



**CLEPA**  
European Association of  
Automotive Suppliers

# ERTRAC

## Madrid

## 16 February 2007





**CLEPA**  
*European Association of  
Automotive Suppliers*

# European Road Transport Research Advisory Council

**..towards a greener, safer and smarter  
European Road Transport System**

---

## National Trade and sectoral Associations:

✳ **ACMA** (India)

✳ **ACS** (Slovenia)

✳ **AFIA** (Portugal)

✳ **AGORIA** (Belgium)

✳ **ANFIA** (Italy)

✳ **AUTIG** (Denmark)

✳ **FIEV** (France)

✳ **ILEA** (Luxembourg)

✳ **MAJOSZ** (Hungary)

✳ **RAI** (The Netherlands)

✳ **SAS** (Sweden)

✳ **SERNAUTO** (Spain)

✳ **SMMT** (United Kingdom)

✳ **TAYSAD** (Turkey)

✳ **VDA** (Germany)

✳ **EUROBAT**

✳ **EUROFORGE**

✳ **EUWA**

✳ **EWFA**

✳ **SUPPLYON**





**CLEPA**  
European Association of  
Automotive Suppliers

## Corporate Members:

✦ Advanced Labels  
Technologies

✦ Aisin

✦ Akebono Brakes

✦ Autoliv

✦ Automotive Lighting

✦ AVL List

✦ Behr

✦ Bekaert

✦ BOS

✦ Bosal

✦ Bosch

✦ BPW

✦ Brembo

✦ Britax

✦ Brose Fahrzeugteile

✦ Continental AG

✦ Dana Europe

• Delphi

• Denso

• Dorel France

• Eberspächer

• Emitec

• Faurecia

• Federal-Mogul

• FER

• FEV Motorentechnik

• Fraunhofer

• Gates

• GKN

• Haldex

• Hayes – Lemmerz

• Hella

• Honeywell

• HUF

• Intier

• Karmann

• Knorr - Bremse

• Koito

• Kostal

• JTEKT europe

• Lear

• LUK

• Magneti Marelli

• Mahle

• Mann & Hummel

• Maflow

• Mark IV - Dayco

• Mira

• Mitsubishi Electric

• 3M

• NGK Spark Plug

• Philips Automotive  
Lighting

✦ Pilkington

✦ Reflexite

✦ Saint-Gobain Sekurit

✦ Sensata Technologies Holland

✦ Siemens VDO

✦ SKF

✦ Sogefi

✦ Takata – Petri

✦ Tenneco

✦ Thyssenkrupp Automotive

✦ TRW

✦ Valeo

✦ VDI / VDE – IT

✦ Visteon

✦ Wabco

✦ Webasto

✦ ZF

✦ ZF Trading



**CLEPA**  
*European Association of  
Automotive Suppliers*

## Working Groups:

- ✦ Strategic & International Relations
- ✦ Aftermarket Policy
- ✦ Technical Regulations
- ✦ Research and Technological Development
- ✦ Quality
- ✦ Training
- ✦ SME's
- ✦ Legal Advisory Group (LAG)
- ✦ Warranty

## Who's who

Tel: +32.2.743.91.ext  
Fax: +32.2.732.00.55

### BOARD OF DIRECTORS

#### STEERING COMMITTEE

Giuliano Zucco (President); Lars Holmqvist (CEO); Armand Batteux (Vice-President); Jürgen Harnisch (Vice-President); Karel Bos (BOSAL); Emanuele Bosio (ANFIA - Sogefi); Arthur Connelly (GKN); Marc Hendrickx (AGORIA - Hayes-Lemmerz); Eric Rommerts (Treasurer); Marco Stella (ANFIA - TubiStyle)

#### CLEPA Working Groups (WG)

- **Aftermarket Policy**  
(Chair: Mike Ward – LuK)
- **Quality**  
(Chair: Malcolm Bird – GKN Driveline)
- **Research & Technological Development**  
(Chair: Horst Kornemann, Continental)
- **Training**  
(Chair: Manfred Glahe – SKF)
- **Strategic & International Relations (SIR)**  
(Chair: To be appointed)
- **SME's**  
(Chair: Marco Stella – ANFIA - TUBI SYLE)
- **Warranty**  
(Chair: John Guy – CLEPA)
- **Technical Regulations**  
(Chair: Carlo Bertolini – VALEO)
- **Legal Advisory Group (LAG)**  
(Chair: Thomas Ansorge - ThyssenKrupp)

<b>Lars Holmqvist</b>	CEO	All Working Groups + LAG	<a href="mailto:l.holmqvist@clepa.be">l.holmqvist@clepa.be</a> (ext 37)
<b>Eleri Wessman</b>	Executive Manager, Legal Affairs, Assistant to the CEO	Aftermarket, SIR, Warranty + LAG	<a href="mailto:e.wessman@clepa.be">e.wessman@clepa.be</a> (ext 33)
<b>Louis-Sylvain Ayral</b>	Technical Director	Technical Regulations & Quality	<a href="mailto:techsec@clepa.be">techsec@clepa.be</a> (ext 32)
<b>Pierre Laurent</b>	Senior Manager Technical Dpt.	Technical Regulations	<a href="mailto:techsec@clepa.be">techsec@clepa.be</a> (ext 36)
<b>Roland Gillebeert</b>	Senior Manager Technical Dpt.	Technical Regulations	<a href="mailto:techsec@clepa.be">techsec@clepa.be</a> (ext 36)
<b>Bjorn Hedlund</b>	Director RTD	Research & Technological Development	<a href="mailto:b.hedlund@clepa.be">b.hedlund@clepa.be</a> (ext 29)
<b>John Guy</b>	Warranty Adviser	Warranty	<a href="mailto:j.guy@clepa.be">j.guy@clepa.be</a> (ext 30)
<b>Amalia Di Stefano</b>	Director European Affairs	European Affairs, Training & SMEs	<a href="mailto:a.distefano@clepa.be">a.distefano@clepa.be</a> (ext 35)
<b>Paule Jacqmart</b>	Assistant to Technical Dept. & European Affairs	Technical Regulation, Training & SMEs	<a href="mailto:techsec@clepa.be">techsec@clepa.be</a> (ext 31)
<b>Maggy Creplet</b>	Head of Administration	Administration	<a href="mailto:m.creplet@clepa.be">m.creplet@clepa.be</a> (ext 27)
<b>Maria Daniela Lenzu</b>	Project Manager	Communication, Jama-Clepa	<a href="mailto:md.lenzu@clepa.be">md.lenzu@clepa.be</a> (ext 25)
<b>Beatrice Tomassini</b>	Receptionist and meetings' coordinator	Meetings' coordination	<a href="mailto:b.tomassini@clepa.be">b.tomassini@clepa.be</a> (ext 30)



**C L E P A**  
*European Association of  
Automotive Suppliers*

# RTD Expert Groups

- ✦ Control, Electronics and Mobility  
(Transport efficiency and safety)
- ✦ Powertrain and Propulsion (Fuel cells,  
Biomass and Hybrids)
- ✦ Materials, Manufacturing and Recycling



**CLEPA**  
*European Association of  
Automotive Suppliers*

# European Road Transport Research Advisory Council

**..towards a greener, safer and smarter  
European Road Transport System**

---





**Greener** – A long term 40% improvement of energy efficiency will provide adequate support of the road transport sector to climate stabilisation. This, and a 20% substitution by renewable fuels will reduce Europe's energy import dependence to a sustainable level.

**Safer** – Europe's roads will become the safest in the world by optimising the total system through innovations in vehicles, infrastructure and intelligent traffic management.

**Smarter** – Innovation will be key for providing long term sustainable mobility. Smart solutions will be globally attractive and as such boost European industry's competitiveness.



**CLEPA**  
European Association of  
Automotive Suppliers

# Why ERTRAC

- Road transport is a complex, multi-stakeholder system
- Road transport, one of the largest sectors in Europe:
  - 20% GDP contribution,
  - 9% workforce
  - 30% R&D expenditure
- Need for a forum addressing all challenges of European Road Transport



**CLEPA**  
*European Association of  
Automotive Suppliers*

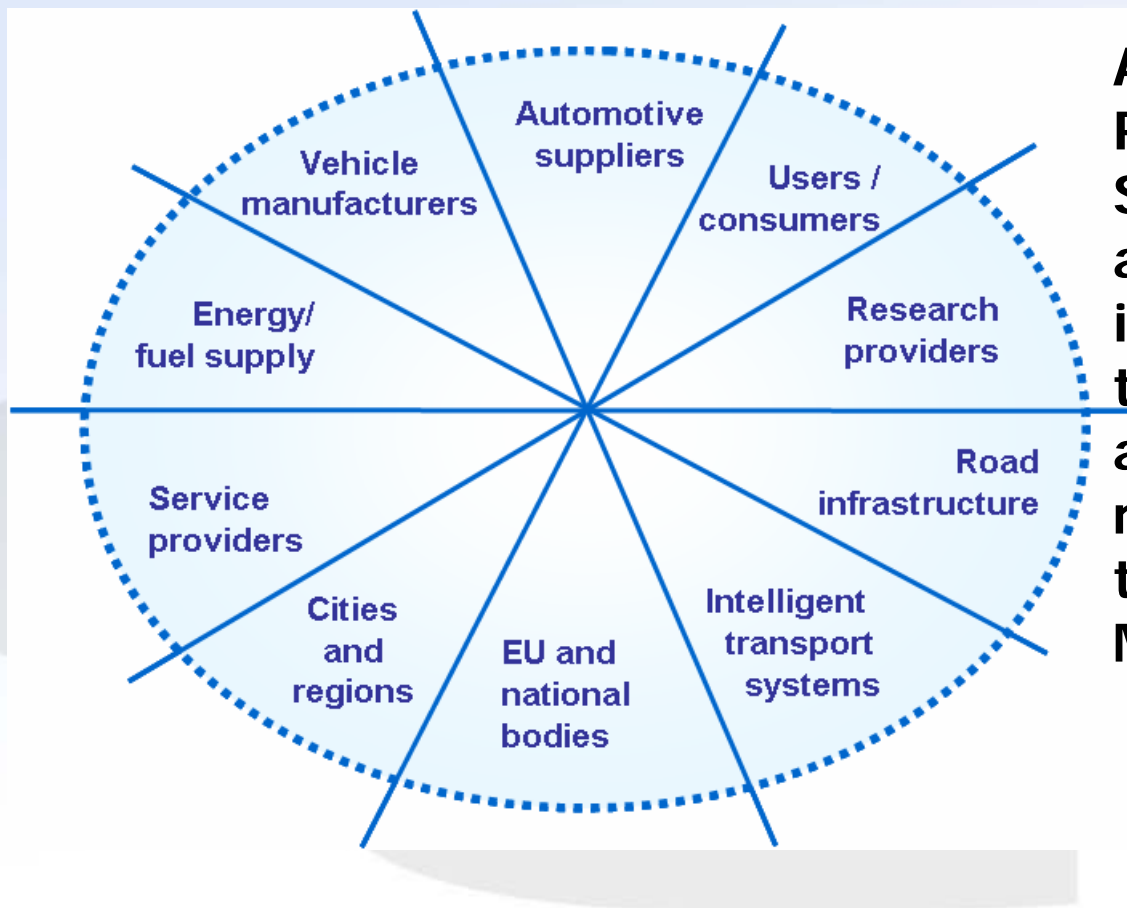
# **ERTRAC history**

- **In March 2002 the European automotive representatives called for the establishment of a European Road Transport Research Advisory Council comprising of senior experts from car manufacturing companies, component suppliers, energy and fuel suppliers, research institutes and other relevant stakeholders.**
- **Official launch of ERTRAC in June 2003**
- **“Vision 2020” published in June 2004**
- **“Strategic Research Agenda” published in October 2004**
- **“Research Framework” published in April 2006**



**CLEPA**  
European Association of  
Automotive Suppliers

# ERTRAC members



**All major Road Transport Stakeholders are represented in ERTRAC, through their associations, as representatives of the EU and Member States.**



CLEPA  
European Association of  
Automotive Suppliers

# ERTRAC's unique position

- The road transport sector is a rather heterogeneous one with so different stakeholders like car-industry, suppliers, oil-industry, telecoms, infrastructure, regional groupings etc. Via ERTRAC, all those players find a platform to discuss / monitor the research needed for the future.
- For being globally competitive in road transport, several societal issues like safety, environment / energy and mobility / congestion have to be taken into account. ERTRAC cover research topics, which are driven and accepted by society and politics.



CLEPA  
European Association of  
Automotive Suppliers

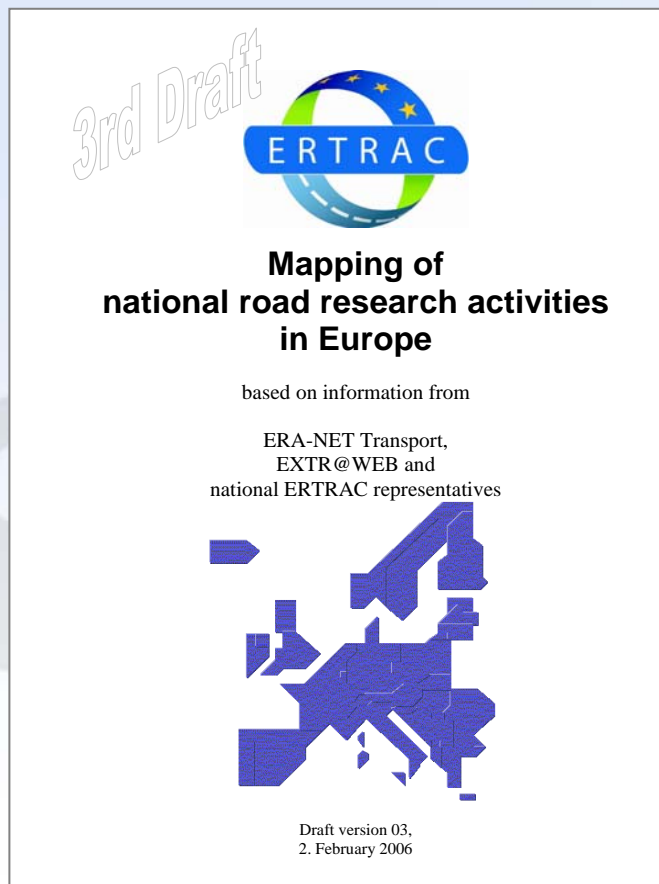
# ERTRAC's unique position

- In ERTRAC's broad spectrum of stakeholders many other non research issues / needs are to be taken into account - standards, regulatory, liability etc.
- ERTRAC has the goal to overcome the fragmentation of road transport research in the Europe of 27 different nations. ERTRAC analysis "National Programmes" and is initiating activities for various national research in line with a wider European strategy.



**CLEPA**  
European Association of  
Automotive Suppliers

# ERTRAC's link to national RTD activities

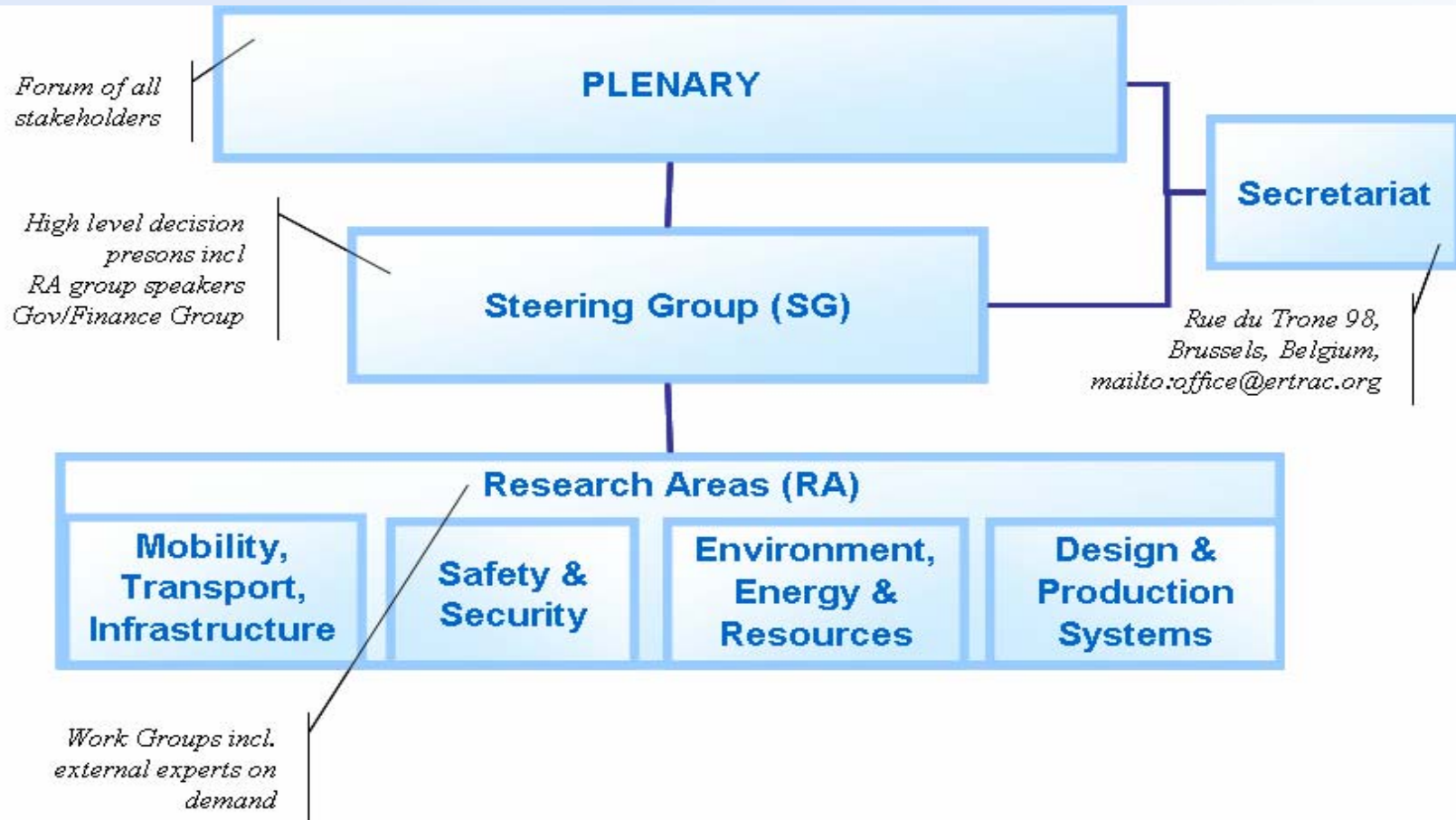


## Creation of an inventory on national research activities:

- Country description and transport infrastructure
- Transport industries
- Transport policy related general goals
- Transport research and innovation system
- Mapping of the country specific transport research funding system
- Selected RTD programmes of the past 5 years



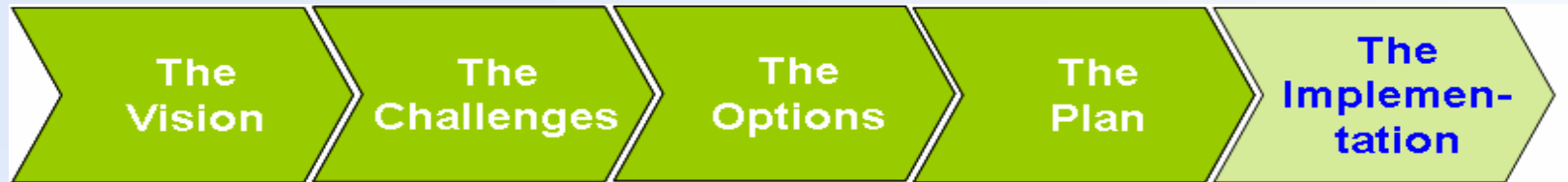
# ERTRAC structure







# ERTRAC process



- **Priorities**
- **FP7**
- **X-Stakeholder Topics**
- **Tbd Projects/ JTI ...**



**CLEPA**  
*European Association of  
Automotive Suppliers*

# ERTRAC research framework

**ERTRAC's inventory of research topics provides the foundation for smart system solutions. It is structured in 4 research areas:**

- **Mobility, transport and infrastructure**
- **Safety and security**
- **Energy, environment and resources**
- **Design and production systems**



**CLEPA**  
*European Association of  
Automotive Suppliers*

# ERTRAC RA mobility, transport and infrastructure

## **Mobility of People**

- Land use
- Mobility management
- Mobility concepts
- Information Provision
- Trends and behaviours

## **Transport of Goods**

- Urban transshipment
- Long distance freight transport
- Vehicle concepts
- Business processes
- "Home" delivery



**CLEPA**  
*European Association of  
Automotive Suppliers*

# ERTRAC RA safety and security

## **Accident Prevention**

- Accident research
- Cooperative systems
- Human factors
- Vehicle technologies
- Road engineering
- Fuel safety

## **Accident Impact Mitigation**

- Vehicle and infrastructure architecture and compatibility
- Vulnerable road users
- Assessment tools and procedure
- Restraints
- Post crash

## **Road Transport System Security**



**CLEPA**  
*European Association of  
Automotive Suppliers*

# ERTRAC RA energy, environment and resources

## **Greenhouse Gas Emissions / Efficient Energy Use**

- Fuel cell vehicles & low carbon / hydrogen fuels
- Mobility management
- Societal trends & behaviours
- Efficient, ICE vehicles & advanced fuels
- Intelligent systems & energy management, including hybrids
- Strategic analysis

## **Impact on Communities and Natural Habitats**

- Infrastructure design & management
- Low noise vehicles
- Fuels from biomass
- Sustainable resource use
- Low emission vehicles



**CLEPA**  
*European Association of  
Automotive Suppliers*

# ERTRAC RA design and production systems

## **Flexible production systems**

- **Modular factory and road concepts**
- **Design & development tools**
- **Knowledge management & data handling**
- **Advanced & people friendly processes**

## **Time to market/implementation**

- **Integration of product and process development**
- **(Pre-planned) upgrades**
- **Virtual prototyping**
- **Rapid prototypes / pilot scale**
- **Performance monitoring and prediction**

## **Lifetime resource-use**

- **Product & process concepts**
- **Materials**
- **Monitoring and maintenance**
- **Recycling technologies**



# ERTRAC research framework

- The increasing environmental challenges, European competitiveness and global policies are demanding urgent research to answer some critical questions and to support future policies and strategies.
- Both goods and passenger transport is projected to further increase significantly. Should investments be made into carrier or infrastructure technologies? What supporting policies do we need? Which is the most economical solution for society to contain further growth?



**C L E P A**  
*European Association of  
Automotive Suppliers*

# ERTRAC research framework

Those lead to some highly important topics.

**ERTRAC's high priority solutions address the following urgent transport system needs:**

- **Future long distance freight transport and logistics**
- **Urban freight and passenger transport**
- **The intelligent vehicle and infrastructure**
- **Road transport Safety**
- **Sustainable energy for road transport**
- **Competitive EU Production in a global context**



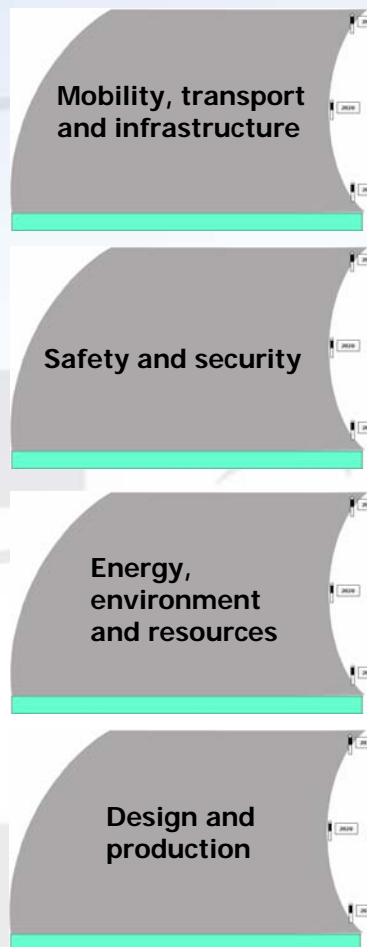


**CLEPA**  
European Association of  
Automotive Suppliers

# ERTRAC next steps

**ERTRAC will develop road maps for his 4 research areas, along a time schedule from 2010 to 2030.**

**This will support the implementation of necessary technologies.**





# ERTRAC next steps

## ERTRAC will

- **actively promote and structure key research from a Road Transport System perspective through**
- **recommendation of sector spreading research needs to bring together the necessary different stakeholders and thus to improve the implementation of our RF.**



**C L E P A**

*European Association of  
Automotive Suppliers*

Further Information:

[www.ertrac.org](http://www.ertrac.org)

For general inquiries:

[rainer.aust@ertrac.org](mailto:rainer.aust@ertrac.org)