Mr Damon Cantwell believes that while this indicates continued pressure on Australia's automotive sector, there are proactive strategies that companies can adopt.

These include perspectives on the major technology developments, structural changes, shifts in consumer preferences and the workforce trends which are expected to transform the global automotive industry over the next decade. The report also provides signposts for the sustainability of the Australian industry.

"From a vehicle manufacturer viewpoint, the focus on changing the model mix produced locally will need to continue, with our study predicting alternatively-powered vehicles representing one third of new car sales in developed markets by 2020," said Mr Cantwell.

"From a component manufacturer perspective, the regional appetite for technology and design services will also present significant opportunities for progressive Australian companies over the medium term."

The race for electric vehicles too is heating up. By 2020, electrical vehicles and other "green" cars will represent up to a third of total global sales in developed markets and up to 20 percent in urban areas of emerging markets.

"In the Australian context, this makes the introduction of hybrid production models a crucial bridge that keeps Australia in the game," said Mr Cantwell.

"Australia needs to be careful it does not lag behind other markets but takes the initiative and focuses on niche export opportunities as emerging markets start to demand more luxury vehicles where more complex skill sets are needed in the workforce."

The report details seven major global consumer trends for the automotive industry as it heads towards 2020, including:

- Conscious consumption – a growing emphasis on value
- Moving up – the emergence of new wealth in emerging markets, consumer shifting from economy to luxury cars
- Shades of green – cost versus consciousness
- Safety first – consumers to be attentive to innovations



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- Staying connected – the need to be networked
- The web – internet as a sales channel
- Changing preferences – older, more urban consumers

"Dramatic changes in consumer buying preferences will play out according to the differences that will develop between mature and emerging markets. Consumers will fragment into distinctly different segments by 2020," said Mr Cantwell.

Attitudes altered by the recession will continue to evolve in mature markets. Advancements in alternative technologies will also transform consumer mobility altogether. In these markets consumers will demand that their vehicles are connected to their computers, mobile phones, work and home.

The industry changes foreshadowed also emphasises the critical role of skills in the new global automotive sector.

"This means the need to attract highly skilled talent will intensify leading up to 2020. It is the companies and governments that embrace new and comprehensive approaches to workforce flexibility which will succeed," added Mr Cantwell.

Importantly, the Report also highlights the increasing role that government will play in regard to the post-recession global automotive industry.

"The study underlines the importance of a directional role for government in its policy settings – it is not simply about throwing money at the industry," Mr Cantwell observed.

"In the Australian context, it can be argued that the policy and program fundamentals are in place, and it is critical that the local industry engage with these opportunities, and that government responds accordingly."





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# V. OTHER ACTIVITIES (PASSIVE SEARCH)

## OTHER TRANSNATIONAL NETWORKS RELATED TO AUTOMOTIVE SECTORS

## EASN – EUROPEAN AUTOMOTIVE STRATEGY NETWORK

At the heart of the formation of European Automotive Strategy Network (EASN, a pan-European Automotive Regions platform), are 5 EU funded projects:

1) Automotive Regions
2) Network of European Automotive Competence (funded from Structural Funds)
3) Transnational Clustering in the Automotive Sector
4) BeLCAR (funded from INNOVA, FP6)
5) I-CAR-O (funded from Article 6, ESF)

EASN is a strategic, long term, initiative. It will develop a European Platform to support the development of Automotive Cluster policy across Europe, and will also reach out to prospective new EU members. EASN will offer broad support for the creation of added value from cross-regional co-operation in Cluster Management and support of Automotive Companies, with specific emphasis on SMEs.

It picks up a number of key recommendations from the 2005 CARS21 High Level Group report on the future policy framework for a competitive EU industry. The EASN's objectives are fully in line with the CARS21 report and the Lisbon and Gothenburg Agendas.

The main aims of EASN are to support the Automotive Industry in the EU by:

- Identifying opportunities for improving its competitiveness including the competitiveness of SMEs.
- Enabling co-operation and joint project activity amongst Companies, Clusters and Regions (e.g. particularly joint Research and Development projects, co-operation between Companies and Public Authorities).
- Making recommendations and influencing Policy development at Regional, National and EC/EU Level.
- Contributing to the development and design of suitable support instruments as well as stimulating the use by SMEs of present and new instruments.

The main themes through which EASN will achieve its aims are:

1. What are the likely Skills requirements of the EU Automotive Industry in the next 5, 10, 15 and 20 years?
2. How can we bring competitive advantages to the EU Automotive Industry, from the R & D activity and Innovation developed?
3. How can we ensure that any development activity carried out under the auspices of EASN benefits the EU Automotive Industry?





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**European network of automotive clusters**

EASN provides European automotive regions and their companies with a platform for horizontal and vertical information exchange. It is our aim to create a network of clusters with an emphasis on automotive and supplying industry and to add decisive impetus to the innovation forces of small and medium-sized enterprises (SME) in particular. Since the end of 2006, various regions and EU-funded projects have been participating in the development of concepts to firmly establish EASN, while the Chamber of Commerce and Industry (BCCI) Birmingham has been coordinating EASN's development.

**The questions EASN will develop and provide answers to are amongst others:**

- How can information exchange and cooperation between regions, cluster organisations, companies, research institutes, chambers of commerce and industry and other institutions be intensified?
- How can information, experience and best-practice examples be exchanged in an efficient way?
- How can the risk resulting from globalization and consequential rationalization in the automotive industry be minimized?
- What opportunities does the extended European Union offer the automotive industry?
- How can EASN as a lobbyist of SME support national and European political decision makers and make political and strategic recommendations?
- Which opportunities does the EU offer with regard to support and research programmes, in particular for the programme period 2007 to 2013?
- To what extent can supportive measures be geared to the requirements of the automotive industry?

**The existing range of activities**

This way EASN offers an institutional framework fostering extensive activities at a European level that can improve the European automotive industry's position in global competition. Currently, there are projects in three fields of action: "innovation", "future skills" and "cluster".

- Innovation: With a focus on Environmental Technologies, e.g. Bio-fuels
- Skills: Availability of sufficient skilled and educated staff
- Clustering/Networks: Best practicing for Automotive Clusters and their programmes in Networking, Innovation and Co-operation.

Participation in "Thematic Groups" will enable you to help create further fields of action for future projects.





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# NEAC

**Network of European Automotive Competence**

**Strategic background**

To create sustainable frameworks to better understand Regional Automotive Competences and Excellence within the EU context, by developing joint approaches and instruments to improve Regional and European competitiveness in the future.

**Objectives of the NEAC project**

1. Build a sustainable network for communication, exchange and dissemination of strategic and technological competence for Automotive Cluster partnerships across Europe (including continuous benchmarking).
2. To produce a map of partner Regional Automotive Clusters to identify improvement potentials and best practice exchange opportunities, in the following areas: -
    a. Competitiveness (skills and performance)
    b. Innovation and Technology
    c. Cluster support activities (e.g. policies and tools)
3. Evaluate the competitiveness of the Regional Automotive Clusters and SMEs in a Regional and EU perspective and in the light of global technology trends.
4. Make visible any correlations between successful competence support and regional competitiveness; establish regional competitiveness agendas and a joint strategic approach to the future competitiveness of EU Automotive Regions.

**Work Plan**

The work plan consists of five components including one management work package:

**1. Component 1 – Project Management.** For NEAC, Birmingham Chamber (BCI) is the Lead Partner, charged with overall project management. The role is to set up the administration and management structure for the network, developing a work plan and co-operation agreement between the participating regions. BCI is responsible for delivery of the Financial Management for the project and overall co-ordination of network activities. NEAC was launched on 5th and 6th July in Birmingham, which provided the opportunity to "Showcase" the West Midlands.

**2. Component 2 – Competence Assessment.** The component lead is Slovenia, supported (mentored) by Wales. The activity covered under this component is the creation of a questionnaire and manual for assessment of the automotive competence of (partner) regional supply bases on a like for like basis. The areas covered will include Public policy (e.g. research and development, technology transfer, innovation and skills), Cluster Demographics (e.g. technological focus, institutional framework and strategic scope) and success stories.

**3. Component 3 – Competitiveness Assessment.** The component lead is the Region of Saxony (Germany) supported (mentored) by the Region of Saxony Anhalt (Germany), with additional guidance from BCI. The activities covered under this component are the creation of a questionnaire and manual for sustainable benchmarking of SMEs and technology centres on



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a like for like basis, the training of regional specialists to complete benchmarking. The project aims to benchmark a total of 300 SMEs, (minimum 25 per region), to evaluate their competitiveness within their respective regional clusters, against SMEs benchmarked in the project, etc.

**4. Component 4 – Competitiveness Agendas.** The component lead is Wales, supported (mentored) by the partner from Reggio Emilia (Italy). The activities covered under this component are evaluation of the link between regional competence and regional competitiveness; evaluation of the impact of regional policy; conclusions related to regional differences and opportunities to share best practice; policy recommendations on the enhancement of EU automotive competitiveness for a European audience.

**5. Component 5 – Dissemination and Promotion**. The component lead is the Region of Communidad Valenciana (Spain) supported (mentored) by the Region of Lorraine (France). The activities covered under this component are building a dissemination infrastructure including a Website and Newsletter; presenting project objectives, findings, key stakeholders and policy makers at regional and EU level; networking the operation and promotion of European automotive excellence, including Launch and Showcase Events.

**NEAC consortium**

The consortium consists of 11 EU regional partners and the Samara region of Russia. The partners are from Local and Regional Authorities, Regional Development Agencies, Regional Governments and Business Support Organisations. Delivery of the various components is supported by External Experts where appropriate. The process for selecting External Experts is by tender from among the partners.

1. Birmingham Chamber of Commerce (Lead Partner), West Midlands, UK. SBS Franchise holder for Birmingham and Solihull sub-region; includes Accelerate, the regional partnership that supports the Automotive cluster in the WM. Accelerate is overseen by regional stakeholders including AWM, GOWM, the WM Chambers/Business Links, Private Sector, etc.
2. Welsh Automotive Forum, Wales, UK. Has been formed to support the Automotive Cluster in Wales. It is a Public Equivalent Body, i.e. the majority of its funding is from public sources.
3. University of Ljubljana, Faculty of Mechanical Engineering, Ljubljana, Slovenia. It is a Public Equivalent Body. Will deliver its element of the project through the Automotive Cluster of Slovenia (ACS). This organisation has been formed to support the automotive cluster of Slovenia.
4. Economic Region of Chemnitz-Zwickau, Germany is a Public Equivalent Body, Local Public Authority. Will deliver its element of the project through automotive focused local/regional organisations.
5. Bacs-Kiskun County Foundation for Enterprise Promotion, partner from Hungary (plus one).
6. Instituto de la Mediana y Pequena Industria, Valencia, Spain. Public equivalent Body. Translated, Valencian Institute for Small and Medium Sized Industrial Firms.
7. Research Institute Juelich, North Rhine-Westfalia, Germany.
8. Regional Council of Lorraine, France. Regional Authority, similar to AWM. Not involved in direct delivery.



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9. Ministry for Economy and Labour of the Land Saxony-Anhalt, Germany. National Government at regional level, similar to GOWM.
10. Province of Reggio Emilia, Italy.
11. Ministry of Economic Development, Investment and Trade of Samara Oblast, Russia. Regional Government Department.





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# ACEA

**What is ACEA?**

The European Automobile Manufacturers Association (ACEA), founded in 1991, represents the interests of the fifteen European car, truck and bus manufacturers at EU level.

Its membership consists of the major international automobile companies, working together in an active association to ensure effective communication and negotiation with legislative, commercial, technical, consumer, environmental and other interests. The members of ACEA are competitors in the automobile market place and support free and fair competition as a trade policy and a legal concept.

ACEA is an Economic Interest Grouping. Its headquarters are based in Brussels and made up of the Secretary General and the Secretariat. In 1995 and 2004, ACEA opened additional offices in Tokyo and Beijing.

The Board of Directors is composed of the Chief Executive Officers (CEOs) of the automobile companies which are members of the Grouping. The Board has authority to take decisions on all relevant issues and elects, within its circle, a President for one year, with the possibility of re-election once. The decisions of the Board are prepared by a Joint Committee, composed of senior executives of the members and chaired by the Secretary General. If needed, specific issues may be discussed beforehand by a more specialised Committee.

The input is coming from 25 working groups, made up of experts from member companies, which also allows ACEA to have a permanent contact with the real life of industry.

**Why ACEA?**

ACEA was established as a response to the gradual shift to Brussels of government responsibility for many of the complex economic, social, technical and legal issues resulting from closer European integration. The origin of ACEA largely arose from the need to represent the technological, industrial and commercial contributions and interests of its member companies.

Through its specialist working groups and an extensive network of individual experts from Member Companies at all levels of the industry, ACEA has access to a wealth of expertise and applied technical experience which is unsurpassed in the EU.

The Association readily provides this expertise as an input during the regular dialogues it maintains with legislators, regulators and other EU authorities. In this way ACEA contributes significantly to practical and effective law making, which combines realism with sensible control, to the benefit of all concerned.





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ACEA also provides clear and objective information on the many complex aspects of the automobile industry. This permits effective interaction with decision-makers and partner organisations and encourages understanding of the diverse industry issues.

**How does ACEA work?**

ACEA has engaged itself in activities, which include, but are not limited to, the following actions:

- dialogue: with the European Union at all levels, and with all others concerned by the automobile industry, including the European public. Because there is such strong interaction between what happens in the industry and what happens in society and the economy, this dialogue is an integral part of the industry's social responsibility;
- cooperation: with policy makers, legislators and opinion-makers, in order to make use of the industry's experience and expert knowledge, to advance mutual understanding of industry-related issues and to make a constructive contribution to realistic and effective legislation, bearing in mind the interests of European society and its economy.
- partnership: among all its members and with associated organisations and related industries in defining, developing and supporting the common interests, policies and positions of the European automobile industry;
- strategic reflection: on the increasingly global challenges of competition and social responsibility, drawing on the strengths and expertise of its members;
- communication: of the role and importance of the industry, of its common views and of reliable data and information;
- monitoring: of all activities which influence the automobile industry, responding to and cooperating with the actors involved.

**ACEA - Co-operation & Collaboration**

ACEA has permanent and close co-operation with the European Council for Automotive R&D (EUCAR), which was established in 1994 as the research arm of the industry. EUCAR's purpose is to strengthen the competitiveness of the European automotive industry by promoting and carrying out co-operative research and development of products, processes and systems.

ACEA maintains close relationships with all the national automobile manufacturers' associations and with a number of organisations, having interests related to the automobile industry. These include the European Association of Automotive Suppliers (CLEPA), Intelligent Transport Systems - Europe (ERTICO), the European Committee for Motor Trades and Repairs (CECRA), the European Road Safety Federation (ERSF), the Fédération Internationale de l'Automobile (FIA) and the Union of Industrial Employers' Confederation of Europe (UNICE).

ACEA also maintains a dialogue on international issues with automobile associations around the world (JAMA, KAMA, AAM, ATPC).





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# ERTICO

ERTICO – ITS Europe is a multi-sector, public/private partnership pursuing the development and deployment of Intelligent Transport Systems and Services (ITS).

ERTICO – ITS Europe was founded at the initiative of leading members of the European Commission, Ministries of Transport and the European Industry.

ERTICO is the network of Intelligent Transport Systems and Services stakeholders in Europe. We connect public authorities, industry players, infrastructure operators, users, national ITS associations and other organisations together.

The ERTICO Partners and our dedicated team of highly skilled professionals work on a portfolio of activities to accelerate the development and deployment of ITS across Europe and beyond.

In the past, ERTICO has played a leading role in advancing:

- TMC standards;
- an open framework for telematics services;
- next generations of preventive safety systems;
- next generation of digital maps & associated applications;
- the technical framework for interoperable tolling in Europe;
- global implementation of ITS together with ITS America and ITS Japan.





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# EARPA – EUROPEAN AUTOMOTIVE RESEARCH PARTNERS ASSOCIATION

Founded in 2002, **EARPA** is the association of automotive R&D organisations. It brings together the most prominent independent R&D providers in the automotive sector throughout Europe. Its membership counts at present 33 members ranging from large and small commercial organisations to national institutes and universities.

EARPA, as the platform of automotive researchers, aims at actively contributing to the European Research Area and the future EU Framework Programmes.

In this task, EARPA seeks a close cooperation with the automotive industry, the automotive suppliers, the oil industry as well as the European Institutions and the EU Member States.

**Objectives**

EARPA seeks close cooperation with industrial automotive partners, universities and other research organisations to develop the future of R&D in Europe. Such cooperation already exists and varies in its forms from exchanging ideas and knowledge in joint meetings to setting-up networks and carrying out joint research projects. The EU R&D Framework Programmes are of particular interest for EARPA members as a mean to achieve such cooperation.

EARPA actively supports **ERTRAC – the European Research Transport Advisory Council** and its effort in defining a common 'Vision on Future Transport' and creating a European 'Strategic Research Agenda'.

Being well integrated in both national and European research structures, EARPA and its members are able to promote and support closer links between national and European research programs.

As an independent platform, EARPA participates in strategic consultations at EU level related to public interest and social matters regarding mobility, environment, energy and safety in the automotive area.

EARPA promotes awareness and understanding of the specific role and contribution of R&D providers in the automotive sector and reinforce the high tech character of the automotive industry and its potential for future innovation and new opportunities.

**Activities**

To achieve its goals, EARPA provides to its Members or its counterparts (EU officials and other stakeholders) the following elements:





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- An effective EU Representation: a better visibility in Europe thanks to its **central point of contact:** i.e. its Secretariat based in Brussels available for its Members and other EU stakeholders.
- **Targeted information** on the development of future EU Framework Programmes and procedures, initiatives for projects, supporting actions and coordination as well as on-going projects. This information is provided thanks to various **publications** such as newsletters, flyers and others confidential documents, all easily accessible via EARPA intranet.
- **A platform for discussion** and exchange of views for R&D providers through for example its task forces, workshops and General Assembly Meetings.
- An increasingly **strong network** with the relevant European Institutions and industries thanks to regular meetings such as its annual conferences.
- **Support or initiation of new networks, projects and consortia** by bringing interested parties together and facilitating meetings. However, EARPA is not directly carrying out or managing projects, its members do.
- **Additional public exposure of its members** through its **communication effort** (public website, presentations to events, etc.) towards EU & industrial officials as well as the general public.

**Projects**

**EARPA directly supports or initiates new networks, projects and consortia** by bringing interested parties together and facilitating meetings. However, EARPA is not directly carrying out or managing projects, its members do.
This list gives an overview of some EU-funded projects EARPA members are involved in. This list is far from being exhaustive as EARPA members are involved in a very large number of RTD projects. This list aims at highlighting some of the important running or recently completed automotive projects initiated or supported by EARPA.

<u>Main projcets:</u>

- EAGAR
- APROSYS
- GAST
- ECO-ENGINES
- INMAR
- CityMobil
- PISA
- MYMOSA
- HySys
- HiCeps
- IPSY
- FURORE
- Roads2HyCOM
- EURO-TRANS Days





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# ERTRAC – THE EUROPEAN RESEARCH TRANSPORT ADVISORY COUNCIL

The European Road Transport Research Advisory Council was established to mobilise all stakeholders, develop a shared vision, and ensure timely, co-ordinated and efficient application of research resources to meet the continuing challenges of road transport and European competitiveness.

**Mission**

- Provide a strategic vision for the road transport sector with respect to research and development;
- Define strategies and roadmaps to achieve this vision through the formulation and maintenance of a Strategic Research Agenda (SRA) and Strategic Research Recommendations (SRR);
- Stimulate increased effective public and private investment in road transport research and development;
- Contribute to improving co-ordination between the European, national, regional and private research and development actions on road transport;
- Enhance the networking and clustering of Europe's research and development capacity;
- Promote European commitment to research and technological development ensuring that Europe remains an attractive region for researchers and competitive industries.

**Road transport plays a vital role in the European economy and society**

It involves a wide range of industries and services from vehicle manufacturers and suppliers to infrastructure providers, communication, energy and research organisations, public authorities, insurance and vehicle rental companies and many others. Road transport, together with the other modes of transport, provides indispensable mobility for people and transport of goods.

Overall, road transport related industries provide employment to more than 14 million people in Europe and directly contribute 11% to the European gross national product. It has a major impact on our daily lives, as it is one of the primary means of access to employment, services, and social activities. Road transport creates links and these links are a key factor in developing social, regional and economic cohesion of the European Union. Road transport impacts the environment and general quality of life of every European citizen.

Because of the importance of the role of road transport, an accelerated development of sustainable, integrated transport solutions is necessary. ERTRAC's goal is to provide a framework to focus co-ordination efforts of public and private resources on the necessary research activities.





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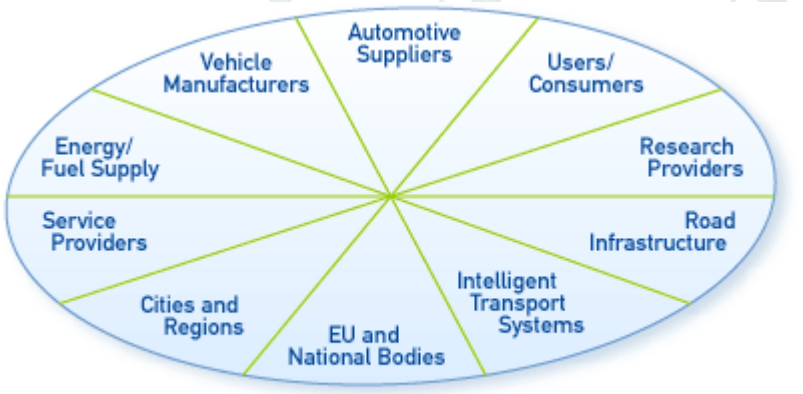
**Organisation**

There are more than 50 member organisations in ERTRAC representing all sectors of the road transport industry, non-governmental organisations, Member States, and the European Commission.




Sectors Represented in ERTRAC

**Research Areas and Working Groups**

The Research Areas and Working Groups consist of experts responsible for the creation and co-ordination of the draft documents of the Strategic Research Agenda and Recommendations. In order to accomplish this mission, Workshops with invited technical experts from all sectors of road transport are organised. The following four Research Areas were defined:

- Environment, Energy & Resources
- Safety & Security
- Transport, Mobility & Infrastructure
- Design & Production Systems
- Currently Working Groups are active in the topics of;
- Urban Mobility
- Long distance transport
- Environent and Energy
- Road traffic safety

In addition, working groups have been created on ERA (European Research Area) issues, on the TRA and on events.





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# CECRA - COMMITTEE FOR MOTOR TRADES AND REPAIRS

CECRA, the European Council for Motor Trades and Repairs established in 1983, is THE European Federation regrouping 27 national professional association representing the interests of the motor trade and repair businesses and 14 European Dealer Councils on behalf of vehicle dealers for specific makes.

CECRA is composed of professional national member organisations in the sector of distribution, maintenance and repair of vehicles, industrial vehicles and motorcycles together with ancillary activities in the retail motor industry in the countries, which make up the European Union. It also represents all fuel retailers within the European Union.

**CECRA represents on a European scale:**

- All **380.000 enterprises of motor trade and repair businesses**, of which 120.000 are authorized dealers and repairers with a contractual relationship with a vehicle manufacturer/importer (71.000 of which are selling and repairing vehicles, 42.000 only repairing and 7.000 are selling spare parts) and 260.000 independent repairers.
- The **turnover of sales and service of vehicles** is larger than that of the manufacturing industry and amounts to 800 billion € of which 630 billion € for sales of new and used vehicles, 80 billion € for repair and maintenance and 90 billion € for sales of spare parts.
- Our members (sales and services) **employ about 2.8 million people** (of which 1.55 million are employed by authorised dealers, 1.15 million by independent repairers and 0.15 million in the distribution of spare parts). It represents 25% of the jobs in the entire automotive sector.
- The net profit before tax was between 0,3 - 0,6% of the turnover in 2008.
- All **110.000 fuel businesses** with 440.000 employees and approx. 250 billion € turnover
- All **12.000 motorcycle dealers** with 81.000 employees and approx. 13,1 billion € turnover.

**The motor trades and repairs sector plays a very important role in the european union's economy.** CECRA is therefore the voice of the branch on European level.
Financially it is entirely independent and it lays down its own policies. In the European retail motor industry, the organisation works as a consultative body for its members, and as a link between European associations of motor vehicles, European Commission, European Parliament and other European institutions.

CECRA has also 14 European Dealer Councils as members:
European Dealer Council BMW/MINI, European Dealer Council CITROËN, European Dealer Council FIAT/LANCIA, European Dealer Council FORD, European Dealer Council IVECO, European Dealer Council MERCEDES, European Dealer Council MITSUBISHI, European Dealer Council PEUGEOT, European Dealer Council RENAULT, European Dealer Council RENAULT VI, European Dealer Council SMART, European Dealer Council TOYOTA, European Dealer Council VW/AUDI and the European Dealer Council OPEL.



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**AIMS**

The Association's object is to study and defend the interests of the undertakings operating in the automotive distribution and services and all related sectors, more particularly with a view to their economic integration in the European Union.

**In the pursuit of these aims the Association shall, in particular:**

- Assure the relations with the EU-authorities, and the European organisations representatives of all the partners of the profession;
- Be a lobbying body at all levels of the EU structure — Commission, Parliament, Council of Ministers — and assure the coordination of the lobbying work of its members;
- Organize conferences, meetings, study-days, etc.;
- Create divisions for specific interests of each category of member;
- Create Councils to study all trade, technical, legal and social and any other matters of general interest to the motor trade and related sectors;
- Create legal, research and trade information departments;
- Actively and adequately inform in order to create a favourable atmosphere for the reception of the results of inquiries by the public and the authorities and the legislative power, by the social institutions and trade unions, the associations of consumers, and with all other professional associations; in the national as well as in the international field;
- Be the first source of information on European questions regarding Automotive Commerce, Repairs and Services for its members and other stakeholders in the sector;
- Inform the member organisations;
- Establishing and maintaining contacts with other associations such as ACEA (European Automobile Manufacturers Association), JAMA (Japan Automobile Manufacturers Association), EMF (European Metalworkers' Federation), CITA (International Motor Vehicle Inspection Committee), NADA (National Automobile Dealers Association – USA), WADAA (World's Automobile Dealers Associations Alliance), etc.

There is more to the automotive dealer and repair sector than meets the eye. The companies and enterprises CECRA represents via its members are an essential element in our society. In direct contact with the consumers, not only do they sell, maintain and repair cars, trucks, vans, … they also play a key role in protecting the environment and are in the front line of road safety.

The companies and enterprises CECRA's members represent are responsible for making sure that motor vehicles meet the appropriate environmental standards, in terms of air pollution, recycling, proper disposal of used oils, … and that all the various vehicle components, such as brakes, head-lamps, bumpers, air bags, … are functioning properly so that vehicles are as safe for all road users as possible.





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# "ANTICIPATION OF CHANGE"

## ABOUT THE "ANTICIPATION OF CHANGE": THE NEED FOR A COMMON PROJECT

The automotive sector, an important source of economic prosperity, employment and innovation in the EU, is undergoing a major transformation as a result of market trends, international competition, technological innovation and regulatory changes. This transformation creates new opportunities for Europe's automotive sector but represents, at the same time, major challenges for the industry, its employees and the territories in which the sector operates. The different actors should be made aware of the need to anticipate change and to take a proactive approach.

These long-term challenges are coupled now with a short-term harsh economic crisis that threatens the existence of the industry itself.

To explore the main drivers behind change in the automotive sector and the mechanisms that should be implemented to anticipate and manage it in a socially responsible way, a 12-month project "Anticipation of Change in the Automotive Industry" was launched in November 2008.

Its main objective is to investigate, in accordance with known automotive trends for 2020:

- good practices in anticipation of change at both company and regional level;
- staff management strategies for increasing the skills level and the employability of the workers;
- analysis of automotive regions and clusters.

**Background to the Project**

Against this background, the European Commission (DG Employment, Social Affairs and Equal Opportunities, DG Enterprise and Industry and DG Environment) has organised in Brussels, on 17/18 October 2007, the Restructuring Forum, aimed at discussing "The challenges of the automotive industry – Towards a European partnership for the anticipation of change".

This event was a starting point to gather all relevant stakeholders to review the evolution of the automotive sector, to open a dialogue between the different actors and to help them to adapt to the change. One of the main objectives of the Forum was to establish a **"European Partnership for the anticipation of change in the automotive industry"** which is open to new signatories.

This innovative document agreed to by the European Commission and all the economic and social players of the sector (i.e. ACEA, representing all European car manufactures; CLEPA, representing the European automotive suppliers; and EMF, the European Metalworkers



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Federation) refers to the roles and responsibilities of the European institutions, National governments, companies, trade unions and regions.

Moreover, it commits the partners to a series of 14 actions over a 2-year period (2008-2009) aimed at monitoring the developments in the industry and exchange know-how and best practices on managing restructuring in a socially responsible way (Annex III of the Partnership).

**Main objectives of the project**

The transformation process in the automotive industry has already started and it will continue in the coming years. The main purpose of this project is the implementation of the five actions included in the Annex III of the "European Partnership for the anticipation of change in the automotive industry", in a period of one year (2008-2009).

These actions cover the following items:

**Employment and skills issues:**

**ACTION 2:** Good sectoral, regional and company-level practices of increasing the skill levels and the employability of the workforce

**Restructuring and management of change:**

**ACTION 3:** Good practices of anticipation and good management of change and restructuring at company and regional levels.

**ACTION 4:** Analysis of automotive regions

**Co-operation, exchanges and mobilization of the actors:**

**ACTION 8:** Dissemination and discussion workshops with the participation of representatives of Human Resources Management of the sector

**ACTION 9:** Dissemination and discussion workshops with the participation of representatives of European Works Councils of the automotive sector

**ACTION 10:** Seminars and workshops in automotive regions likely to experience significant change.

The implementation of these actions requires a combination of interdependent and mutually reinforcing analytical work and dissemination, mobilisation, exchanges and co-operation activities involving all the major players.

These actions will refer to the car industry, the truck manufacturers and the automotive suppliers. In particular, they will take into consideration the supply chain dimension i.e. the OEMs (Original Equipment Manufacturers), the SMEs (Small and Medium sized enterprises) as well as the automotive suppliers.



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## Project Timeline


## Expected Results

The transformation process in the automotive industry has already started and it will continue in the coming years. This landmark project brings together the main partners involved at European level in the complex task of preparing for this process of change the automotive industry is about to embark on.

This will be facilitated by the implementation of three studies on:
*Study 1: Good practices in anticipating and managing change within companies and regions*
*Study 2: Good practices in increasing skills levels and employability within companies, regions and sectors*
*Study 3: Analysis of automotive regions*

and two dissemination events to mobilise the actors around the main principles and objectives of the project:

- on 14 October 2009, Brussels (European Parliament)
- on 25 August 2009 Final Report Study III
- on 30 June 2009 Progress Report Study III
- on 15 June 2009, Brussels (Committee of the Regions)
- on 26 May 2009 Final Report
- on 26 May 2009 Progress Report Study II
- on 26 May 2009 Launch Study III

## PARTNERS

### CLEPA - European Association of Automotive Suppliers

CLEPA
European Association of Automotive Suppliers





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CLEPA is the European umbrella membership organisation representing the interests of the global automotive supply industry. 80 of the world's most prominent suppliers for car parts, systems and modules and 27 National trade associations and European sectoral associations are members of CLEPA, representing more than 3,000 companies, employing more than three million people and covering all products and services within the automotive supply chain. CLEPA is recognised as the natural discussion partner by the European Institutions, United Nations and fellow associations (ACEA, JAMA, MEMA, etc).
www.clepa.eu

**EMF - European Metalworkers Federation**

EMB EMF FEM Europäischer Metallgewerkschaftsbund European Metalworkers' Federation Fédération Européenne des Métallurgistes

EMP is the representative body defending the interests of workers in the European metal industry on behalf of 72 metalworking unions (and 4 associated organisations) from 33 countries, with a combined total of 5.5 million members.
The EMF was established in 1971 and has a mandate for the external representation and coordination of the metalworkers' unions and a mandate to engage in bargaining at European level.
www.emf-fem.org

**OBSERVERS**

**ACEA - European Automobile Manufacturers Association**

ACEA
www.acea.be

**CEEMET - Council of European Employers of the Metal, Engineering**

CEEMET Council of European Employers of the Metal, Engineering and Technology-based Industries
www.ceemet.org

**EXTERNAL ADVISERS**

**University of St. Andrews, School of Management**



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University of St Andrews
School of Management

www.st-andrews.ac.uk/management

**WZB, Social Science Research Centre Berlin**

WZB Wissenschaftszentrum Berlin für Sozialforschung
Social Science Research Center Berlin

www.wzb.eu

**Alpha-Conseil**

www.groupe-alpha.com





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# CLEPA

**The voice of the automotive supply industry in Europe**

CLEPA is the European umbrella association representing the interests and the entrepreneurial skills of the global automotive supply industry.

CLEPA membership is made of the world's most prominent suppliers for car parts, systems and modules; national trade associations and European sectorial associations from several countries, covering all products and services within the automotive supply chain.

Therefore CLEPA represents directly and indireclty more than 3000 automotive companies of every size, employing more than three million people.

CLEPA was born in 1959 and it is constantly reviewing its priorities, its structures and its ways of operating in order to adapt to new circumstances and challenges.

**History**

CLEPA (Comité de liaison européen des fabricants d'équipements et de pièces automobiles) was created in 1959 by various national associations representing automotive suppliers with the aim of establishing a representation office in Brussels, dealing mainly with the issue of technical regulations that the newly born European Economic Community was starting to define.
In 1997 the association was redesigned and changed its statutes to gain independence from other similar industry associations thus becoming more effective in its advocacy mission.
CLEPA then became the European Association of Automotive Suppliers and extended dramatically both its range of activities and its membership, including corporate members.

**CLEPA, promoting the interests of the European Automotive Supply Industry**

CLEPA's aim is to promote, defend and represents the general interests of the motor equipment and parts industry internationally.
To achieve this aim, CLEPA will seek to coordinate views and opinion regarding all the problems facing the industry, both in the technical and the economic fields, to ensure harmonious development of international trade, especially through the lifting of technical barriers.

**Vision**

CLEPA represents the official voice for the automotive supplier industry and its aim is to further strengthen the position and promote the common interests of one of the most strategic industries in the European and global economy.





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**Mission**

The over 3000 member companies of CLEPA play a central role in adapting the automotive industry to the sweeping changes brought on by the double processes of globalisation and technological development. Automotive suppliers account for about 75% of the vehicle industry's final product value and are responsible for about 50% of the research and development in the sector.

CLEPA mission is to defend and to make the most of this endowment of innovative skills and industrial achievements by initiating activities, which stimulate the successful business growth and development of its members and by rising debate on those topics, which directly impact the future of the automotive industry in general and of the supply chain in particular.

**CLEPA's Activities**

**Industry analysis and representation**

CLEPA monitors and analyses issues of common interest to its members to develop and support the common interest of automotive suppliers. It informs its members about all trends and important industry developments and impacts.

**Government relations and advocacy**

CLEPA represents its members' interests vis-à-vis the legislative and administrative bodies at the European Union and United Nations level and support those institutions in dealing with matters relevant to the automotive industry by presenting the views of suppliers.

**Public relations and media**

Being the voice of automotive suppliers, CLEPA responds to media inquiries about trends in the industry and about its activities. It also works to enhance the industry image and to promote its importance to the economy.

**Strategic alliances**

CLEPA establishes leverage effects by maintaining contacts, forming alliances and promoting synergies with other European and international automotive associations and relevant parties.

**Responsiveness to specific topics**

**CLEPA:**

- Co-ordinates suppliers OE and Aftermarket interests
- Works on global harmonisation of standards and regulations
- Co-ordinates cooperative Research and Development both between members and with other parties
- Initiates benchmarking activities
- Co-ordinates supply chain management issues



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- Establishes a platform for the dissemination of education and training in best practice
- Promotes tasks with regard to Medium size Enterprises
- Establishes transparent communication practices throughout the supply industry.





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## ESF PROJECTS (EUROPEAN SOCIAL FUND)

| | |
|---|---|
| **PROJECT NAME** | **Strengthening expertise in car, transport, and logistics industries: Safely and professionally in the traffic** |
| **COUNTRY** | **Finland** |
| **REGION** | **Länsi-Suomi** |
| **PROJECT DURATION** | **From 2004-08-01 to 2007-05-31** |
| **TOTAL BUDGET** | **121900.00 EUR** |
| **TARGET GROUP** | **The young Workers and employees** |
| **EU PROGRAMME** | **Objective 2** |
| **ESF PRIORITY AREA** | **Partnerships, networks and initiatives** |
| **ORGANISATION** | **Jämsän seudun ammatillisen koulutuksen kuntayhtymä** |

**Key words:** Car, transport and logistics industry, safety, expertise, traffic, training, research, business network

| | |
|---|---|
| **PROJECT NAME** | **An innovative network for Automation technology** |
| **COUNTRY** | **Finland** |
| **REGION** | **Länsi-Suomi** |
| **PROJECT DURATION** | **From 2001-01-01 to 2005-03-31** |
| **TOTAL BUDGET** | **1610672.00 EUR** |
| **TARGET GROUP** | **Trainers and educators, including systems Researchers and innovators, including R&D and innovation systems** |
| **EU PROGRAMME** | **Objective 2** |
| **ESF PRIORITY AREA** | **Partnerships, networks and initiatives** |
| **ORGANISATION** | **Satakunnan ammattikorkeakoulu, kehittämis- ja palvelukeskus OSata** |

**Key words:** Automation, network, innovation, expertise, training, research





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# HESSEN AGENTUR GMBH

## Clusters

Hessen Agentur's "Technology division" is the Hessian competence center for the support of cluster and network building processes between industry and science. Focusing on technologically advanced sectors the establishment of close co-operative ties between industrial firms, universities and supporting institutions along the value creation chain, strengthens the competitiveness of firms, especially small and medium-sized enterprises (SMEs) and contributes to a positive image of Hessen as a prime location for technology and innovation.

Being active cluster managers we have developed a methodology for bringing together partners of varying expertise, providing them with targeted advice on questions related to specific sectors or technology and helping them set up a sustainable network management. Together wit our partners our goal is the advancement of Hessian competence networks that become internationally competitive.

## Technology Transfer Network Hessen

The Hessen Agency is lead agency to the TechnologyTransferNetwork Hessen (TTN-Hessen), a collaborative network with the aim to promote industry-science cooperation. Coordinated by the Hessen Agency, its members include all Hessian universities and polytechnics as well as the leading industry associations and the chambers of commerce. The TTN-Hessen does facilitate access to application-oriented public research for small and medium sized enterprises by providing information on partners for research and development in all relevant technological fields, thus strengthening their capability to innovate.

In order to stimulate joint development projects, the TTN-Hessen supports the match-making between enterprises and RTD institutions. As part of its service, TTN-Hessen identifies R&D partners and consultancy services for SMEs through its regional advisory centers for technology transfer located at five Hessian chambers of commerce and industry. Patent and licensing advice is offered by three patent- and utilisation agencies (PVAn) which undertake the evaluation, protection and marketing of the newest research results by order of the 11 state universities. Gathering information from all participating research institutions, a web-based expertise index, the "TTN-Expertendatenbank", provides users with single window access to all participating researchers at Hessian universities, polytechnics and other research institutions.

Actively promoting its services with the regional enterprises, the TTN-Hessen has established a well-known brand name for efficient technology and know-how transfer. Moreover, in joint cooperation with its partners and the state government of Hessen, the TTN-Hessen is continually working to improve the framework conditions for innovation and a closer cooperation between industry and science in Hessen.



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**Transnational Clustering in the Automotive sector**

The Hessen Agency is lead agency to a transnational network of European automotive clusters comprising the Automotive Cluster RheinMainNeckar and the Network Mobility Industry of the Regionalmanagement Nordhessen and five other European partners, .i.e. the Netherlands, Slovenia, the Haute-Normandie, Wielkopolska and the West Midlands.

The focus is on transnational clustering in the automotive sector, where clusters have proven a successful framework for suppliers to respond to high cost and innovation pressure. Clusters differ, however, in various dimensions, i.e. in terms of their institutional set-up, their management, their goals, their instruments, their member services, their financing, their partner structure, etc. In order to develop a best practice strategy on automotive clustering, which takes into account the existing differences, the project consortium includes some of the most advanced and successful European automotive clusters.

It is intended to facilitate the exchange of experiences and best practices among the clusters, thus strengthening their performance - in terms of internationalisation, institutional development and benchmarking - and creating a transnational cooperation platform. It is planned to share organizational know-how on how to build up successful clusters with the less advanced participant regions from the new member states, especially Wielkopolska, where the build-up of a cluster is planned.





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# EU INTEGRATED PROJECT 'MYCAR'

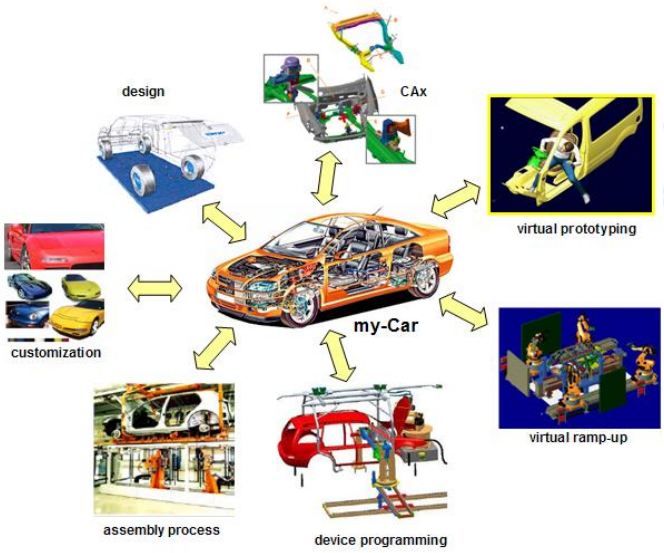
**Project Description**

MyCar is advancing the way modern vehicles are assembled, enabling an ultimate degree of customization, which could, in its outmost extent, allow every customer to purchase a unique vehicle. This paradigm will be formed on the basis of the self-adaptive assembly plant.

MyCar will further develop and integrate technologies that will facilitate the vehicle assembly process into becoming self-adaptive to any kind of market variation and capable of producing cars with extended degree of personalization.

MyCar aspires at improving the ability of the automotive industry to integrate the customer into its assembly processes.

MyCar project is funded by the EU, under the FP6, Thematic Area: Priority 3 – NMP




The research and development activities are organised around the four subprojects, as follows:

**Self adaptive plant,** aims to enable the production system at plant level to be self-adaptable in order to accommodate diversified customer needs. This concept integrates emerging technologies such as: RMS/RAS, in-line robots, manual, automated and mixed assembly lines, fixtureless assembly, mini robots for clamping, in-line instructions to support operator adaptability and other emerging technologies.

**Virtual Assembly Plant,** integrates assembly simulation technology (virtual prototyping, robots kinematics, human factors, product design, process simulation, production network simulation) and enables designers and engineers to test new car/truck designs and assembly concepts prior to their physical implementation.

**Networked Assembly Plant,** adaptability enablers include: supply chain management and inventory control approaches, RFID, ICT technologies for data exchange (e.g. XML, STEP, web services, semantic web), supply chain simulation and probabilistic modelling of market behaviour.

**Knowledge-based Assembly Plant,** includes and extends beyond state of the art, tools that assist operational and design decisions towards self-adaptability; such tools include: mathematical models for correlating process and parameters with product quality, product templates, assembly process integration and closing the loop from design to final product.

**Project Co-ordinator:** Bert Hill; Volvo Technology Corporation; Dept., Göteborg, Sweden





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**Project manager:** Dr. Sotiris Makris; Laboratory for Manufacturing Systems and Automation; Director: Prof. George Chryssolouris University of Patras, Patras, GREECE

**Consortium:**

Project coordinator: VOLVO

Project Manager: Laboratory for Manufacturing Systems and Automation, University of Patras, Director: Prof. George Chryssolouris

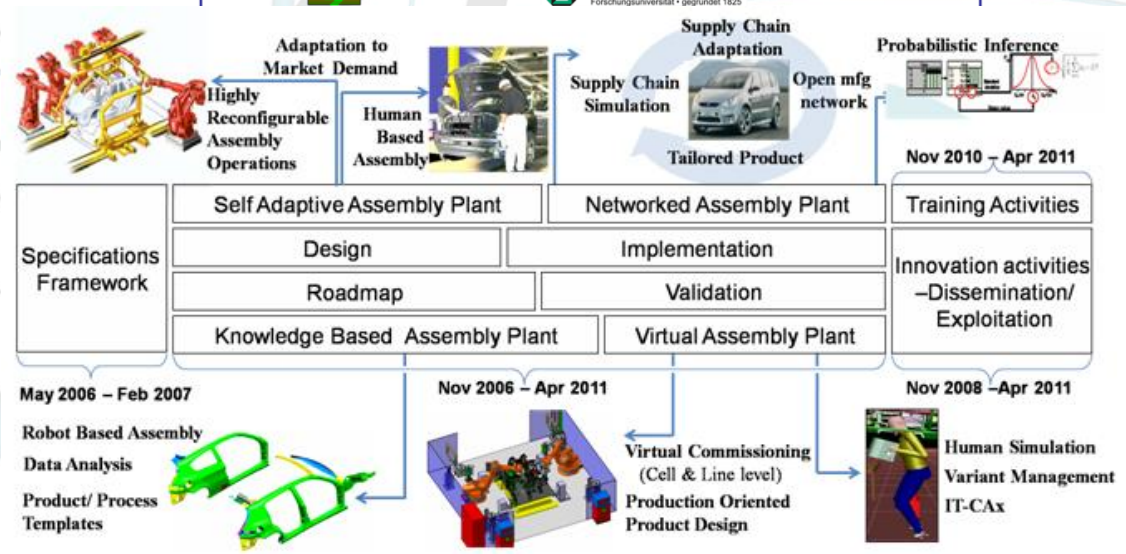
OEMs: VOLVO, DAIMLER, Ford, CRF CENTRO RICERCHE FIAT

System integrators and equipment providers: SIEMENS, COMAU, EDAG, HARMS+WENDE, PRIMA INDUSTRIE, TUNKERS

Information technology providers: CASP, cenit, emphasis TELEMATICS

Universities and research institutes: UNIVERSITY OF SKÖVDE, CHALMERS, Universität Karlsruhe (TH), UNIVERSITÄT DES SAARLANDES

**Project table:**




Info: http://www.mycar-project.eu/





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# EU PROJECT IN AUTOMOTIVE TRAINING

Education and Culture DG
Lifelong Learning Programme

Infocar is now the project manager for a two year long EU project in automotive training.
In this project there are several partners, for example Hella, Mid Sweden University and Bilprovningen (Swedish Yearly Car Inspection).

The goal of the project is to develop new e-learning courses within the following areas:

**Hybrid/Green vehicles**

- Will give a broad overview of different types of hybrid vehicles, electric vehicles, alternative fuels like ethanol, methanol, hydrogen, biodiesel, fuel cells and so on.

**Vehicle diagnosis**

- Will cover many different aspects of how to handle the diagnostic process in the best way, from reading out fault codes to the actual repair of a vehicle.
- A number of different scenarios will be developed where the user can do troubleshooting in a simulated workshop environment for some various problem cases.

A great deal of effort will be put into using e-learning in the best possible way, with lots of user interactions, animations and simulations.
The first title will be released later this year and the others will follow during 2009 – a number of different language versions will also be developed.

**Project manager:** Per-Henrik Persson; per-henrik@infocar.se

**Project manager:**
**Infocar Training AB**
Web: infocar.se
E-mail: info@infocar.se

**Partners:**

HELLA Net-Translations BILPROVNINGEN ACCU TEST Mittuniversitetet MID SWEDEN UNIVERSITY

Info: http://www.infocar.se/eu-project/





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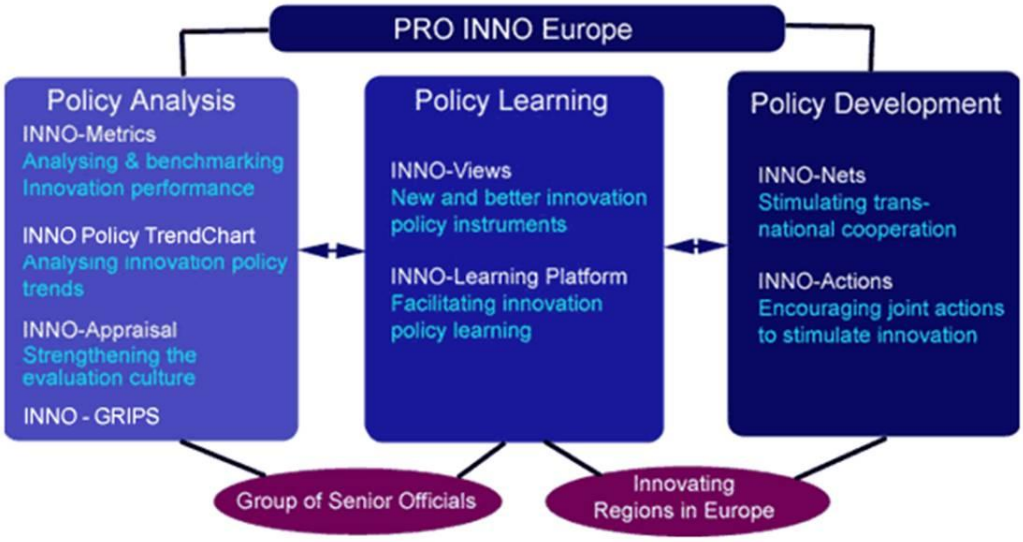
# PRO INNO EUROPE

PRO INNO Europe is a new innovation policy initiative intended to become the focal point of **innovation policy analysis and development** throughout Europe. It aims to improve policy learning based on sharing experiences with examples of best practice throughout the EU and to increase and improve trans-national innovation policy cooperation.

The initiative unites the previously separate **PAXIS** initiative, the **TrendChart on Innovation in Europe**, including the **European Innovation Scoreboard**, and the series of innovation policy studies in a common framework. Existing policy analysis and benchmarking activities will thus be integrated with new incentives for trans-national cooperation, innovation actions and policy learning methods. A strong regional dimension will be created by developing cooperation with the **Innovating Regions in Europe** (IRE) network.

## Structure

PRO-INNO Europe is based on **three pillars** accommodating a total of **eight modules**. Each of these follows a specific key aim of the initiative, as shown in the chart below.




Although these actions are different in nature, they form part of a wider **integrated policy approach** intended to develop new and better innovation policies based on sound policy analysis and reliable statistics. This will prepare the ground for innovation actions covering the whole range of policy aspects and involving a multitude of different actors.





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**Products**
Delivered by PRO INNO Europe will include an annual Innovation Progress Report, annual country reports and an inventory of innovation policy measures and programmes as well as a database for innovation studies and policy papers.

**Timing**

PRO INNO Europe was implemented in two stages, beginning in July 2006. The first stage in mid-2006 with the launch of four modules: INNO-Learning Platform, INNO-Nets, INNO-Actions and INNO-GRIPS.
The modules INNO-Metrics, INNO-Policy TrendChart, INNO-Appraisal and INNO-Views was launched during the second stage of the implementation of PRO INNO Europe, in time for the initiative to become fully operational by early 2007.

**Funding**

The initiative primarily drawn on funds from FP6 and, as of 2007, from the Competitiveness and Innovation Framework Programme. The implementation of most modules is based on a call for proposals launched through a Specific Support Action of FP6. The INNO-Learning Platform, INNO-Nets, INNO-Actions and INNO-GRIPS are based on the INNOV-9 call for proposals.

**The eight modules of the PRO INNO Europe initiative**

**INNO-Metrics** - Analysing and benchmarking innovation performance:
The INNO-Metrics module will analyse and benchmark innovation performance across Europe. It will develop the European Innovation Scoreboard in order to pinpoint regional and national strengths and weaknesses in innovation policy. As an ongoing benchmarking tool, it will also help to measure progress in innovation policy over time. INNO-Metrics, which is expected to start in early 2007, will also include elements of the Innobarometer surveys and will cooperate with the Joint Research Centre for further statistical and economic analysis.

**INNO-Policy TrendChart** - analysing innovation policy trends:
The INNO-Policy TrendChart module will monitor innovation policy trends in Europe and analyse new policy developments at regional and national levels. INNO-Policy TrendChart will be launched in early 2007 to contribute to policy assessment and the identification of good practice. In this context, synergies with the ERA-Watch project will be used to create extra added value. The module will be supported by a strong network of national correspondents to facilitate a better coverage of regional innovation policy aspects.

**INNO-Appraisal** - strengthening and coordinating an evaluation culture:
The INNO-Appraisal module aims to create, strengthen and consolidate a sound evaluation culture in Europe. Building on different evaluation studies of existing innovation and research programmes, it will collect, analyse and report on the evaluation of various innovation initiatives. INNO-Appraisal will be launched in early 2007.





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**INNO-Views** - creating and improving innovation policy instruments:
The INNO-Views module is intended to explore new or better innovation policy instruments by establishing a dialogue between different innovation stakeholders. The module will be launched in early 2007 and will contribute to and liaise with the results achieved in other modules of the PRO INNO Europe initiative (notably INNO-Nets and INNO-Actions, as well as the INNO-Learning Platform).

**INNO-Learning Platform** - facilitating innovation policy learning:
The INNO-Learning Platform module is a new tool for policy learning and translational cooperation. Bringing together key innovation policy actors and drawing lessons from examples of best practice, the Learning Platform will initiate an open, interactive process intended to prepare for future INNO-Actions and INNO-Nets. The Learning Platform will be launched in 2006.

**INNO-Nets** - stimulating trans-national cooperation:
The INNO-Nets module is designed to stimulate trans-national cooperation between national or sub-national innovation programmes, for example in areas like cluster policies or access to finance. The module can finance cooperation projects for up to three years. The first cooperation agreements are expected to be signed in summer 2006.

**INNO-Actions** - encouraging joint actions stimulating innovation:
The INNO-Actions module will provide incentives for joint actions of different innovation agencies and other not-for-profit organisations in areas relevant to innovation policy (including, for example, intellectual property rights or technology transfer). The first actions funded under the terms of this module (for a maximum of two years) are expected to begin in summer 2006.

**INNO-GRIPS** - The global review of innovation intelligence and policy studies:
INNO-GRIPS will compile and further analyse world-wide existing studies and information on innovation policy-making, business innovation and academic discussions and deliver digests and studies on emerging innovation issues. This pool of knowledge will be publicly available in a systematic and up-dated way. It will also provide a platform for open discussion among experts, such as eminent academics, innovation policy designers and business innovation leaders. It aims to serve as an “early-warning” system for policy-makers to identify appropriate policy responses.





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# ICARO

| | |
|---|---|
| **Project Acronym:** | ICARO |
| **Type of contract:** | Shared Cost |
| **Project title:** | Increase of Car Occupancy through innovative measures and technical instruments |
| **Main contractor:** | UNIVERSITAT FUER BODENKULTUR WIEN |
| **Type organisation:** | Education |
| **Country:** | AT |
| **Start date & duration:** | 1997-01-01 - 27 months |
| **Area:** | Urban |
| **Relevant tasks:** | 5.2.17 |
| **Total cost in kECUs:** | 2040 |
| **Total EU contribution in kECUs:** | 1053 |

**Objectives of research**

**Main objectives:**
The overall aim of ICARO is to investigate the measures and instruments that can increase car occupancy. ICARO will focus on transport policy research and will deliver valuable and accessible recommendations and guidelines on how to increase car occupancy at both local and national levels. ICARO will carry out a combination of both research and demonstrations, concentrating on the latter. The objectives of ICARO are: (1) to identify best practices concerning technical instruments and organisational measures to increase private car occupancy; (2) to identify and understand the institutional, legal and cultural framework necessary for increasing car occupancy. There may be considerable differences between countries with respect to the acceptance of measures and instruments; (3) to carry out a number of real life demonstrations on techniques and measures that can increase private car occupancy. These demonstrations will involve a mix of innovative and technical measures. The demonstrations will be carried out in 4 European countries. The demonstrations will concentrate on simple and easy to implement schemes on the one hand and on HOV-lanes as a technical measure on the other hand. In addition there will be studies that will analyse through modelling (changes in) the use of HOV-lanes (Saloniki, Salzburg, Leeds, Madrid); (4) to investigate substitute behaviour that might occur as an undesired effect of schemes for increasing the car occupancy; (5) to set up a methodology for selecting the right measures and instruments; (6) to disseminate the results to all interested parties.

Demo Sites:
Leeds (UK), Salzburg (AT), Brussels (BE), Graz (AT)

Links with other projects, tasks, areas, programmes, policy actions:
There are links with other EU-projects like MOMENTUM and MOSAIC.



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**Participants**

| Organisation | Type | Country |
|---|---|---|
| UNIVERSITAT FUER BODENKULTUR WIEN | Education | AT |
| LEEDS CITY COUNCIL | Other | GB |
| UNIVERSIDAD POLITECNICA DE MADRID | Education | ES |
| LANGZAAM VERKEER VZW | Research Organisation | BE |
| HIGHWAYS AGENCY | Other | GB |
| UNIVERSITY OF LEEDS | Education | GB |
| AUSTRIAN MOBILITY RESEARCH | Research Organisation | AT |
| TRAJECT C.V. | Other | BE |
| DS DATA SCIENCE AG | Industry | CH |
| NEA - TRANSPORTONDERZOEK EN -OPLEIDING | Research Organisation | NL |
| TRIAS SA CONSULTING | Industry | GR |
| CENTRE D'ETUDES TECHNIQUES DE L'EQUIPEMENT DE L'EST ADMINISTRATION | Other | FR |
| CENTER FOR CLEAN AIR POLICY | Other | CZ |

Coordinator's name: Prof. Gerd SAMMER
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# EUCAR

## European Council for Automotive R&D

The automobile is the most technologically diverse product in common use. It must have high levels of quality, safety, reliability and durability and a decreasing environmental impact, at acceptable cost. The automotive industry thus needs focused R&D activities to sustain the continuous process of technological and organisational innovation. To support the achievement of the highest efficiency, effectiveness and economy in R&D performance, the major European automakers have joined their efforts in the **European Council for Automotive R&D - EUCAR.**

The European Council for Automotive R&D (EUCAR) is the European body for collaborative automotive and road transport R&D. EUCAR is an industrial association owned by its members, which are the 12 major European manufacturers of cars, trucks and buses.

EUCAR and its member companies acknowledge the importance of the research work partly funded through national institutions within the EU and through the Framework Programs of the European Commission in which the automotive manufacturers have played a key role from the outset. Over the coming years the industry foresees the need for an even greater level of collaboration and commitment of key players in order to meet the ever-increasing challenges of providing efficient, safe, environmentally friendly, diverse and affordable mobility and transport in a world faced with scarcity of resources such as fossil fuels and raw materials.

**Mission:**
”Strengthen the Competitiveness of the European Automotive Manufacturers through Strategic Collaborative R&D”:

- Identify and describe the major relevant common R&D areas
- Act, and be recognized, as the unique reference body for Collaborative European Automotive (and Road Transport) R&D
- Have the organisational structure, strength and qualities for identifying, initiating, monitoring and supporting R&D projects.

**EUCAR FOCUS - 2009**
**The Automotive Industry Focus on future R&D**

EUCAR, the European Council for Automotive Research and Development, identifies the R&D riorities that can be best addressed through collaborative R&D and in this context serves as an important interface between the European Vehicle Manufacturers and the European Commission. In November 2008, EUCAR published its overall strategy document The Automotive Industry – R&D Challenges of the Future), providing a framework for a prospective automotive R&D programme and a basis for further elaboration and specification. With this new Focus document, the European Automotive Industry takes a further step forward in prioritizing selected aspects of this strategy, detailing some of the R&D efforts



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which are now needed to deliver the smarter, safer and greener products and services for market launch by 2020 and market penetration by 2030.

Being part of an Industry which spans the world, it is essential to take into account global trends when considering the R&D activities to be conducted in Europe. For the next years the following R&D areas are of major interest for the automobile industry:

• Urban Mobility and Transport
• Safety Applications in Co-operative Systems
• Alternative Fuels
• Suitable Materials
• Electrification of the Vehicle
• Ecological and Efficient Manufacturing.

Continuing to provide highly attractive and environmentally friendly products which satisfy global mobility and sustainability demand, while setting new technological standards and ensuring competitiveness and employment opportunities within a global market – these are the driving factors for European automotive R&D. By implementing these objectives **the European Automobile Industry strives to be quite simply the most innovative in the world**.

To develop sustainable, safe and secure products and services which are affordable within a global market, while exploiting synergies regarding pre-competitive issues, the European automotive industry has been highly active for over a decade, participating in a wide range of collaborative European research and development projects.
Through EUCAR, the European automobile manufacturers have discussed and agreed on a common approach which is expressed in the EUCAR strategy (The Automotive Industry – R&D Challenges of the Future, Nov. 2008) and is based on four cornerstone research fields, namely:
*Mobility and Transport, Energy and Environment, Safety and Security and Affordability and Competitiveness.*

Within each of these fields, the main topics for the coming years have been identified and specified in terms of the R&D activities necessary. On this basis, a range of projects conducted in collaboration will be encouraged, specifically, the main activities foreseen in each field include:

**Urban Mobility and Transport**
- Advanced driving-assisted vehicles
- Energy efficient transport of people and goods with improved logistics
- Safety of urban road transport
- Traffic management
- Market implementation of innovation.

**Alternative Fuels**
- Scenarios for alternative fuels and strategies for their market introduction
- Preparation of specifications for alternative fuels


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- Optimisation of powertrains with alternative fuels
- Integrated safety of alternatively-powered vehicles.

**Electrification of the Vehicle**

- Affordable and safe battery systems with improved performance
- Post Lithium-ion technologies
- Efficient vehicle and energy management system
- High voltage systems and components
- Connection to the infrastructure
- Field tests and demonstrators
- Road map for market penetration of the electric vehicle.

**Safety Applications in Co-operative Systems**

- Connecting independent driver assistance systems in an integrated co-operative system
- Fail-safe co-operative systems
- Reliability of sensors and data acquisition through the entire chain
- Sensor data fusion and information processing in co-operative systems
- Accident prevention and collision mitigation in co-operative safety systems
- Driver feedback for safe, clean and efficient driving
- Preparation for standardisation of information and data-protocols, interfaces and evaluation
- Development and standardisation of computer modelling
- Data-collection to assist crash avoidance.

**Suitable Materials**

- Improving the energy efficiency of powertrains
- Successful market launch of new materials for weight reduction
- Lighter and more compact seating systems
- Smart acoustic insulation and damping
- Innovative functional integration of interior components
- Sustainable material processing along the entire value chain.

**Ecological and Efficient Manufacturing**

- Innovative green painting processes
- Green manufacturing of vehicles and sub-systems
- Affordable manufacturing of green vehicles
- Digital manufacturing for integrated product and process development
- Virtual engineering for product and process performance management over the whole lifecycle.

The implementation of the R&D recommendations is intended to satisfy society's demand for mobility and transport in the future while enhancing the competitiveness of the European automotive industry.





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**EUCAR PROJECTS 2009-2010**

To be best prepared for the future, the EUCAR member companies bring a vast range of expert knowledge in the daily work of the various Working Groups that are researching the following four main R&D areas:

- Fuels and Powertrain
- Integrated Safety
- Materials, Processes and Manufacturing
- Mobility and Transport.





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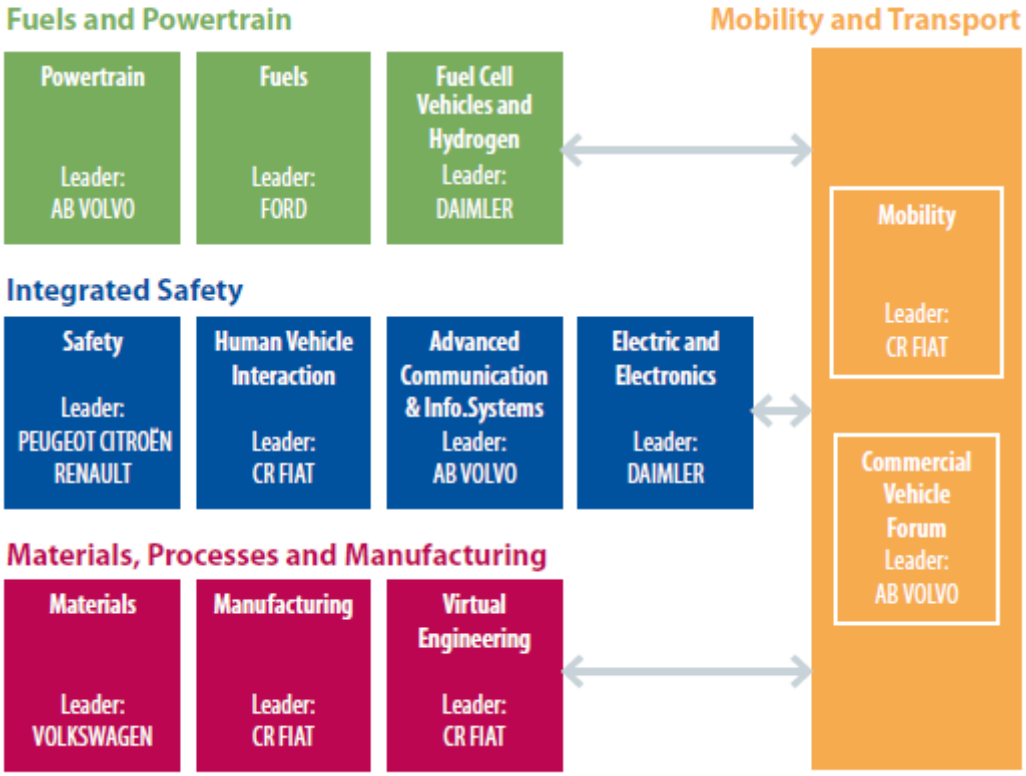
**Our main activities are:**

- Identifying, formulating and prioritising the common R&D needs.
- Interacting with the European Commission, national bodies and other key stakeholders in order to represent, promote and communicate these common R&D needs.
- Initiating, supporting and monitoring impact studies, R&D projects and programmes.





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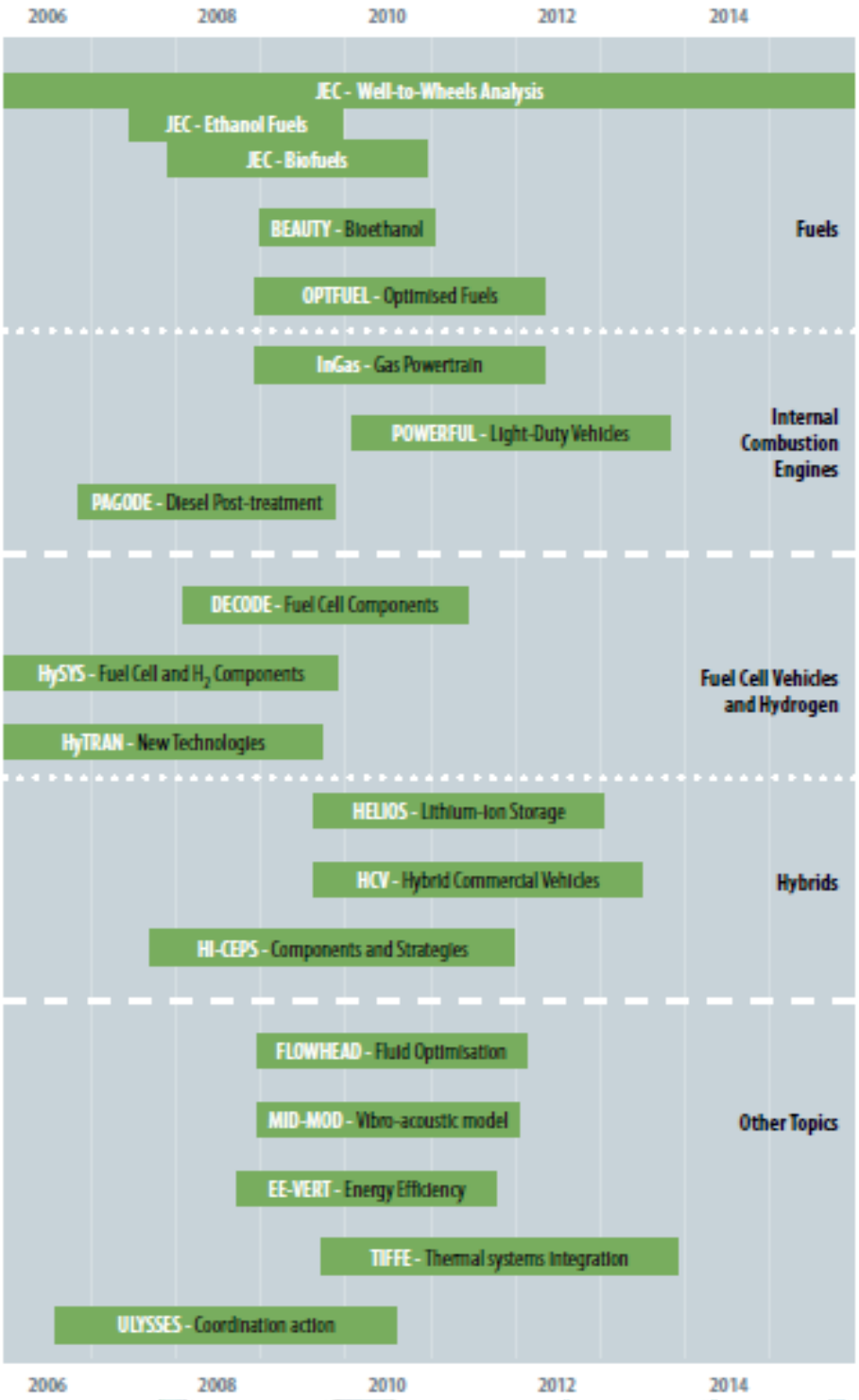
# Fuels and Powertrain

## Mapping of R&D projects





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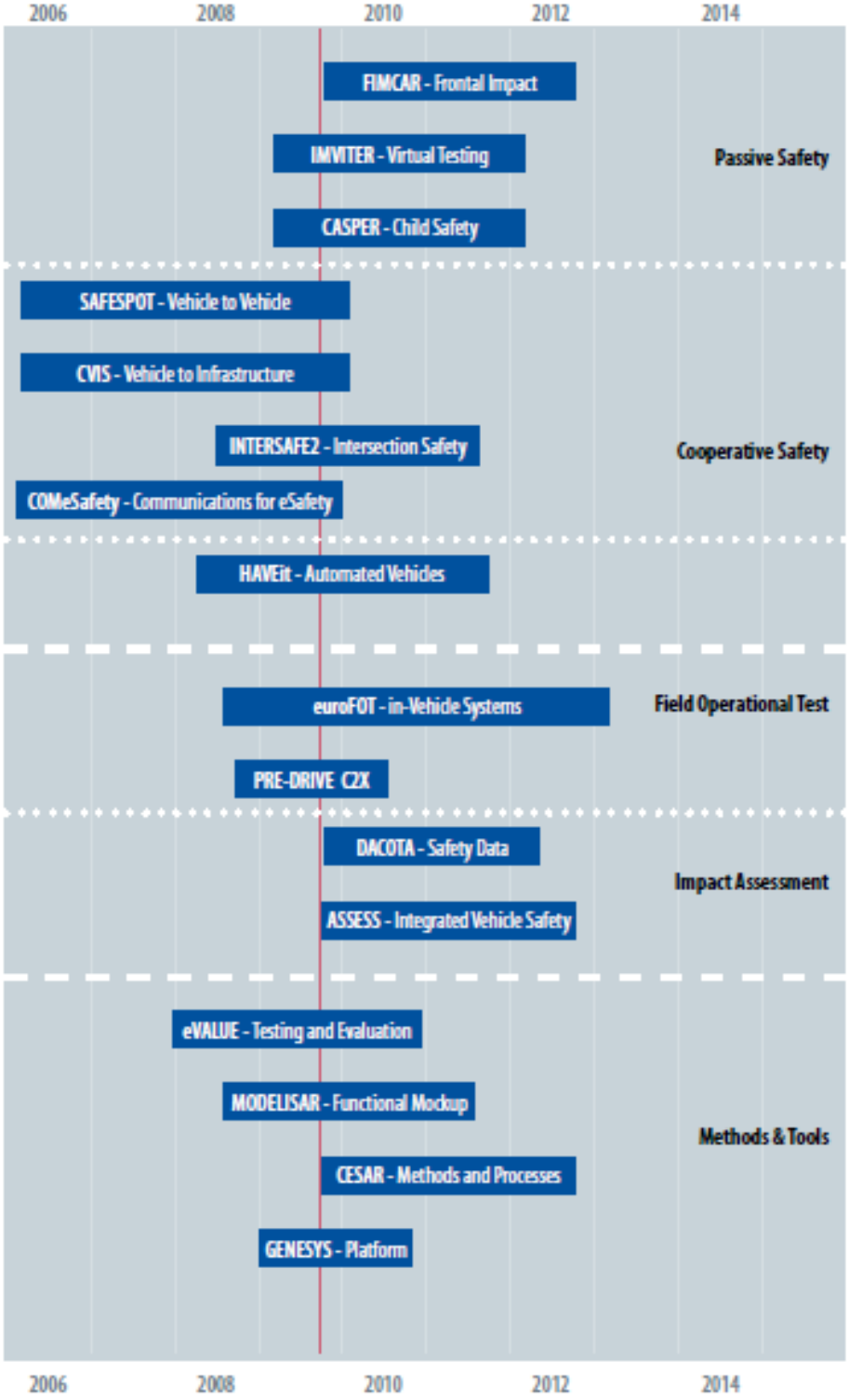
# Integrated Safety

## Mapping of R&D projects





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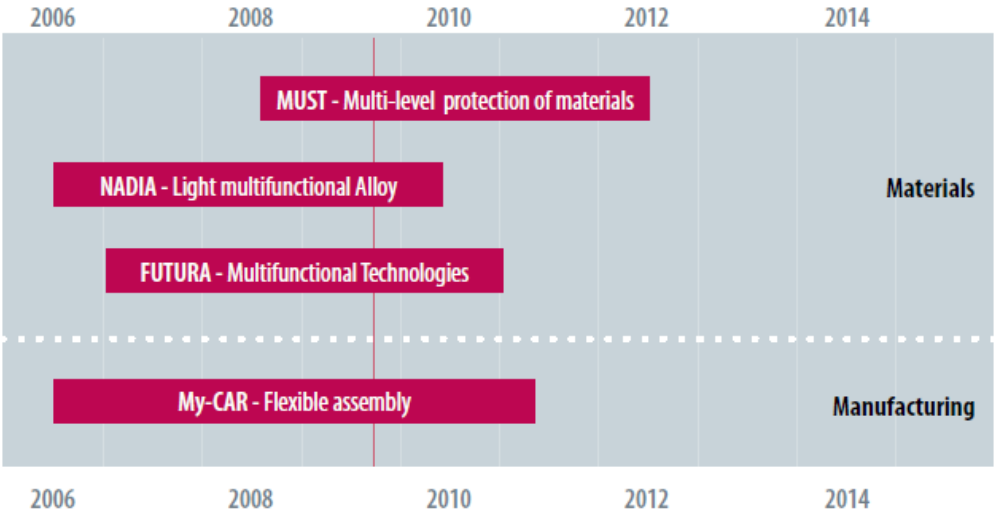
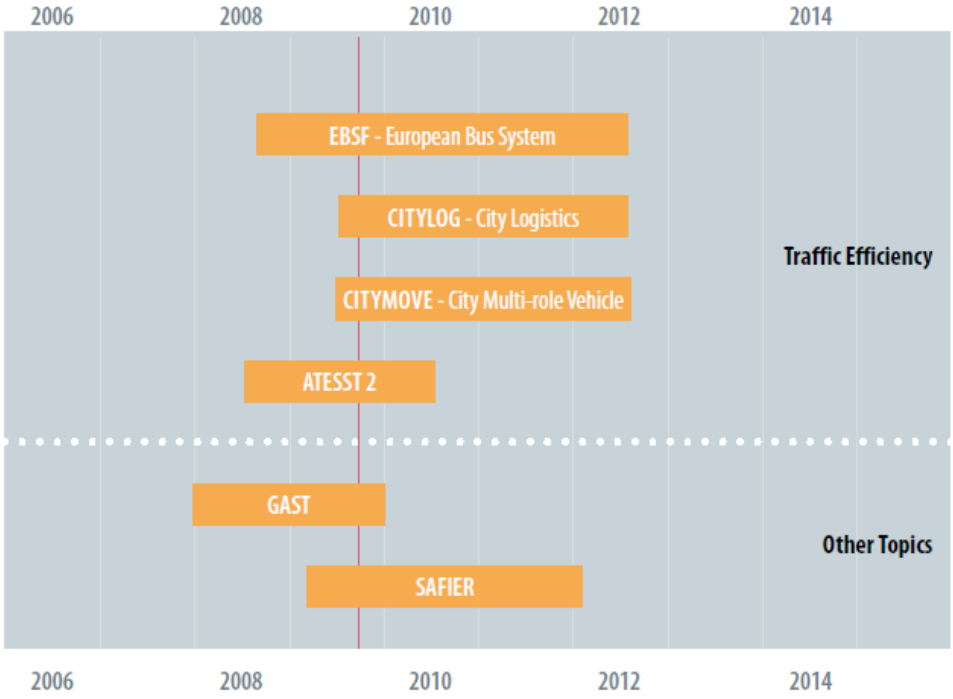
# Materials and Manufacturing

## Mapping of R&D projects




# Mobility and Transport

## Mapping of R&D projects





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# EUCAR PROJECTS OVERVIEW

## Energy and Environment

http://www.eucar.be/projects-and-working-groups

| | | |
|---|---|---|
| WTW | Well-to-Wheels analysis of future automotive fuels and powertrains in the European context | http://ies.jrc.ec.europa.eu/WTW |
| RENEW | Renewable fuels for advanced power trains | http://www.renew-fuel.com |
| PAGODE | Post-treatment for the next generation of Diesel engines | |
| GREEN | Green heavy duty engine | |
| HI-CEPS | Highly integrated combustion electric propulsion system | http://www.hi-ceps.eu |
| HySYS | Fuel cell hybrid system component development | http://www.hysys.eu |
| HyTRAN | Hydrogen and fuel cell technologies for road transport | |
| HyLights | Hydrogen for transport in Europe | http://www.hylights.eu |
| Roads2HyCOM | Fuel Cells and Hydrogen in a Sustainable Energy Economy | |
| STORHY | Hydrogen storage systems for automotive applications | http://www.storhy.net |
| ULYSSES | The future propulsion as ONE system | http://www.ca-ulysses.eu |
| SILENCE | Quieter surface transport in urban areas | |
| DECODE | Understanding of degradation mechanisms to improve components and design of PEFC | |
| OPTFUEL | Optimised fuels for sustainable transport in Europe | http://www.optfuel.eu |
| BEAUTY | Bio-ethanol engine for advanced urban transport by light commercial & heavy-duty captive fleets | |
| INGAS | Integrated Gas Powertrain | http://www.ingas-eu.org |
| FLOWHEAD | Fluid optimisation workflows for highly effective automotive development processes | |
| EE-VERT | Energy efficient vehicles for road transport | |

## Integrated Safety and Mobility

| | | |
|---|---|---|
| AIDE | Adaptive integrated driver-vehicle interface | http://www.aide-eu.org |



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| | | |
|---|---|---|
| eIMPACT | Socio-economic impact assessment of stand-alone and co-operative intelligent vehicle safety systems | http://www.eimpact.eu |
| TRACE | Traffic accident causation in Europe | http://www.trace-project.org |
| Aprosys | Advanced protection systems | http://www.aprosys.com |
| WATCH-OVER | Vehicle to vulnerable road user cooperative system to improve transport safety | http://www.watchover-eu.org |
| SAFESPOT | Cooperative systems for road safety "Smart vehicles on smart roads" | http://www.safespot-eu.org |
| CVIS | Cooperative vehicle-infrastructure systems | http://www.cvisproject.org |
| FESTA | Field Operational Test – Support Action | http://www.festaproject.eu |
| FIDEUS | Freight innovative delivery of goods in European urban spaces | http://www.fideus.org |
| IMVITER | Implementation of virtual testing in safety regulations | |
| euroF.O.T. | European large-scale field operational tests on in-vehicle Systems | http://www.eurofot-ip.eu |
| PRE-DRIVE C2X | Preparation for driving implementation and evaluation of C2X communication technology | http://www.pre-drive-c2x.eu |
| ATESST2 | Advancing traffic efficiency and safety through software technology | http://www.atesst.org |
| eVALUE | Testing & evaluation methods for ICT-based safety systems | http://www.evalue-project.eu |
| GENESYS | Generic embedded system platform | |
| MODELISAR | Modelica – AUTOSAR integration to support vehicle Functional Mockup | Will be available soon |
| HAVE-IT | Highly automated vehicles for intelligent transport | http://www.haveit-eu.org |
| INTERSAFE-2 | Cooperative intersection safety | |
| EBSF | European bus system of the future | http://www.ebsf.eu |

**Materials, Processes and Manufacturing**

| | | |
|---|---|---|
| SuperLight-Car | Sustainable production technologies of emission reduced light weight car concepts | |
| NADIA | New automotive components designed for and manufactured by intelligent processing of light Alloys | |
| FUTURA | Multi-functional materials & related production technologies integrated into further industries | http://www.futura-ip.eu |
| MyCar | Flexible assembly processes for the car of the third millennium | http://www.mycar-project.eu |
| DYNAMITE | Dynamic decisions in maintenance | http://dynamite.vtt.fi |



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| | | |
|---|---|---|
| MUST | Multi-level protection of materials for vehicles by “smart” nanocontainers | http://www.must-eu.com |
| GAST | Green and Safe Road Transportation | http://www.gast-online.eu |





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# VI. CONLUSION

The aim of this study was to summarize and present past and current Community and other initiatives in the EU in the area of autocluster development.
The study collects all programmes and its results carried out and achieved by project partners related to the automotive industry.
Many cluster activites and networks had detemined which are runnig currently or have been realized in Europe.

The ten parteners took part in 28 projects in the past and run 32 projects currently. As it can be seen from the tables, Framework Programme and Interreg Program are often used to involve financing in the project realization. From the past inititives 14 were financed by FP6, 3-3 was financed by FP7 and INTERREG 3C programs. Regarding the current projects 13 were funded by FP7 and 6 were funded by INTERREG IV programmes.
In the case of past projects the tendency is twofold: small-budget projects involving several partners; and medium-size projects with variable budget and partners. The total budget is usually below 10 MEUR. The partner number above 20 is quite rare.
If we examine the current initiavites, we can see, that the tendency is more having small-budget projects involving several partners. The total budget in average is around 5M-15M EUR; the ~40 MEUR project is an exception.

Many other activities in clustering and networking, associations and policies related to automotive industry are listed and presented in the last section which running currently or have been realized in Europe, such as EASN, NEAC, ACEA, ERITCO, EARPA, CLEPA, EUCAR, MyCAR, PRO INNO Europe initiatives (including some of networking projects). Many Partners in the Partnership do not have the full knowledge on these activities therefore this review will be a map for them.

Hopefully this study could contribute to project partners to put the autoclusters activities in wider context and eventually identify sources of information.





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This paper belongs to the following section of AUTOCLUSTERS project: WP3 Best practices and study on clusters development in SEE / 3.1 Study and analyze in EU policies, news in other running project sas well as new results or available sources.

**www.autoclusters.eu**

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