

## **ECTRI MEMBERS IN 6<sup>th</sup> FRDP and COST FUNDED PROJECTS**

### **ECTRI members in 6<sup>th</sup> FRDP and COST projects**

#### **A – FP6**

##### **I – ITS**

- 1-eSafety
- 2-Other ITS

##### **II – Safety**

##### **III – Economy**

##### **IV – Energy & environment**

##### **V – Urban Mobility**

##### **VI – Transversal**

#### **B – COST Actions**

\*  
\* \* \*

This document presents an overview of the projects in which ECTRI members are involved; more particularly it focuses on 6<sup>th</sup> Framework Research and Development Programme (6<sup>th</sup> FRDP) and COST funded projects.

The projects are identified by thematics, the calls identifiers, as well as the Directorates-General that launched the call (DG RTD, DG TREN or DG INFSO) are also mentioned. The projects which have been officially sponsored by ECTRI are indicated with a sign (\*).

ECTRI members are involved in **113 FRDP6 projects**: **6 Networks of Excellence (NoE)**, **35 Integrated Projects (IP)**, **17 Coordination Actions (CA)**, **41 Specific Targeted Research Projects (STREP)**, **11 Specific Support Actions (SSA)**, **3 Marie Curie (Transfer of Knowledge - ToK)** and **International Reintegration Grant - IRG** and **4 COST actions**.

# ECTRI MEMBERS IN 6<sup>th</sup> FRDP PROJECTS

## A – FP6

### I – ITS

#### 1-eSafety projects

##### **1. HUMANIST\* “Human centred design for Information Society Technologies” - NoE**

###### ***Call DG INFSO (FP6-2002-IST-1)***

This Network of Excellence started in March 2004. It aims at creating a European Virtual Centre by setting up strong connections within its Network members, promotes exchanges with Universities and Academic Institutes outside the Network through training programmes and supports the involvement of young researchers in the European road transport safety research.

This project includes 22 partners. ERT/INRETS (France) is the co-ordinator

ECTRI partners: INRETS, CERTH/HIT, CDV, DTU Transport, TNO, TOI, VTT, VTI, UPM and TRL.

Website: <http://www.noehumanist.org/>

##### **2. APSN\* “Advanced Passive Safety Network” - NoE**

###### ***Call DG RTD (FP6-2002-Transport -1 & 2)***

The aim of this Network of Excellence which started in April 2004 is to create a sustainable integrated European vehicle passive safety research and implementation programme and a permanent virtual organisation in the field of passive safety for road transport.

This project includes 53 partners. TNO Automotive is the co-ordinator.

ECTRI partners: TNO, FhG, INRETS, UPM and TRL

Website: <http://www.passivesafety.com/>

##### **3. APROSYS “Advanced Protection Systems” - IP**

###### ***ESafety projects: synchronised call on Integrated Safety launched by DG TREN, DG INFSO and DG RTD (FP 6-2002-Transport -1 & 2/FP6-2002-IST-1)***

This Integrated Project focuses on scientific and technology development in the field of passive safety (crash safety), concerning particularly human biomechanics (injury mechanisms and criteria), vehicle and infrastructure crashworthiness, occupant and road user protection systems. The general objective of APROSYS is the development and introduction of critical technologies that improve passive safety for all European road users in all relevant accident types and accident severities.

This project includes 47 partners. TNO is the coordinator.

ECTRI partners: TRL, FhG, POLITO, UPM and INRETS

Website: <http://www.aprosys.com/>

#### **4. SafetyNet “The European Road Safety Observatory, an Information System to support road safety policy in Europe” (DG TREN) - IP**

*E-safety projects: synchronised call on Integrated Safety launched by DG TREN, DG INFSO and DG RTD (FP 6-2002-Transport -1 & 2/FP6-2002-IST-1)*

This Integrated Project defines a project to build a European Road Safety Observatory as defined in the EC White Paper on Transport Policy. The Observatory addresses the specific need for co-ordinated accident and injury data resources that will supply the basic information supporting safety policy decision making at EU and national levels. The project meets the requirements for independent accident and injury data and related information that is freely available as specified in the call.

This project includes 22 partners. VSRC (United Kingdom) is the coordinator.

ECTRI partners: INRETS, CDV, TOI, KTI, TNO and TRL

#### **5. PREVENT “PReVENTive and Active Safety Applications” (DG INFSO) - IP**

*E-safety projects: synchronised call on Integrated Safety launched by DG TREN, DG INFSO and DG RTD (FP 6-2002-Transport -1 & 2/FP6-2002-IST-1)*

The key objective is to develop, test and evaluate safety-related applications, taking advantage of advanced sensors and communication devices integrated into on-board systems for driver assistance.

This project includes 53 partners from Industry, Public Authorities, Institutes, Universities, Public and Private Organisations. Daimler-Chrysler is the coordinator.

ECTRI partners: AVV/DVS, CERTH/HIT, INRETS, VTT, FhG, TNO and TRL

Website: <http://www.prevent-ip.org>

#### **6. AIDE “Adaptive Integrated Driver-vehicle interface” (DG INFSO) - IP**

*E-safety projects: synchronised call on Integrated Safety launched by DG TREN, DG INFSO and DG RTD (FP 6-2002-Transport -1 & 2/FP6-2002-IST-1)*

The project is part of the Integrated Safety Programme. The general objective is to generate the knowledge and the development of the methodologies and human machine interface technologies required for safe and efficient integration of multiple driver assistance and information functions into the driving environment, thus maximising the efficiency of ADAS (Advanced Driver Assistance Systems) and minimising negative effects of IVIS (In-Vehicle Information Systems).

This project includes 28 partners. Volvo (Sweden) is the coordinator.

ECTRI partners: INRETS, TNO, VTT, VTI, CERTH/HIT

Website: <http://www.aide-eu.org>

## 7. GST “Global System for Telematics” (DG INFSO) - IP

***E-safety projects: synchronised call on Integrated Safety launched by DG TREN, DG INFSO and DG RTD (FP 6-2002-Transport -1 & 2/FP6-2002-IST-1)***

The purpose of GST is to create an environment in which innovative telematics services can be developed and delivered cost-effectively and hence to increase the range of economic telematics services available to manufacturers and consumers.

This project includes 49 partners. ERTICO (Belgium) is the coordinator.

ECTRI partner: TNO

Website: <http://www.gstforum.org>

## 8. SAFESPOT “SAFE COOPERATIVE DRIVING “Smart Vehicles driving on Smart Roads” - IP

***FP6-IST-2004-2.4.12 eSafety Co-operative Systems for Road Transport***

The objective of this project is to understand how intelligent vehicles and intelligent roads can cooperate to produce a breakthrough for road safety. The aim is to prevent road accidents by developing a Safety Margin Assistant that detects in advance potentially dangerous situations and that extends in space and time drivers' awareness of the surrounding environment. The Safety Margin Assistant will be an Intelligent Cooperative System based on Vehicle to Vehicle (V2V) and Vehicle to Infrastructure (V2I) communication.

This project includes 51 partners. The Centro Ricerche Fiat (Italy) is the coordinator.

ECTRI partners: TNO, VTT, HIT, DLR and UPM.

Website: <http://www.safespot-eu.org>

## 9. CVIS “Cooperative vehicle-infrastructure systems” - IP

***Call DG INFSO (FP6-2004-IST-4)***

The CVIS objectives are to create a unified technical solution allowing all vehicles and infrastructure elements to communicate with each other in a continuous and transparent way using a variety of media and with enhanced localisation; to enable a wide range of potential cooperative services to run on an open application framework in the vehicle and roadside equipment; to define and validate an open architecture and system concept for a number of cooperative system applications; and to develop common core components to support cooperation models in real-life applications and services for drivers, operators, industry and other key stakeholders and to address issues such as user acceptance, data privacy and security, system openness and interoperability, risk and liability, public policy needs, cost/benefit and business models, roll-out plans for implementation.

This project includes 63 partners. ERTICO (Belgium) is coordinator.

ECTRI partners: AVV/DVS, INRETS-LCPC, TNO and DLR.

Website: <http://www.cvisproject.org>

## 10. EURAMP “European Ramp Metering Project” - STREP

***FP6-IST-2002-2.3.1.10 eSafety of road and air transports***

The major objective of the EURAMP project is to advance, promote and harmonise ramp metering control measures on European motorways with the aim of improving safety and increasing efficiency of traffic flow.

This project includes 17 partners

ECTRI common partners: AVV/DVS and INRETS. IBI group (Greece) is the coordinator.

Website: <http://www.euramp.org>

## **11. TRACKSS “Technologies for Road Advanced Cooperative Knowledge Sharing Sensors - STREP**

### ***Call DG INFSO (FP6-2004-IST-4)***

The aim of the project is to develop new systems for cooperative sensing and predicting flow, infrastructure and environmental conditions surrounding traffic, with a view to improving road transport operations safety and efficiency.

This project includes 14 members. ETRA (Spain) is the coordinator.

ECTRI partners: INRETS, KTI, CDV and TRL

Website: <http://www.trackss.net>

## **12. TRACE “TRaffic Accident Causation in Europe” - STREP**

### ***Call DG INFSO (FP6-2004-IST-4)***

The objective of TRACE is to provide the scientific community, the stakeholders, the suppliers and the public with an overview of the road **accident causation** issues in Europe based on the analysis of any and all current available databases which include **accident**, injury, insurance, medical and exposure data (including driver behaviour in normal driving conditions). The idea is to identify, characterise and quantify the nature of risk factors, groups at risk, specific conflict driving situations and **accident** situations; it will help to estimate the safety benefits of a selection of technology-based safety functions.

The project includes 15 partners. PSA Renault (France) is the coordinator.

ECTRI partners: INRETS, TNO, CDV and TRL

Website: <http://www.trace-project.org>

## **13. e-IMPACT “Assessing the Impacts of Intelligent Vehicle Safety Systems” - STREP**

### ***Call DG INFSO (FP6-2004-IST-4)***

eIMPACT assesses the socio-economic effects of Intelligent Vehicle Safety Systems (IVSS), their impact on traffic safety and efficiency. It takes into account policy options and the views of the different stakeholders involved: users, OEMs, insurance companies and society. By analysing these effects, eIMPACT also provides an indication of the prospects for introducing IVSS.

The project includes 13 partners. TNO (The Netherlands) is the coordinator

ECTRI partners: VTT, AVV/DVS and CDV

Website: <http://www.eimpact.info>

## **14. GOOD ROUTE “Dangerous Goods Transportation Routing, Monitoring and Enforcement” - STREP**

### ***IST-2004-2.4.12 eSafety Co-operative Systems for Road Transport***

GOOD ROUTE aims to develop a cooperative system for dangerous goods vehicles routing, monitoring, re-routing (in case of need) enforcement and driver support, based upon dynamic, real time data, in order to minimise the Societal Risks related to

their movements, whereas still generating the most cost efficient solution for all actors involved in their logistic chain.

The project includes 15 partners. HIT (Greece) is the coordinator.

ECTRI common partner: UPM.

Website: <http://www.goodroute-eu.org>

## **15. eSafety support - SSA**

***Call DG INFSO (FP6-2004-IST-4)***

eSafety Support actively assists transport stakeholders in their efforts to increase public awareness of the enormous impact intelligent vehicle safety systems, so called eSafety systems, can have on road safety. The eSafety initiative brings together the European Commission, public authorities, industry and other stakeholders in a drive to accelerate the development, deployment and use of eSafety systems. The main aim is to contribute to the European Commission's 2001 goal of halving the number of fatalities on Europe's roads by 2010.

The project includes 4 partners. ERTICO (Belgium) is the coordinator.

ECTRI partner: VTT.

Website: <http://www.esafetysupport.org>

## 2-Other ITS projects

### **16. HTA "An Alliance to Enhance the Maritime Testing Infrastructure in the EU" - NoE**

#### ***Call FP6-2005-Transport-4***

The objective of HTA is to facilitate lasting alliances between its key actors in order to establish an effective and flexible infrastructure of EU marine testing research capacity. This will be catalysed through cooperations that contribute towards competitiveness and excellence in the marine industry, and ensure a continued world leadership of the European hydrodynamic testing.

The project includes 19 partners. Maritime Research Institute Netherlands (The Netherlands) is the coordinator.

ECTRI partner: VTT.

### **17. SENSATION "Advanced sensor development for attention, stress, vigilance and sleep/wakefulness monitoring" - IP**

#### ***Call DG INFSO (FP6-2002-IST-1)***

This project aims at promoting the health, safety and quality of life of people, and protecting the environment by reducing relevant accidents and thus the impact on environment through the application of novel micro and nano sensors and related technologies, of low-cost and high-efficiency, for physiological state monitoring. The focus of the work will be the physiological activity, including the sleep and wakefulness states and their boundaries, stress, inattention and hypovigilance states, for hypovigilance detection, prediction and management as well as diagnosis, treatment and remote monitoring of sleep disorders.

The project includes 42 partners. CERTH/HIT (Greece) is the coordinator.

ECTRI partners: VTI, VTT and UPM

### **18. ASK-IT "Ambient Intelligence System of Agents for Knowledge-based and Integrated Services for mobility impaired Users" - IP**

#### ***Call DG INFSO (FP6-2003-IST-2)***

The ASK-IT integrated project aims to establish Ambient Intelligence (Aml) in semantic web enabled services, to support and promote the mobility of the Mobility Impaired people, enabling the provision of personalised, self-configurable, intuitive and context-related applications and services and facilitating knowledge and content organisation and processing.

The project includes 42 participants. Siemens (Spain) is the coordinator.

ECTRI partners: VTT, CERTH-HIT and UPM.

Website: <http://www.ask-it.org>

### **19. MarNIS "Maritime Navigation and Information services" - IP**

#### ***Call DG TREN (FP 6-2002-TREN-1)***

This project aims to establish an integrated and interoperable maritime navigation information structure in European waters. It will contribute to the improvement of safety and the protection of the environment, security, efficiency and reliability, economic aspects of sea transport and of legal and organisational aspects.

The project includes 59 partners representing the relevant stakeholders. AVV/DVS (The Netherlands) is the coordinator.

ECTRI partners: INRETS and TNO.

Website: <http://www.marnis.org>

## **20. MOSES "Motorways of the seas (logistic supply chains) - IP**

A main focus of the project will be to efficiently link sea transport with all other surface transport modes by transforming port terminals into seamless motorway junctions where the traditional boundaries between the modes are eradicated. One of the challenges will be to remove the barriers that make existing intermodal door-to-door solutions more like an endless row of crossroads with red lights, instead of motorways with seamless junctions (similar to the nearly seamless logistics for truck-only solutions).

The project includes 58 partners.

ECTRI partner: FhG.

## **21. EFFORTS "EFFective Operation in poRTS" - IP**

***Call FP6-2005-Transport-4***

The EFFORTS project aims to improve the competitiveness of European port operations and the quality of the ports labour conditions and market, being a prominent one in coastal regions.

The project includes 43 partners. D'Appolonia S.p.A. (Italy) is the coordinator.

ECTRI partner: VTT

Website: <http://www.efforts-project.org>

## **22. VIRTUE "The Virtual Tank Utility in Europe" - IP**

***Call FP6-2003-Transport 3***

VIRTUE will initially concentrate on the development of new, and the further improvement of existing, high-precision CFD tools, which allow an integrated and complete numerical analysis of marine hydrodynamic behaviour in a virtual environment, the virtual tank utility. By improving the accuracy, flexibility and reliability of CFD predictions, and by integrating presently disparate tools into an integrated platform, VIRTUE promises to deliver important advantages to the shipbuilding industry, including:

- reduced manufacturing costs through shorter lead times and more focused designs
- improved design and product quality
- increased range and quality of service offered by European hydrodynamics service providers and an increased market share in the design and analysis of maritime products
- increased R&D capacity of the sector as a whole.

VIRTUE's scientific and technological objectives to achieve these ambitious goals include:

- formally integrating numerical tools, using proven approaches, into an environment for complete modelling and simulation of ship behaviour at sea

- providing smooth and versatile communication and data exchange link between marine CFD service providers, such as model basins, and the end user
- providing the means – CFD tools, integration platform and optimisation techniques – to cover the whole range of hydrodynamic problems and to facilitate and support multi-disciplinary design optimisation of new ships.

The project includes 23 partners. Hamburgische Schiffbau-Versuchanstalt GmbH (Germany) is the coordinator.

ECTRI partner: VTT

Website: <http://www.virtual-basin.org>

### **23. AC-DC “Automotive Chassis Development for 5-day Cars” - IP**

***Call FP6-2005-Transport-4***

The prime objective of AC-DC is to develop a concept which radically enhances automotive manufacturing in order to achieve the high level of responsiveness required for a 5-day car process according to customer specifications, with the development and introduction of individual and highly reactive planning loops in the supply chain. The efficiency of this future system needs to be validated realistically by considering the emerging step-change in component technology (technology convergence of “Mechatronics” for customer neutral modules of high parameterisation).

The project includes 18 partners. Continental AG (Germany) is the coordinator.

ECTRI partner: FhG.

### **24. INTEGRAIL “INTElligent inteGration of RAILway systems” - IP**

***Call DG RTD (FP 6-2003-Transport -3 and FP6-2002-Transport-2)***

The project’s objective is to create a holistic, coherent information system to integrate the major railway sub-systems and to deliver a higher level of co-ordination and co-operation between the key railway processes. The objective is to achieve higher levels of performance of the railway system in terms of capacity, average speed and punctuality, safety and the optimised use of resources.

The project includes 33 partners. UNIFE is the coordinator.

ECTRI partner: INRETS.

Website: <http://www.integrail.info>

### **25. MODURBAN “Modular Urban Guided Rail Systems” - IP**

***Call DG RTD (FP 6-2003-Transport -3 and FP6-2002-Transport-2)***

The targets of this project are to design, develop and test an innovative and common system architecture for urban guided public transport systems and its key interfaces.

The project includes 39 partners. UNIFE is the coordinator.

ECTRI partner: INRETS

Website: <http://www.modurban.org>

## 26. URBAN TRACK “Urban Rail Infrastructure” - IP

### ***Call DG RTD (FP6-2005-Transport-4)***

This four year research project aims at developing, testing and validating innovative products for ***urban rail track*** infrastructure, in full accordance with the ERRAC 2020 vision: high capacity, reliability, high comfort & safety, easy access, seamless travel. Building blocks and a comprehensive toolbox will be developed.

The project includes 38 partners. DS2 International (Belgium) is the coordinator.

ECTRI partner: INRETS

Website: <http://www.urbantrack.eu>

## 27. RETRACK “Reorganisation of Transport concepts by Advanced Rail freight concepts” - IP

This project aims at developing, demonstrating and implementing a rail freight service along an East-West trans-European corridor

The project includes 13 partners. TNO (The Netherlands) is the coordinator

ECTRI partner: TØI.

Website: <http://www.retrack.eu>

## 28. AUTOSIM “Development of Best Practices and Identification of Breakthrough Technologies in Automotive Engineering Simulation” - CA

### ***Call FP6-2003-Transport-3***

The broad objectives of AUTOSIM can be summarised as follows:

- To improve the quality and robustness of modelling and simulation in the European automotive industry within an integrated design and product development environment.
- To facilitate the use of advanced simulation technologies (finite element analysis, computational fluid dynamics, and related methods) within a multi-site, multi-organisational environment.
- To improve technology and knowledge transfer between engineering practitioners within the automotive industry.
- To identify potential breakthrough technologies which could have a profound effect on the use of simulation techniques for automotive applications.
- To identify technology gaps and areas where RTD activity is needed.

The project includes 32 partners. NAFEMS Ltd (United Kingdom) is the coordinator.

ECTRI partner: TRL

Website: <http://www.autosim.org>

## 29. CERTAIN “Central European Research in Road Infrastructure” - CA

### ***Call FP6-2005-Transport-4***

The main objectives of the project are to provide a platform of coordinated work and efficient dissemination of results of the two STREP proposals on road infrastructure, dedicated to NMS: SPENS on pavement and ARCHES on highway structures, to establish and reinforce links with stakeholder in the NMS and CEEC by organising dedicated workshops and providing the key project deliverables in national languages and to set the route for more efficient incorporation of NMS and Central and Eastern European countries partners in future European research by organising training courses for the research project managers from these countries.

The project includes 4 partners. Zavod za Gradbeništvo Slovenije (Slovenia) is the coordinator.

ECTRI partner: CDV

Website: <http://certain.fehrl.org>

### **30. REORIENT “Implementing Change in the European Railway System” - CA**

***Call DG TREN (FP6-2003-TREN-2)***

This project will assess the process of transforming the European railways from nationally fragmented into internationally integrated rail operating systems as a consequence of the EC interoperability legislation. It will support the EU policy of balancing modal split between road and rail freight transport.

The project includes 7 partners. Isdefe (Spain) is the coordinator.

ECTRI partners: TOI, DLR, VTT

Website: <http://www.reorient.org.uk>

### **31. TREND “Towards new Rail freight quality and concepts in the European Network in respect to market Demand” - CA**

***Call DG TREN (FP6-2003-TREN-2)***

The project gathers all necessary information to assess the general progress in the establishment of a European Railway Area. It will provide an improved “Integration Index” composed of a set of sub-indices covering amongst others the issues of liberalization, free access, interoperability etc. TREND also seeks to recommend a coherent conception of individual actions as a “break down” of the White Paper’s general framework. If these actions were implemented co-ordinatedly and according to a reasonable scheduling, the concept should enable to achieve a quantum leap for Trans-European rail services in quality, efficiency, and in volume, in particular.

The project includes 10 partners. HaCon Ingenieurgesellschaft mbH (Germany) is the coordinator

ECTRI partner: CDV

Website: <http://www.trend-project.com>

### **32. RAILCOM “Electromagnetic compatibility between rolling stock and rail-infrastructure encouraging European interoperability” - CA**

***Call DG RTD (FP 6-2003-Transport -3 and FP6-2002-Transport-2)***

Focusing on the vehicle-infrastructure interfaces, especially on the TEN-T railway network, the project will provide practical and harmonised solutions to EMC issues and in this way will contribute to railway interoperability. The objectives are the harmonisation of interference limits for train detection systems in addition to the characterisation of the railway electromagnetic environment for communication systems, with correlation between electromagnetic emission and operation conditions of the systems.

The project includes 14 partners. Holland Railconsult (HR) (The Netherlands) is the coordinator.

ECTRI partner: INRETS.

### **33. INTRO “Intelligent Roads” - STREP**

***Call DGRTD (FP6-2003-Transport-3 and FP6-2002-Transport-2)***

This project aims to address the problems of road safety and capacity by combining sensing technologies and local databases with real time networking technologies.

The project includes 11 partners. VTI (Sweden) is the coordinator.

ECTRI partners: TRL and INRETS.

### **34. NR2C “New Road Construction Concepts” - STREP**

***Call DG RTD (FP6-2002-Transport-1)***

The objectives of this project are as follows: to express and derive new concepts for the road of the future, from a more global perspective, to develop a number of targeted innovations of special interest, to fulfil society's most urgent needs concerning sustainable surface transport.

This FEHRL project includes 9 partners. FEHRL is the coordinator.

ECTRI partners: INRETS-LCPC

Website: <http://nr2c/fehrl.org>

### **35. ISLE “Integrated communicating solid-state light engine for use in automotive forward lighting and exchange between vehicles and infrastructure” - STREP**

***Call FP6-2002-Transport-1***

The main objective of the project is to define the ability of a LED system to provide communication modes for other vehicles or traffic devices – measured by the new ability to communicate during different driving conditions.

The project includes 16 partners. Schefenacker Vision Systems GmbH (Germany) is the coordinator.

ECTRI partner: UPM

### **36. MISS “Monitor Integrated Safety System” - STREP**

***Call FP6-2003-Transport-3***

MISS aims to develop an innovative platform to dynamically sense and predict natural and infrastructure conditions, so to improve safety and efficiency of transport operations in a multi-environmental scenario. This project wants to increase citizens and operators safety by enabling a just in time intelligent computation of an open dynamic road surveillance network and streamlining alerting tasks under the daily duty provided by clerical staff. In this way MISS will pay attention to viability of the system in the long term. The platform will use advanced communication technologies for on-line services as well as high capacity storage devices for off-line services and applications, in addition to a new advanced algorithm to simulate risk assessment. The MISS adaptable platform is a mobile system explicitly designed to monitor rough environmental and infrastructure conditions and it will be integrated with any pre-existing legacy system. It will enable intelligent exchange of structured information between the operational fleet vehicles and the Unified Operative Centre where information will be elaborated and actions planned.

The project includes 13 partners. Province of Bologna (Italy) is the coordinator.

ECTRI partner: CERTH/HIT

Website: <http://www.missproject.net>

### **37. HeavyRoute “Intelligent Route Guidance for Heavy Vehicles” - STREP**

#### ***Call FP6-2005-Transport-4***

The overall objectives are to improve road safety and capacity while reducing the negative impacts on the environment and the road and bridge maintenance costs (by reducing the rate of deterioration caused by heavy traffic). The route guidance system aimed for in this project will be built on available and implemented systems, and technologies such as fleet management and logistics systems, guidance/rerouting systems, traffic monitoring and management systems, dynamic map updating and various ITS solutions.

The project includes 8 partners. VTI (ECTRI partner from Sweden) is the coordinator.

### **38. INTERGAUGE “Interoperability, Security and Safety of Goods Movements with 1435 and 1520 (1524) mm Track Gauge Railways: New Technology in Freight Transport including Hazardous Products - STREP**

#### ***Call FP6-2003-Transport-3***

The aim of the project is to develop freight movement technologies to enable the interoperability of transport between railways with different gauge widths.

The project includes 11 partners. Warsaw University of Technology (Poland) is the coordinator.

ECTRI partner: CNTK

### **39. WIDEM “Wheelset Integrated Design and Effective Maintenance” - STREP**

#### ***Call FP6-2003-Transport-3***

Combining inputs from reliable service measurement of wheel-rail forces carried out by means of an innovative instrumented wheelset and an extensive assessment of actual material properties, an endurance strength design concept will be developed and validated through a comprehensive testing programme on full-scale wheelset prototypes. A flexible numerical tool is also proposed as an upgrading of existing knowledge.

Additionally, the project will develop and evaluate alternative NDT (non-destructive testing) techniques that allow a greatly increased detection probability and a size estimation of cracks to set up a schedule for NDT periodic inspection. The research work will lead to the definition of wheelset design procedures and maintenance methods to be implemented into existing standards for a quick and easy optimisation of the process.

The project includes 10 partners. Lucchini Sidermeccanica SpA (Italy) is the coordinator.

ECTRI partner: FhG

Website: <http://www.widem.org>

### **40. MODBRAKE “Innovative Modular Brake Concepts for the Integrated European High-speed Railway System” - STREP**

#### ***Call FP6-2005-Transport-4***

During the implementation of the MODTRAIN project, it became clear that this Integrated Project could not address brake-related issues beyond the brake-relevant interfaces in a sufficient appropriate manner, and that there was a strong case for a

separate project dedicated to braking performance, brake modules and their interfaces to TCMS and the other sub-systems of rolling stock.

It is critical to carry out research on braking performance and brake module interfaces, which will enable a comprehensive approach to be applied to modular high-speed trains and universal locomotives.

To reduce this complexity, and therefore the costs of brake systems, the project proposes to develop a modular brake system. The related system specifications will be determined, evaluated and tested to develop a modular brake concept. The standardised modules will be interchangeable in terms of functions and interfaces, but they may still be specific to each manufacturer so as to guarantee future technological progress.

The MODTRAIN consortium therefore proposed to start a MODBRAKE project, which focuses on the braking system starting from the interfaces defined in MODTRAIN. The field of application for MODBRAKE will be the same as for MODTRAIN: TSI high-speed trains and universal locomotives (locos, train sets and EMUs) capable of speeds greater than 190km/h.

The project includes 15 partners. Association of European Railway Industries (Belgium) is the coordinator.

ECTRI partner: POLITO

## **II – Safety projects**

### **41. MARSTRUCT "Network of Excellence on Marine Structures" - NoE**

#### ***Call FP6-2002-Transport-1***

The overall objective of the Network, which has a duration of 5 years, is to improve the safety, effectiveness, reliability, environmental behaviour and comfort of ship structures through the application of advanced structural and reliability assessment within design, fabrication and operation, leading to increased public and commercial confidence in the competitiveness and use of waterborne transportation. This objective will be achieved by strengthening the European competitiveness aiming at a permanent organisation of the type of a virtual institute, which will ensure the integration of the various European groups in a European Centre of Competence for structural analysis of ships with improved safety environmental behaviour and comfort.

The project includes 33 partners. Instituto Superior Técnico (Portugal) is the coordinator.

ECTRI partners: VTT and TNO

Website: <http://www.mar.ist.utl.pt/marstruct>

### **42. DRUID "Driving under the Influence of Drugs, Alcohol and Medicine" - IP**

#### ***Call DGTRN (FP6-2004-TREN-3)***

As consumption of psychoactive substances such as alcohol, drugs and certain medicines are likely to endanger the drivers' aptitude and impaired driving is still one of the major causes for road accidents, some active steps have to be taken to reach the goal of a 50% reduction in the number of road deaths in the EU. The objective of DRUID is to give scientific support to the EU transport policy to reach the 2010<sup>th</sup> road safety target by establishing guidelines and measures to combat impaired driving.

This FERSI project includes 36 partners. BASt (Germany) is the coordinator.

ECTRI partners: DTU Transport, CERTH-HIT, INRETS, ITS, TNO, VTI, CDV, TOI

Website: <http://www.druid-project.eu>

### **43. CAATS "Cooperative Approach to Air Traffic Services" - CA**

#### ***Call DGTRN (FP6-2002-TREN-1)***

The objective of this project is the coordination of processes and methodologies across EC's, FP6 ATM projects in relation to Safety, Human Factors and Validation domains. Best practice from these areas can be identified and brought into the 6<sup>th</sup> Framework Projects (FP). The aim is to provide a coordinated approach by all FP6 projects to achieve the EC's paradigm shift.

The project includes 14 partners. Ingeniera de Sistemas para la Defensa de Espana (Isdefe – Spain) is the coordinator.

ECTRI partner: CDV.

Website: <http://www.caats-isdefe.es>

#### **44. IN-SAFETY “Infrastructure and safety” - STREP**

##### ***Call DGREN (FP6-2002-TREN-1)***

This project aims to address the relation between infrastructure and traffic safety. The project will give better knowledge on how roads could be designed to get safe behaviour and minimise the probability for wrong behaviour. In particular, it aims to use intelligent, intuitive and cost-efficient combinations of new technologies and traditional infrastructure best practice applications, in order to enhance the forgiving and self-explanatory nature of roads. IN-SAFETY ambition is to significantly contribute to road safety enhancement by the optimal and balanced use of available resources.

The project work is based on a balanced amalgam of analysis of previous work results and concept, test and report of innovative concepts, in terms of combinations of new technological elements with traditional road infrastructure. These new concepts, along with promising but as yet untested or under-reported solutions, will be realised and extensively tested in 4 inter-related pilots Europewide, covering all road types and including among others key drivers' cohorts, such as tourists, elderly and novice drivers.

The project includes 30 partners and key subcontractors. CERTH/HIT (Greece) is the coordinator.

ECTRI partners: CDV, KTI, TOI and VTI.

#### **45. RIPCORD “Road infrastructure safety protection-core research and development for road safety in Europe” - STREP**

##### ***Call DGREN (FP6-2002-TREN-1)***

This project shall describe best practice concerning factors as: Indication and analysis of special accidental places, safety inspection on existing roads etc.

This FERSI project with ECTRI members' involvement includes 17 partners. BASt (Germany) is the coordinator.

ECTRI partners: TOI, CDV, CERTH-HIT, KTI.

Website: <http://www.ripcord-iserest.com>

#### **46. RANKERS “Ranking for European Road Safety” - STREP**

##### ***Call DGREN (FP6-2002-TREN-1)***

RANKERS is Europe's most comprehensive research initiative to date on road safety engineering. The overall objective of RANKERS is to develop scientifically researched guidelines on road infrastructure safety enabling optimal decision-making by road authorities in their efforts to promote safer roads and eradicate dangerous road sections. RANKERS is highly innovative in its scope and objectives. The safety analysis will address all types of existing roads (dual-carriageways, motorways, rural and urban roads), integrate human behaviour and vehicle technology considerations and consider both accident prevention and mitigation.

The project's tangible output will include an index used for assessing and monitoring road safety and a catalogue of remedial measures ranked according to their efficiency. Both measures will contribute to the emergence of a European culture of safe road engineering.

The project includes 17 partners. CIDAUT (Spain) is the coordinator.

ECTRI partner: CDV.

#### **47. CAST “implementing mass media campaigns and evaluating their (isolated) effect on traffic accidents and other performance indicators” - STREP**

##### ***Call DG TREN (FP6-2004-TREN-3)***

The CAST project aims at meeting the Commission needs for enhancing traffic safety by means of effective road safety campaigns. CAST will develop evaluation tools and a design tool for road safety mass media campaigns. These tools will enable the EC to design and to implement such campaigns and to evaluate their (isolated) effect on traffic accidents and other performance indicators. CAST will then validate and exploit these tools by testing the evaluation tools on an EU-funded campaign (Euchires) and by using the design tool to design and implement a pan-European campaign to support the implementation of a measure that will recently be taken by the EU at that time.

This FERSI project includes 19 partners. ISBR (Belgium) is the coordinator.

ECTRI partners: TOI, INRETS, VTI, DTU Transport, AVV/DVS, CDV

Website: <http://www.cast-eu.org>

#### **48. PEPPER “Police Enforcement Policy and Programmes on European Roads”**

##### **- STREP**

##### ***Call DG TREN (FP6-2004-TREN-3)***

The PEPPER proposal looks critically at all relevant aspects of enforcement and aims to produce recommendations and tools for the development of more effective and efficient traffic law enforcement (TLE). Speeding, drink driving and use of seat belts are especially targeted. The project views the whole enforcement chain. It recognises the need for improved enforcement data and better understanding of the impacts, and studies the potential of innovative technologies in the different links of the enforcement chain.

This FERSI project includes 17 partners. VTT is the coordinator.

ECTRI partners: CERTH-HIT, CDV, DTU Transport, INRETS, TOI, TRL, UPM, VTI

Website: <http://www.pepper-eu.org>

#### **49. ARCHES “Assessment and Rehabilitation of Central European Highway Structures” - STREP**

##### ***Call FP6-2005-Transport-4***

The overall goal of the project is to reduce the gap in the standard highway infrastructure between Central and Western European Countries (CEEC) – particularly New Member States – and the rest of the EU. This key problem will be addressed by a combined approach:

- developing more appropriate tools and procedures to avoid unnecessary interventions in structures and prevent the development of corrosion by simpler and less expensive techniques
- implement faster, more cost-effective and longer lasting repair or strengthening techniques of sub-standards and unsafe bridges
- aggressive dissemination of the results and general best practice to the key stakeholders

Another important objective of this project is to help society and politicians to understand the need for sustainable maintenance of their road networks, together with their engineering infrastructure; and to help the managers of infrastructure to spend their resources in a more optimal way.

The project includes 11 partners. IBDIM (Poland) is the coordinator.  
ECTRI partner: CDV

## **50. REACT “Realising Enhanced Safety and Efficiency in European Road Transport” - STREP**

### ***Call FP6-2003-Transport-3***

The REACT project will represent a breakthrough towards the long-term vision of reducing traffic deaths significantly and improving transport infrastructure efficiency. Integrating state-of-the-art technologies, REACT will sense natural and infrastructure conditions within and in the vicinity of each equipped vehicle, will transmit sensed real-time data to a central server where they will be analyzed by a set of sophisticated prediction and decision-making models, and will generate 1) safety alerts, speed and route recommendations, to be communicated to specific vehicle drivers; and 2) relevant information for road and law enforcement authorities.

The project includes 10 partners. Motorola Israel Ltd is the coordinator.

ECTRI partner: TNO

Website: <http://www.react-project.org>

## **51. PISa “Powered Two-wheeler Integrated safety” - STREP**

### ***Call FP6-2005-Transport-4***

The aim of the PISa project is to develop and implement "reliable and fail-safe" integrated safety systems for a range of Powered Two Wheelers (PTWs), which will greatly improve the performance and primary safety (handling and stability) and can link to secondary safety devices.

The project includes 10 partners. TNO (The Netherlands) is the coordinator.

ECTRI partner: TRL

Website: <http://www.pisa-project.eu>

## **52. SAFEINTERIORS “Train Interior Passive Safety for Europe” - STREP**

### ***Call DG RTD (FP6-2005-Transport-4)***

This new interior passive safety platform will provide tangible and commercially viable solutions and a systems approach to methodically reduce injuries and fatalities by combining and exploiting in a cost efficient and optimised manner the already well matured railway structural crashworthiness (closely linked with primary collisions events), with injury biomechanics, directly associated with secondary collisions.

The project includes 16 partners. Bombardier (United Kingdom) is the coordinator.

ECTRI partner: INRETS.

Website: <http://www.eurailsafe.net>

## **53. 2TRAIN “Training of Train Drivers in Safety Relevant Issues with Validated and Integrated Computer-bases Technology” - STREP**

### ***Call FP6-2005-Transport-4***

2TRAIN aims at two objectives. The first topic is to reach a maximum utilisation of latest computer-based training technology and to develop a modular platform in order to enable an integration of these technological solutions in existing training environments throughout Europe. The second one is to increase the train drivers'

competency in crisis management by defining and realising appropriate human factor training scenarios that will be evaluated and validated within the demonstration phase.

The project includes 11 partners. The University of Würzburg (Germany) is the coordinator.

ECTRI partner: UPM

Website: <http://www.2train.eu>

#### **54. SAFECOS05 “Safety Competition for Students” - SSA**

***Call DGRTD (FP6-2003-Transport-3 and FP6-2002-Transport-2)***

This project aims to support the work of European students for International conference on road safety, hence stimulating international cooperation.

The project includes 2 partners. ERT (France) is the coordinator.

ECTRI partner: INRETS

#### **55. SAFECOS07 “Safety Competition for Students” - SSA**

***Call DG RTD (FP6-2005-Transport-4)***

This project aims to support the work of European students for International conference on road safety, hence stimulating international cooperation.

The project includes 2 partners. ERT (France) is the coordinator.

ECTRI partner: INRETS

#### **56. ICOMOB “Icebreaker Co-operation on the Motorway of the Baltic Sea” - SSA**

***Call DGRTD (FP6-2003-Transport-3 and FP6-2002-Transport-2)***

The project aims to stimulate international cooperation between Finland, Estonia and Russia with measures to maintain the safety of waterborne traffic through the Baltic Sea in winter conditions. The objectives of the action are to improve the effectiveness of the icebreaker fleet in the Gulf of Finland. The outcome will be new knowledge required for icebreaking assistance in the sea area concerned.

The project includes 3 participants. VTT (ECTRI partner from Finland) is the coordinator.

### **III – Economy projects**

#### **57. TRANSFORUM\* “Scientific Forum on Transport Forecast Validation and Policy Assessment” - CA**

##### ***Call DG RTD (FP 6-2002-SSP-1)***

This project sponsored by ECTRI concerns a co-ordination action that intends to create a virtual transport research forum for on-line discussion. It will facilitate the work of researchers, policy makers and stakeholders brought together in order to check transport policy tools developed by FP- and national research against factors like scientific consistency, transparency and appropriateness to fit policy makers, users' and stakeholders' needs.

The project includes 9 partners. AVV/DVS (The Netherlands) is the coordinator.

ECTRI partners: VTT, UPM, TNO, CERTH/HIT, TRL, CDV and INRETS

Website: <http://www.transforum-eu.net>

#### **58. ENACT “Design of contractual relationships in financing transport infrastructure - STREP**

The project includes 11 partners.

ECTRI common partners: FhG and CDV.

#### **59. HEATCO “Developing Harmonised European Approaches for Transport” - SSA**

##### ***Call FP6-2002-SSP-1***

HEATCO's primary objective is the development of harmonised guidelines for project assessment and transport costing on EU level. This includes the provision of a consistent framework for monetary valuation based on the principles of welfare economics.

The project includes 13 partners. Universität Stuttgart, Institute of Energy Economics and the Rational Use of Energy (IER – Germany) is the coordinator.

ECTRI partners: VTI and TNO.

Website: <http://heatco.ier.uni-stuttgart.de>

## **IV – Energy & environment projects**

### **60. ECO-ENGINES “Energy COnversior in Engines - NoE**

#### ***Call FP6-2002-Transport-1***

The overall aim of ECO-ENGINES is to set up a virtual research centre (VRC) on advanced engine combustion modes for road transport, with special emphasis on optimised alternative and renewable fuels. This VRC will be the result of an integration of the related research activities of major European institutions in the domain, and will include dedicated actions towards education and dissemination. The ambition is to be recognised as a worldwide leader on advanced engine combustion modes.

The project includes 23 partners. The Institut Français du Pétrole (France) is the Coordinator.

ECTRI partner: TNO

Website: <http://project.ifp.fr/eco-engines>

### **61. GREEN “Green Heavy Duty Engine” - IP**

#### ***Call FP6-2003-Transport-3***

The main objective of Green is to perform research, which will lead to sub-systems for a heavy-duty engine. The objectives should be achieved with strict boundary conditions for: 1/ a competitive cost base, and 2/ the highest fuel conversion efficiency of the diesel cycle, to achieve near-zero real-world, including off-cycle, pollutant emissions and significant reductions of CO<sub>2</sub> and other greenhouse gases.

The project includes 29 partners. Volvo Powertrain Aktiebolag (Sweden) is the coordinator.

ECTRI partner: POLITO

### **62. HI-CEPS “Highly Integrated Combustion Electric Propulsion System” - IP**

#### ***Call FP6-2005-Transport-4***

The objectives of the project are to develop three different, innovative, integrated series-parallel full hybrid thermal-electric powertrains utilising low-cost and standardised electric devices, vehicle auxiliaries and dedicated gasoline, diesel and natural gas engines with specific exhaust after-treatment systems and to achieve, at vehicle level, both the environmentally friendly requirements and fun-to-drive characteristics at an acceptable purchasing/operation cost.

The project includes 25 partners. CRF (Italy) is the coordinator.

ECTRI partner: TNO

### **63. CITYMOBIL “Towards Advanced Road Transport for the Urban Environment” - IP**

#### ***Call FP6-2005-Transport-4***

The CityMobil project will validate and demonstrate the capabilities of new mobility solutions in different European cities. In 5 horizontal sub-projects the issues that still prevent full scale implementation of innovative automated transport systems will be investigated and solutions will be developed. The overall objective of this FP6 Integrated Project is to achieve a more effective organisation of urban transport,

resulting in a more rational use of motorised traffic with less congestion and pollution, safer driving, a higher quality of living and an enhanced integration with spatial development. This objective is brought closer by developing integrated traffic solutions: advanced concepts for innovative autonomous and automated road vehicles for passengers and goods, embedded in an advanced spatial setting. The city of tomorrow is in need of integrated traffic solutions that provide the required mobility in an efficient, safe and economic manner. It is inevitable that automation, in all possible forms between providing information at one end of the spectrum and fully autonomous driving at the other, will play a major role. We wish to make significant steps forward that will, on the short to medium term, support a sustainable development of European cities.

The project includes 28 partners. TNO (The Netherlands) is the coordinator.

ECTRI partner: DLR

Website: <http://www.citymobil-project.eu>

#### **64. SLC “Sustainable Production Technologies of Emission-reduced Lighweigh Car Concepts” - IP**

***Call FP6-2003-Transport-3***

The overall objective of the SuperLIGHT-CAR project is the realization of advanced multi-material lightweight vehicle structures achieving:

- 30% weight reduced vehicle structure (Body-In-White)
- Reduction of manufacturing costs and cycle times
- Technologies suitable for large series production (approx. 1000 cars/day)
- Equivalent performance (C-class segment): e.g. crash, fatigue, etc.
- Reduced raw material consumption

The project includes 38 partners. Volkswagen AG (Germany) is the coordinator.

ECTRI partners: FhG, DLR, POLITO and TNO.

Website: <http://www.superlightcar.com>

#### **65. HYSYS “Fuel-Cell Hybrid Vehicle System Component Development” - IP**

***Call HYDROGEN-1***

The goals of the project are:

- the improvement of fuel-cell system components for market readiness
- the improvement of electric drivetrain components (synergies between FC and ICE hybrid) for market readiness
- the optimisation of a system architecture for low-energy consumption, high performance, high durability and reliability
- the optimisation of energy management
- the development of low-cost components for mass production
- the validation of components and system performance on FC vehicles.

The concrete targets of the project are:

- low-cost automotive electrical turbochargers for air supply with high efficiency and high dynamics
- low-cost humidifiers with high packaging density
- low-cost hydrogen sensors for automotive use
- effective low-cost hydrogen supply lines
- highly efficient, high powered density drivetrain
- low-cost, high powered Li-on batteries

- enhanced FC drivetrain efficiency

The project includes 25 partners. DaimlerChrysler (Germany) is the coordinator.

ECTRI partner: TNO.

Website: <http://www.hysys.de>

## **66. HyTRAN “Hydrogern and Fuel-Cell Technologies for Road Transport” - IP**

***Call FP6-2002-Transport-1***

The scope of the HyTRAN project is to advance the fuel-cell technology towards solutions that are commercially viable. This will be demonstrated in two fuel-cell systems. The components and sub-systems are considered as major bottlenecks for fuel cell-based vehicle systems. HyTRAN is therefore largely focused on the development of the necessary components and sub-systems to make them meet the actual requirements derived from the two applications.

The challenges deal with factors such as cost, durability, weight, volume and efficiency which all need to be improved. The project has compiled targets for all these factors, which have to be met for commercial products. Based on the commercial targets, projects targets have been elaborated which would be a leap forward from today's R&D status towards a commercial product. The plan to meet the project objectives leads to the development and innovation on both a component and system level. A multitude of components and sub-systems will be developed and integrated into advanced systems, which will be tested and evaluated.

The project includes 19 partners. Volvo Technology Corporation (Sweden) is the coordinator.

ECTRI partner: POLITO

Website: <http://www.hytran.org>

## **67. SILENCE “Quieter surface transport in Urban Areas” - IP**

***Call DG RTD (FP 6-2003-Transport -3 and FP6-2002-Transport-2)***

This project emphasizes on refining solutions for attenuation at source and considering noise propagation and the potential effect on noise nuisance. The investigations on noise generation in this project related principally to private cars, public transport and heavy rail applications.

This FEHRL project includes 42 partners. AVL LIST (Austria) is the coordinator.

ECTRI partners: TRL, TOI and VTI

Website: <http://www.silence-ip.org>

## **68. QUANTIFY “Quantifying the Climate Impact of Global and European Transport Systems” - IP**

***Call DG RTD (FP 6-2003-Global-2)***

The objective of this project is to quantify the climate impact of global and European transport systems for the present and for different scenarios of the future development."

The project includes 34 partners. DLR-Institute of Atmospheric Physics (IPA) is coordinator and DLR-Transport Research (IVF) is leader for transport activity.

ECTRI partners: DLR, KTI

Website: <http://www.pa.op.dlr.de/quantify/>

## **69. INNOTRACK “Innovative Track System” - IP**

### ***Call DG RTD (FP6-2005-Transport-4)***

InnoTrack brings together rail infrastructure managers (IM) and industry suppliers, the two major players in the rail industry, and concentrates on the research issues that will contribute to the reduction of rail infrastructure Life Cycle Cost (LCC). The EC White paper on Sustainable Transport calls for rail operators to: double passenger traffic & triple freight traffic by 2020 and reduce LCC by 30%. The Railway Business Scenario 2020 also calls for railways to capture 15% of freight & 12% of the passenger market. To achieve these objectives, investment alone is not sufficient, significant innovation and technology transfer is essential. This can only be achieved with very close cooperation between IMs and industry suppliers. It is essential that the IMs, as the end users, set out their priorities and needs, at a European Level, to solve the necessary problems for achieving the white paper objectives.

The project includes 32 partners. UIC (France) is the coordinator.

ECTRI partner: INRETS-LCPC.

Website: <http://www.innotrack.org>

## **70. FELICITAS “Fuel Cell Power trains and clustering in heavy duty transport” - IP**

### ***Call DG RTD (FP 6-2003-Transport -3 and FP6-2002-Transport-2)***

This project aims at developing fuel cell (FC) drive trains fuelled with both hydrocarbons and hydrogen. The proposed development work focuses on producing FC systems capable of meeting the specific demands of heavy-duty transport for road, rail and marine applications.

The project includes 16 partners. FhG (Germany) is the coordinator.

ECTRI partner: INRETS

## **71. DYNAMIS “Towards Hydrogen and Electricity Production with Carbon Dioxide Capture and Storage” - IP**

### ***Call FP6-SUSTDEV***

DYNAMIS responds to the target of "Preparing for large scale H2 production from decarbonised fossil fuels including CO2 geological storage". The main objective is to prepare the ground for large scale European facilities producing hydrogen and electricity from fossil fuels with CO2 capture and geological storage. 29 legal entities have established DYNAMIS, encompassing 4 European fossil fuel end users, 3 fossil fuel producers, 6 technology providers, 1 engineering- and 1 financing group together with 14 R TD providers. The group gathers the critical mass required to undertake such a task. DYNAMIS is designed as an element of the HYPOGEN project, part of the European Commission's Quick-Start Programme within the Initiative for Growth. The HYPOGEN project includes as an interim step the construction of a large-scale facility for the production of hydrogen and electricity from decarbonised fossil fuels with CO2 storage. DYNAMIS is the first step on that route, designed to rank the options and to reduce the risk in development of a fullscale pilot plant post-2008. DYNAMIS is organised as an integrated project (IP). The RTD activities are structured in 5 sub projects that directly meet the stated objectives of the Work Programme: \* SP2 Power plant and capture technology \* SP3 Product gas handling (H2 and CO2) \* SP4 Storage of CO2 \* SP5 Planning and pre-engineering of plants \*

SP6 Societal anchorage of a HYPOGEN demonstration DYNAMIS will, in compliance with the stated objectives of the Work Programme: \* deliver appropriate information and provide recommendations for potential technologies, plants and sites for large scale hydrogen production with CO<sub>2</sub> management from fossil fuels at a level intended for pursuing the pilot phase of HYPOGEN \* provide a framework for legal, financing and public perception of a HYPOGEN demonstration \* generate, exploit and disseminate new knowledge that contributes to the implementation of the EU energy and research policy.

The project includes 29 partners. SINTEF ENERGIFORSKNING A/S (Norway) is the coordinator.

ECTRI partners: FhG-ISI and TNO

## **72. AUTOBRANE “Automotive high temperature fuel cell membranes” - IP**

### ***Call FP6 - SUSTDEV***

AUTOBRANE is an interdisciplinary project funded by the European Commission within FP6 work programme with clear focus on material research and development driven by automotive application needs in order to overcome existing technological barriers for the introduction of proton exchange membrane fuel cells (PEMFC) to the market. As one of the major hurdles for PEMFCs to become an affordable commodity in the long-term, the automotive industry has identified the material properties of the polymer electrolyte membrane itself which limits fuel cell operation in terms of operating temperature and humidification conditions. Thus, the optimal strategy to overcome the technological barriers is, in the view of the proponents, to integrate Europe’s fuel cell polymer synthesis and membrane development expertise into one effort focusing on fundamental material research and further development, particularly of the polymer electrolyte membrane but also the catalyst and the membrane electrode assembly (MEA), validate these in lab-scale fuel cell setups and demonstrate in an appropriate stack arrangement under relevant conditions. Testing and validation will be conducted at experienced institutes. Europe’s automotive companies will provide advice and information on realistic operation conditions of automobiles. The final target of the project is the development of a membrane-electrode-assembly technology and its demonstration in a state of the art stack adapted to the higher temperature demands. The clear focus of the project is on proof-of-concept of the new membrane and MEA technology in a stack with realistic cell areas and a representative level of power.

The project includes 27 partners. DaimlerChrysler (Germany) is the coordinator.

ECTRI partner: DLR.

## **73. HERCULES ”High-efficiency Engine R&D on Combustion with Ultra-low Emissions for Ships” - IP**

### ***Call FP6-2002-Transport-1***

HERCULES aims to push the limits of marine engine expertise. The focus of the project is on the development of a future generation of optimally marine power plants. The project includes 41 partners. ULEME E.E.I.G. (Germany) is the coordinator.

ECTRI partners: DLR and VTT

Website: <http://www.ip-hercules.com>

#### **74. MC-WAP "Molen-carbonate fuel Cells for Waterborne Application" - IP**

##### ***Call HYDROGEN-1***

The main objective of the MC-WAP project is the development, construction, installation onboard ship and testing of a 500KWe APU based on molten carbonate fuel cells (MCFC). This ambitious goal perfectly fits the requirements of the Joint Call FP6-2004-Hydrogen regarding an IP instrument to cover "Generic RTD on components and systems development and integration for fuel cell systems... for auxiliary power units (APUs) in the power range 100kW to 500kW for... ships" This challenge has never been attempted before on such a large scale and with a molten carbonate (MC) fuel cell technology).

The project includes 14 partners. CETENA S.p.A (Italy) is the coordinator.

ECTRI partner: POLITO

#### **75. STEPS "Scenarios for the Transport System and Energy Supply and their Potential Effects" - CA**

##### ***Call DG RTD (FP6-2002-Transport 1 & 2)***

STEPS has the following overall objective: to develop, compare and assess possible scenarios for the transport system and energy supply of the future taking into account the state of the art of relevant research within and outside of the 6th RTD Framework and such criteria as the autonomy and security of energy supply, effects on the environment and economic, technical and industrial viability including the impact of potential cost internalisation and the interactions between transport and land use.

The project includes 14 partners. The coordinator is BCI (The Netherlands).

ECTRI partner: UPM

#### **76. SPREEX "Spill Response Experience" - CA**

##### ***Call FP6-2003-Transport-3***

The SPREEX project intends to assemble existing experience from oil spill response.

The main aims of the project are the following:

- identify research needs to achieve a fast and effective response,
- propose clusters in order to create synergies with existing or on-going research projects included in different research programmes,
- generate synergies that may lead to new projects and partnerships between authorities and regulators, end users, universities and researchers.

The project includes 23 partners. Puertos del Estado (Spain) is the coordinator.

ECTRI partner: CEDEX

Website: <http://www.spreeex.net>

#### **77. GRACE "Generalisation of Research on Accounts and Cost Estimation" - STREP**

##### ***Call DG TREN (FP6 2003-TREN-2)***

The project aims to support the development of sustainable transport systems by facilitating implementation of transport pricing systems that reflect the costs of infrastructure use. Continuing the research started in the UNITE project, marginal

cost case studies accompanied by transport accounts and modelling exercises to assess the broad socio-economic impacts of transport pricing reform will be carried out. Transparent methods for determining charges will be developed and recommendations for European transport policy will be made.

The coordinator is ITS Univ. of Leeds (United Kingdom).

ECTRI partner: VTI.

## **78. SEFA "Sound Engineering For Aircraft" - STREP**

***Call DG RTD (FP6-2002-Aero-1)***

The aim of SEFA is to develop technology design criteria (Sound Engineering) based on a thorough assessment of which characteristics would make aircraft more acceptable for airport communities from noise signature standpoint (spectral and directivity shapes, impact of separation time), addressing from a complementary perspective the concerns of close communities (peak periods of activities with short separation time), distant ones (high altitude traffic with low background noise) and disturbance from night operations.

The project includes 20 partners.

ECTRI partners: DLR and INRETS.

## **79. SUPERPROP "Superior Lifetime Operation Economy of Ship Propellers" - STREP**

***Call FP6-2003-Transport-3***

The project is focussed in obtaining the optimum method for updating old ship propellers from technological and economic points of view, in order to improve the fuel consumption rates and reduce the maintenance costs. The objectives of SUPERPROP are :

- most fixed pitch propellers installed on ships are Marin B-series. Results from methods for recovering shaft speed to the whole B-series calculated using CFD codes and model tests will be obtained, as well as cavitation predictions.
- development of an economic strategy to predict the profitability of propulsion updating in old fleets.
- improvement of the knowledge about the state of the art in old ships propulsion and their ageing.
- thrust the knowledge in correlation methods to extrapolate results obtained from model testing to full scale.
- to apply CFD codes to predict propeller behaviour, to collate computational and model testing results and to estimate prediction accuracy of both methods.

The project includes 9 partners. UPM (Spain) is the coordinator.

ECTRI partner: VTT

Website: <http://canal.etsin.upm.es/superprop>

## **80. CREATING "Concepts to reduce environmental impact and attain optimal transport performance by inland navigation" - STREP**

***Call FP6-2002-Transport-1***

Creating aims at stimulating waterborne transport in an economical way, by giving new impulses to inland navigation. Whereas the hinterland transport of maritime

cargo such as maritime containers already takes place via inland waterways to a large extent, continental cargo is almost completely transported by road.

The project includes 23 partners. Stichting Projecten Binnenvaart (The Netherlands) is the coordinator.

ECTRI partner: TNO

Website: <http://www.creating.nu>

## **81. SAFECRAFTS “Safe Abandoning of Ships – Improvement of Current Lifesaving Appliances Systems” - STREP**

### ***Call FP6-2002-Transport-2***

This project is emphasising on the rescue process by both quantifying the performance of the LSAs and improving the concept of reaching the rescue vessel in a safe and reliable manner. The challenge is to exploit a first principles approach (regarding hydromechanics, mechanics, human behaviour, quantitative risk assessment and emergency management) in the design of rescue systems for passengers and crew, addressing both hardware and procedures/management. Aim must be to prove attained safety levels acceptable to the EU community. Stated safety levels must be supported by sound scientific evidence. In this respect physical model tests and full scale tests will play a decisive role.

The project includes 18 partners. TNO (The Netherlands) is the coordinator.

Website: <http://www.safecrafts.org>

## **82. EU-MOP “Elimination Units of Maritime Oil Pollution” - STREP**

### ***Call FP6-2003-Transport-3***

There is an existing and direct need for continuous renovation of the relative anti-pollution methodologies and equipment, always striving to minimise or eliminate the adverse effects an oil spill has on the environment. Such a goal must be incorporated in all hierarchical levels, at the same time taking all necessary legislative and surveillance measures to prevent the emergence of oil spills in the first place. However, it is an undisputed fact that as long as oil-carrying vessels sail the seas, tons of oil will eventually end up in the seawater. In effect, and taking into account the increase of oil-related traffic of recent years, efficient operational techniques that allow for the control and the elimination of observed oil spills are imperative. In this context, the research objectives of the EU-MOP project are to establish:

- innovative technologies in oil spill management
- pioneering devices/units for oil spill response
- an integrated framework for oil spill management
- an advanced structure for the dissemination of oil pollution response policies. Moreover, validation, proof of concept and virtual (simulation) experiments are included in the project.

The project includes 13 partners. National Technical University of Athens (Greece) is the coordinator.

ECTRI partner: FhG

Website: <http://www.eumop.org>

### **83. HYHEELS “Optimisation of Hydrogen-powered Internal Combustion Engines” - STREP**

#### ***Call HYDROGEN-1***

The detailed scientific and technical objectives are the result of a thorough analysis of the challenges in the energy supply architecture of hybrid and hydrogen fuel-cell vehicles. A hydrogen fuel cell has to be provided with power and energy during the start up phases as well as continuously during operation. High power is needed for the acceleration of the vehicle and for high power auxiliary fuel cell loads like the compressor. A powerful and reliable energy supply is crucial to fulfil the requirements of the future passenger car generation, which will be powered by hydrogen and fuel cell. These could have high-power charge and discharge conditions as well as operating at low temperature. UltraCaps could fill the power gap. The approved UltrCap storage technology is available but needs to be adapted to future automotive hybrid and hydrogen applications, satisfying the demands on cost efficiency, safety and reliability.

The project includes 12 partners. Siemens AG (Germany) is the coordinator.

ECTRI partner: DLR.

### **84. SPENS “Sustainable Pavements for EU New Member States” - STREP**

#### ***Call FP6-2005-Transport-4***

The objective of this research project is to develop appropriate tools and procedures for the rapid and cost-effective rehabilitation and maintenance of roads in the EU New Member States (NMS). The overall objective is to search for materials and technologies for road pavement construction and rehabilitation that would:

- behave satisfactorily in a typical climate,
- have an acceptable environmental impact,
- be easy to incorporate within existing technologies,
- be cost-effective and easy to maintain.

The project includes 10 partners. Zavod za Gradbeništvo Slovenije (Slovenia) is the coordinator.

ECTRI partners: KTI, VTI, CDV.

Website: <http://www.spens.fehrl.org>

### **85. TOP EXPERT “Tailored on-board activated agents production for exhaust after treatment performance enhancement” - STREP**

#### ***Call FP6-2005-Transport-4***

The specific objective of the proposal is to develop, procure and test the needed components and integrated systems, in order to achieve the following targets:

- EuroV (and beyond) emission levels for passenger cars, particularly in terms of NO<sub>x</sub> emission
- low fuel/energy penalty (<2%)
- compatibility with the engine and vehicle systems
- system operation and maintenance that is fully transparent to the vehicle user
- cost-competitive system with a complete state-of-the-art after-treatment system.

From the outset, system integration is the leitmotiv of the project. The system will have to be an automotive one, and this will be ensured by a partnership strongly

focused on automotive exhaust technology development, manufacturing and application. Efforts will be made to improve each single component of the pursued integrated technology. A scientific and rigorous approach will be followed:

- lab-scale testing of single devices and of pre-prototype assemble systems
- scale-up testing of both systems on the engine bench
- vehicle testing in real conditions for final assessment of the most promising technology.

The project includes 7 partners. CRF Società Consortile per Azioni (Italy) is the coordinator.

ECTRI partner: POLITO

## **86. HOPE “High Density power electronics for FC- and ICE- Hybrid Electric Vehicle Powertrains” - STREP**

***Call DG TREN (FP6-2004-Hydrogen-1)***

The project HOPE is addressing power electronics. It is based on previous EU research projects like the recently finished FP5 HIMRATE (high-temperature power modules), FP5 PROCURE (high-temperature passive components), and MEDEA+ HOTCAR (high-temperature control electronics) and other EU and national research projects. The general objectives of HOPE are:

- cost reduction,
- meet reliability requirements,
- reduction of volume and weight.

This is a necessity to bring the Fuel Cell (FC) hybrid vehicles and Internal Combustion Engine (ICE) hybrid vehicles to success.

The project includes 14 partners. Siemens Corporate technology (Germany) is the coordinator.

ECTRI partners: INRETS and FhG

Website: <http://www.fp6-hope.eu>

## **V – Urban mobility projects**

### **87. CONNECT “Co-ordination of Concepts for New Collective Transport” - CA**

#### ***Call DG RTD (FP6-2002-Transport 1 & 2)***

The project aims for the development of knowledge repository for new forms of both freight and passengers collective transport, at the European level.

The project includes 23 partners. University of Newcastle (United Kingdom) is the coordinator.

ECTRI partner: VTT

### **88. BESTUFS II “Best Urban Freight Solutions II” - CA**

#### ***Call DG TREN (FP6-2002-TREN-1)***

This project is a follow-up initiative of the thematic network BESTUFS and aims to maintain and expand an open European network between urban freight transport experts, user groups/associations, ongoing projects, the relevant European Commission Directorates and representatives of national, regional and local transport administrations and transport operators in order to identify, describe and disseminate best practices, success criteria and bottlenecks with respect to City Logistics.

The project includes 8 partners. PVT Planing Transport Verkehr, AG (Germany) is the coordinator.

ECTRI partner: CDV.

Website: <http://www.bestufs.net>

### **89. SPUTNIC “Strategies for Public Transport in Cities” - CA**

#### ***Call DG TREN (FP6-2004-TREN-3)***

SPUTNIC focuses on local and regional public transport (PT). SPUTNIC builds on the outcome of the VOYAGER project and pays special attention to PT-related challenges in the New Member States. While the VOYAGER project aimed at general analysis and provided overall recommendations, SPUTNIC will take up the most urgent challenges identified and provide more specific guidance. SPUTNIC will help PT actors and decision makers to shape PT into an attractive and efficient mode of urban transport.

The project includes 16 partners. UITP (Belgium) is the coordinator

ECTRI partner: VTI.

Website: <http://www.sputnicproject.eu>

### **90. EURFORUM\* “European research forum for urban mobility” - CA**

#### ***Call DG RTD (FP6-2005-Transport-4)***

The objective of EURFORUM is to create a forum at the European level, effectively representing stakeholders of European research on urban mobility, including representatives of local authorities, public transport associations, research bodies, etc. It will focus on a better and more innovative coordination of research serving urban mobility of people and goods. This forum will provide re-commendations for the coordination of European research on urban mobility issues in order to: help structure the supply side of European research in this field; pave the way to make Europe a real competitive global player in the field of urban mobility; reduce the overall cost of

urban mobility; increase the attractiveness of public transport, walking and cycling, while encouraging a more rational use of motorised traffic. EURFORUM covers all private and public transport modes and focuses both on technology-oriented and on policy-oriented research. The project pays special attention to urban mobility challenges in the New Member States.

ECTRI is involved as partner of the project.

Website: <http://www.eurforum.net>

## **91. LITEBUS “Modular Lightweight Sandwich Bus Concept” - STREP**

### ***Call FP6-2005-Transport-4***

The main goals of the project are the Reduction of Weight and Production Costs through:

- development of a new concept “all composite sandwich material “for the production of structurally resistant modular panels for the construction of “Body in White” structures, reinforced with fibre reinforced pultruded sections (FRP) sections.
- development of a new radical concept vehicle architecture where “load carrying modular sandwich panels” are used instead of the traditional spaceframe structure (in steel or aluminium) lined with sheets of steel or aluminium. The use of sandwich construction and composite materials means that a higher functional integration will be achieved through the incorporation, in the structure, at manufacturing stage of several functions, allowing more efficient space usage and cost efficient manufacturing.

The project includes 13 partners. Instituto de Engenharia Mecânica e Gestão Industrial (Portugal) is the coordinator.

ECTRI partner: UPM

Website: <http://www.litebus.com>

## **92. SPURT “Seamless Public Urban Rail Transport” - STREP**

### ***Call FP6-2002-Transport-1***

It is mandatory to solve some major track-related problems before being able to increase the technical harmonisation for vehicles and hence the potential of these vehicles to be used in other cities. The advantages will be enormous: higher residual value of vehicles, higher scope for vehicle leasing, higher vehicle production series and hence reduction of manufacturing cost and production lead times. The major track-related problems which are to be identified and solved are:

- the reduction of the track degradation in time for ensuring a minimum track quality level
- the avoidance of derailment for ensuring safety at all times
- the improvement of the wheel/rail interface for reducing maintenance
- the minimisation of noise and in particular structure-borne noise and vibrations.

The study (problem identification and solution) of the above problems is the scope of this project. Solutions will be sought which are effective for existing and future vehicle types, albeit that some vehicles (wheel set) adaptations might be recommended or required. The project includes 9 partners. FhG (Germany) is the coordinator.

Website: <http://www.lbf.fhg.de/SPURT>

**93. EUROACCESS\* “For a European Accessibility of public transport for people with disabilities” - SSA**

The objective of this project is to contribute to the development of the EU policy on the accessibility of the transport systems in the 27 member states, and 1 EFTA country, in order to promote social integration and active participation in society of people with disabilities.

The project includes 7 partners. INRETS (France) is the coordinator

ECTRI partner: TØI.

## **VI – Transversal projects**

### **94. EURNEX\* “European Rail Research Network of Excellence” - NoE**

#### ***Call DG RTD (FP6-2002-Transport-1 & 2)***

The objective is to create a durable integrated network of excellence in rail research, technology innovation and knowledge management from the research capacities of universities and institutions, implementing knowledge from rail operators, rail industry including SME, with priority given to engineering interfaces and methods for product qualification in line with ERRAC's SRRA.

The project includes 70 partners and the consortium includes 28 partners. FAV Berlin (Germany) is the coordinator.

ECTRI partners: INRETS, FhG, DLR, CERTH/HIT, DTU Transport, VTI, VTT, UPM, CNTK

Website: <http://www.eurnex.net>

### **95. FREIGHTWISE “Management Framework for Intelligent Intermodal Transport” - IP**

#### ***Call DG TREN (FP6-2004-TREN-3)***

FREIGHTWISE is an integrated project within the EU's 6th Framework Programme that aims at bringing together three different sectors: Transport Management: shippers, forwarders operators and agents; Traffic and Infrastructure Management: Rail, Road, Sea, Inland waterways; Administration: Customs, Border Crossing, Hazardous Cargo, Safety and Security. The FREIGHTWISE project will support the co-operation of these sectors in order to develop and demonstrate suitable intermodal transport solutions in a range of business cases. The project shall support the complex service integration into integrated transport chains. The technical expertise in the project will focus on the development of a reference architecture for intermodal transport and the integration of relevant IT systems including legacy systems in the business cases.

The project includes 55 partners. BMT Ltd (United Kingdom) is the coordinator.

ECTRI partner: CDV

Website: <http://www.freightwise.info>

### **96. QCITY “Quiet City Transport” - IP**

#### ***Call FP6-2003-Transport-3***

QACITY proposes a range of measures and solutions that can realistically be integrated both from an economic, as well as a practical, point of view in the action plans, which the cities will have to produce as a consequence of the EC Noise Directive 2002/49/EC. QACITY starts with the identification of hot spots on existing noise maps from a large number of cities. Some noise hot spots are then researched in detail with specific software in order to find the root cause of the problems. Various solutions will be studied for each of the selected hot spots and their effects determined, also considering the number of people affected and the degree of impact. Besides addressing transport noise problems with conventional technical solutions, QACITY incorporated issues such as traffic control, town planning, architectural features, noise perception issues, intermodal transport, change between transport modes, traffic restrictions, enforcement measures, economic incentive

measures, introduction of hybrid vehicles and new guided public transport vehicles. In the first phase, the emphasis will be on noise mapping, and the conceptual design of the considered solutions and their potential impact. In the second phase, the most promising solutions will be designed in detail for a specific hot-spot problem selected in each participating city. The solutions will be implemented "in situ" and validated. The project included 27 partners. CEO Nilsson Nils-Ake (Sweden) is the coordinator. ECTRI partner: TNO

## **97. PROMIT "Promote innovative intermodal freight transport" - CA**

### ***Call DG TREN (FP6-2004-TREN-3)***

PROMIT is the European Coordination Action (CA) for intermodal freight transport initiating, facilitating and supporting the coordination and cooperation of national and European initiatives, projects, promotion centres, technology providers, research institutes and user groups related to this most complex transport form. The strategic PROMIT objective is to contribute to a faster improvement and implementation of intermodal transport logistics technologies and procedures and to help promoting intermodal transport and mode shift by creating awareness on innovations, best practices and intermodal transport opportunities for potential users as well as for politicians and for the research community.

The project includes 9 partners. PTV Planung Transport Verkehr AG (Germany) is the coordinator.

ECTRI partners: CERTH-HIT, VTT, TNO, VGTU-TMI.

Website: <http://www.promit-project.com>

## **98. COUNTERACT "Cluster Of User Networks in Transport and Energy Relating to Anti-terrorist ACTivities" - CA**

### ***Call DG RDT (FP6 2004-SSP-4)***

Critical transport and energy infrastructures are those which, if disrupted as a result of a terrorist attack, would have an impact on a regional, national or international scale on communities and economies. Such an attack could be co-ordinated, disrupting several infrastructures directly or through cascade effects. The COUNTERACT proposal is aimed at assessing and recommending feasible and cost effective solutions for the improvement of security in key sectors of critical infrastructure, urban public transport, long distance passenger transport, air transport, maritime transport, freight transport and energy.

The project includes 16 partners. UITP (Belgium) is the coordinator.

ECTRI partner: VTI.

Website: <http://www.counteractproject.eu>

## **99. SELCAT "Safer European Level Crossing Appraisal and Technologies" - CA**

### ***Call DG RTD (FP6-2005-Transport-4)***

It aims actively to contribute to the reduction of level crossing accidents by the collection, analysis and dissemination of existing research results and the stimulation of new knowledge exchange in the area of level crossing safety. It intends to create workshops whereby European partners, in the rail and road sectors, can make a significant contribution to the reduction of accidents, injuries and fatalities at level crossings by understanding and codifying existing and planned research, comparing

and harmonising data sources, exploring new technologies and harnessing appraisal techniques. The activities of SELCAT should lead directly to the improvement and expansion of intermodal collaboration between the road and rail sectors.

The project includes 19 partners. TUBS - Technical University of Braunschweig, Institute for Traffic Safety and Automation Engineering (Germany) is the coordinator.

ECTRI partners: INRETS, CNTK, DLR and VTT.

Website: <http://www.levelcrossing.net>

#### **100. LINK “European Forum for Intermodal Passenger Travel” - CA**

The objectives of the LINK project are to provide a European forum for intermodal passenger travel and to foster the integration of passenger intermodality policies and facilitate co-operation for intermodal solutions.

The project includes 17 partners.

ECTRI partners: CEDEX and VTI.

Website: <http://www.linkforum.eu/>

#### **101. TRAIN ALL “Integrated system for driver Training and Assessment using Interactive education tools and New training curricula for ALL modes of road transport” - STREP**

***Call DG RTD (FP6-2005-Transport-4)***

TRAIN-ALL aims to develop a computer-based training system for different land-based drivers cohorts that integrates multimedia softwares, driving simulator, virtual driving simulator and on-board vehicle sensors into a single modular platform. The new system will be adequate for training and assessment. The core developments will focus on driving simulators, with several prototypes development. New simulation tools will be developed for motorcycle riding, passenger car (novices and emergency drivers) and truck driving. The new tools include also VR-based immersive simulation tools, as well as a common architecture (ontologies-based) and a modular simulator design process for multi-user groups.

The project includes 17 partners. CERTH-HIT (Greece) is the coordinator.

ECTRI partners: INRETS, TNO, TRL AND VTI.

Website: <http://www.trainall-eu.org>

#### **102. KITE “Knowledge base for Intermodal Passenger Travel in Europe” - STREP**

The main objective of the KITE project is the provision of a Knowledge Base on intermodal travel in Europe. This Knowledge Base shall comprise all relevant information about passenger intermodality, can easily be accessed and allows stakeholders to develop and evaluate intermodality-related measures. It will allow to integrate and to disseminate currently existing and future information and data.

The project includes 9 partners. STRATA GmbH (Germany) is the coordinator.

ECTRI partners: CDV and INRETS

Website: [http://129.13.189.198/kite/cms/index.php?option=com\\_frontpage&Itemid=1](http://129.13.189.198/kite/cms/index.php?option=com_frontpage&Itemid=1)

### **103. FIDEUS “Freight Innovative Delivery in European Urban Spaces” - STREP Call FP6-2003-Transport-3**

FIDEUS proposes a new approach to the freight delivery through three types of actions:

- the development of a complementary set of vehicles and equipment, specially conceived for undertaking urban deliveries and collection,
- the proposal of anew approach to the organisation of urban logistics, involving the coordinated use of different vehicle types, and innovative goods container and support systems to improve the management of delivery operations,
- the provision of tools and information, which will give practical support to city authorities in the planning and management of strategies for dealing with urban delivery traffic.

The project includes 13 partners. CRF (Italy) is the coordinator.

ECTRI partner: FhG

Website: <http://www.fideus.org>

### **104. TRIAS “Sustainability Impact Assessment of Strategies Integrating Transport, Technology and Energy Scenarios” - STREP**

#### ***Call FP6-2003-Transport-3***

The TRIAS project combines qualitative scenarios on potential technological developments with quantitative modelling approaches that enable to incorporate various possible technology trajectories. The results of the models are used to perform a Sustainability Impact Assessment based on indicators from various fields like change of GDP or employment over 30 years time horizon, change of passenger and freight transport demand or change of resource use (e.g. primary energy) and environmental impacts of transport.

The project includes 4 partners. FhG (Germany) is the coordinator.

Website: <http://www.isi.fhg.de/TRIAS>

### **105. CarCIM “Integration of Two-component Ceramic Injection Moulding for Large-scale Production of Novel Multifunctional Ceramic Components for Automotive and Railway Applications” - STREP**

#### ***Call FP6-2005-Transport-4***

The main goal of the project is the development of novel ceramic components with a high degree of functionnality, longer life cycles and shorter production times, which can be easily implemented into automotive and railway systems. For achieving this main goal, the following objectives must be attained:

- adaptation of powder surface properties to the requirements of feedstock production
- development and supply of new feedstock suitable for low/high pressure 2C-CIM and an environmentally friendly debinding process
- development and supply of material combinations for co-debinding and co-sintering processes
- using simulation techniques for a more flexible and cost-saving production of 2C-CIM parts enclosing simulation tools for the complete processing chain, i.e. tool design, injection moulding, debinding and co-sintering
- developing and providing advanced debinding and sintering concepts for 2C-CIM parts

- improving tool making technologies for 2C-CIM tools with tight tolerances and high precision without reworking
- development of high-throughput 2C-CIM processes for prototype multifunctionnal ceramic parts
- introduction of new advanced ceramic components with complex shape and combined functionalities
- development of prototype systems for testing the developed automotive parts.

The project includes 13 partners. FhG (Germany) is the coordinator.

## 106. EXTR@web II “EXploitation of TRansport Research Results via the Web II”

- SSA

### *Call DG TREN (FP6-2004-TREN-3)*

The overarching goal of EXTR@Web II is to disseminate and promote the results of transport research conducted in the Framework Programmes, in the European Research Area and beyond. The three key objectives are to enhance and maintain the web-based Transport Research Knowledge Centre (TRKC), providing structured and timely access to information on EU, national and international transport research activities and results; to provide focused aggregated analysis of transport research results against a thematic structure and emerging policy priorities; and to stimulate innovation in transport by accelerating the application of research results through extended networking.

The project includes 6 partners. GOPA – Cartermill (Belgium) is the coordinator.

ECTRI partner: CDV.

## 107. NET-TRACK\* “Networking Transport Research Resources, Competencies and Knowledge within the new boundaries of European Research Area” - SSA

### *Call DG RTD (FP 6-2003-Transport-3 and FP6-2002-Transport-2)*

The main objective of NET-TRACK is to contribute to the realisation of the European Research Area (ERA) in the field of surface transport by involving leading research Institutes of New Member States (NMS), Acceding Countries (AC) and Western Balkan Countries (WBC) in current European research efforts.

The NET-TRACK project has two major goals: 1). It aims at exchanging experiences in the field of research management, with focus on programme and project management, between organisations from Members States (MS) and identified organisations from NMS, AC and WBC. Specific attention will be given to the management of Framework programme related research. 2) The co-operation related to a major resource research institutions rely on when carrying out their work: the so-called ‘soft infrastructures’. The soft research infrastructures include datasets, libraries and informational databases or networks. This activity aims at analysing how this resource is organised and managed, exchanging best practises and laying the foundation for a possible harmonized use and exchange of this resource.

ECTRI project where INRETS, CDV, KTI, VTI and DLR are directly involved

Website: <http://www.ectri.org/nettrack>

## **108. CENTRAL LOCO “Central European Network for logistics Competence” - SSA**

### ***Call DG RTD (FP 6-2003-Transport-3 and FP6-2002-Transport-2)***

The aim of the CENTRAL LOCO project is to promote dissemination and exploitation of the results of the 5th and 6th Framework Programmes RTD projects among the enterprises and research units operating in the Central-European logistics and transport sector.

The project includes 4 participants. Instytut Logistyki i Magazynowania (Poland) is the coordinator.

ECTRI partners: CDV and KTI.

Website: <http://www.centralloco.net>

## **109. MOTOS “Transport modelling: Towards operational standards in Europe” - SSA**

The high level objective of the MOTOS project is to support transport policy in Europe, by defining common good practice principles for national and regional transport modelling that satisfy immediate needs of model developers in the new Member States and contribute to the establishment of a standardized approach for transport modelling in the European Union. The MOTOS project puts considerable effort into determining user needs from model developers and policy makers. This user needs analysis is reinforced by targeted workshops in the new member states. In continuation, MOTOS identifies and describes best practices and common pitfalls in setting up, enhancing and linking national and regional transport models. Common best practice principles are defined for the most important processes identified in the user needs analysis.

The project includes 9 partners. Goudappel Coffeng BV (The Netherlands) is the coordinator.

ECTRI partners: DTU Transport, TNO and VGTU-TMI.

Website: <http://www.motosproject.eu/>

## **110. TRANSGEN “Gender Mainstreaming European Transport Research and Policies” - SSA**

### ***Call FP6-SOCIETY SOCIETY Science and Society***

The SSA is intended to work up the knowledge base for future research and interventions in the FP7 by linking gender mainstreaming and the thematic area of transport. The aim is to develop gender mainstreaming in the field of transport as a research strategic and political approach and make it more sustainable and complying with overall EU aims of promoting equality between men and women in all its activities.

The University of Copenhagen – Department of Sociology (Denmark) is the coordinator.

ECTRI partner: TØI

Website: <http://www.sociology.ku.dk/koordinationen/transgen>

### **111. TRANS-AID\* “Transfer of Knowledge in Transport Infrastructure Financing” - TOK**

The ultimate objective of the project is the reinforcement of the research potential and competence of the Budapest University of Technology and Economics (BUTE) and its Department of Transport Economics in particular, in the research topic “transport infrastructure financing”. The project will give the opportunity to one of the new countries which recently joined the enlarged European Union, Hungary, to develop new areas of expertise and enhance the knowledge in one of its most well-known universities, in a transport-related research topic that can play a determinant role in the country’s economic development.

3 Partners including two ECTRI members: CERTH-HIT and INRETS. The Coordinator is BUTE (Hungary)

**DG RTD (FP6-2002-Mobility-3)**

### **112. TiTAM\* “Transport Infrastructure Technologies and Management - TOK**

3 partners including CDV and TRL

**DG RTD (FP6-2002-Mobility-3)**

The ultimate objective of the TiTAM project is to reinforce the research potential and competence of the Centrum dopravního výzkumu (Transport Research Centre - CDV), in particular, its Department of Infrastructure in the research area “Transport Infrastructure Technologies and Management” (TiTAM). This will be achieved through the mobilization of researchers to and from CDV, in close co-operation with two leading EU transport research institutes: the Bundesanstalt für Straßenwesen (Federal Highway Research Institute – BASt; Germany) and the Transport Research Laboratory (TRL; United Kingdom).

### **113. VUDEGFEM “Vulnerable road users: detailed geometry and finite element models for impact conditions” - IRG**

INRETS is partner of the project

**DG RTD (FP6-2002-Mobility-3)**

## **B – COST actions**

- 1. WATCH - COST action n° 355 "Changing behaviour towards a more sustainable transport system".** This action consists in analysing the conditions under which the process of growing unsustainable transport demand could be reversed, by changing travellers', shippers' and carriers' behaviours. This action includes the following ECTRI members: CDV, CERTH/HIT, DLR, DTU Transport, INRETS (Coordinator), POLITO, TØI, UPM, VTT and VÙD.
- 2. EST - COST action n°356 "Towards the definition of a measurable environmentally sustainable transport"** This action consists in designing harmonised and scientifically sound methods to build better environmental indices (or indicators) by using existing European indices, and to build methods to be applied to the decision-making process of the transport sector in the different European countries. This action includes the following ECTRI members: DLR, DTU Transport, INRETS (Coordinator), KTI, POLITO, TØI, TRL, UPM and VTI. <http://cost356.inrets.fr/>
- 3. PROHELM - COST action n° 357 "Accident Prevention Options with Motorcycle Helmets".** The main objective of this action is to increase knowledge on how motorcycle helmets could be improved to help facilitate the avoidance of accidents. This action includes INRETS. <http://www.cost357.org/>
- 4. PQN - COST action n°358 "Pedestrians' Quality Needs".** The main objective of this action is to provide an essential contribution to systems knowledge of pedestrians' quality needs and the requirements derived from those needs, thus simulating structural and functional interventions, policy making and regulation to support walking condition throughout the EU and other involved countries. This action includes the following ECTRI members: AVV/DVS (Coordinator), CDV, INRETS, TNO, TØI and VTT. <http://www.walkeurope.org/>