



Round Table on Network Management Systems of the Future

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The Intelligent Car Initiative (ICI)

- **At the beginning of 2006 the EC launched the ICI:**
 - Coordinate and support the work of relevant stakeholders, citizens, Member States and the Industry, in the Intelligent Car Initiative.
 - Support research and development in the area of smarter, cleaner and safer vehicles and facilitate the take-up and use of research results.
 - Create awareness of ICT-based solutions to stimulate users' demand for these systems and create socio-economic acceptance.
- **Research priorities fully support the ERTRAC SRA:**
 - Further action on cooperative systems and traveller and traffic information
 - Multimodal transport
- **In addition:**
 - Establishment of a comprehensive, technical and socio/economic **assessment program, based on Field Operational Tests (FOT)** to assess in real environments the impact of ICT-based Intelligent Car systems on driver behaviour and on driving dynamics.

Cooperative Systems

- In order for cooperative systems to deliver their potential benefits, large proportion of vehicles and a sufficiently **large intelligent infrastructure** network at European level, are equipped with the technology.
- Wireless technology availability limitations implies fallback strategies (i.e. by **supporting sensor systems** like video, radar or ultrasound) must be developed.
- Requirements for compatible interfaces between cooperative systems and TMS: cooperative systems will need reliable and up-to-date network and traffic and travel information; this implies **traffic management centres able to receive, collect, monitor and disseminate information.**

Cooperative systems projects



Coordinator: **ERTICO**

Total budget: € 41 Million

EC contribution: € 22 Million

Consortium: 61 partners - 12 countries

Core Technologies



Coordinator: **Fiat Research Centre**

Total budget: € 38 Million

EC contribution: € 20,5 Million

Consortium: 51 partners - 12 countries

Car-Makers View



Coordinator: **AustriaTech**

Total budget: € 16,8 Million

EC contribution: € 9,6 Million

Consortium: 37 partners - 14 countries

Road-Operators View



Highways

TMC: today

- **Current status:**
 - Most of the TMC in operation are based on traditional system architectures (hierarchical).
 - Data are collected via static field sensors.
 - Information are delivered mostly on road (and broadcasted)

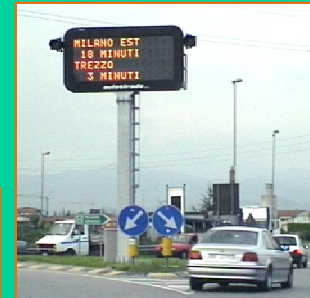


I2V



V2I-I2V:

- electronic tolling:
travel time



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POLIS Conference - Toulouse

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TMC: future

- **More data needed:**
 - Heterogeneous data sources.
 - Multiagency providers: intelligent vehicles (V2I)
- **Distributed system architecture:**
 - Large and reliable communication subsystem
- **New functions:**
 - Intelligent agents to identify and to “emerge” critical events (congestion, accidents, environmental hot spots).
 - DSS for both traffic managers and users.
- **Remarks:**
 - TMC developments only partially driven by technology (protection of investments)
 - Cooperation I-V under clear hierarchy of rules and responsibilities