


ecoDriver Keynote Speech

# Intelligent Transport Systems for cleaner mobility

 **Hermann Meyer**

 *ERTICO – ITS Europe*

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Mercedes-Benz Museum, Stuttgart

Co-funded by



[www.ecodriver-project.eu](http://www.ecodriver-project.eu)



*ecoDriver*  
*Final Event*

# The ERTICO - ITS Europe Partnership



# Policy challenges and ITS benefits



## **Economic Growth and Innovation**

- » Strong transport related industry in Europe



## **Urbanisation**

- » 2030: 60% of population in cities



## **Safety**

- » 95% of accidents partly or fully linked to driver mistakes
- » 69% of road accidents occur in cities



## **Demographic Change**

- » 65+ generation will nearly double by 2030



## **Climate Change and Resource Scarcity**

- » Road transport contributes about one-fifth of the EU's total CO2 emissions



## **Behavioural Change**

- » More usage of "soft" transport modes
- » Home delivery of consumer goods

Estimated potential benefits of ITS deployment (by 2020) \*

- » 30% reduction in fatalities
- » 30% reduction in seriously injured persons
- » 15% reduction of congestion
- » 20% improvements in energy-efficiency

... and it creates employment and economic growth via higher mobility and new industrial opportunities

\* estimates from iMobility Forum for ITS potential contributions (2011-2020) assuming strong implementation efforts

# ecoDriver: following on from...

## *Integrated research project*



2010-2013

Cooperative mobility systems and services for energy efficiency

<http://ecomove-project.eu>

## *Assessment methodology research projects*



2011-2013

Framework for a common assessment methodology for determining the impacts of ITS on energy efficiency and CO<sub>2</sub> emissions

[www.ecostand-project.eu](http://www.ecostand-project.eu)



2011-2014

CO<sub>2</sub> assessment methodology for ICT in transport

[www.amitran.eu](http://www.amitran.eu)



**TNO** innovation for life



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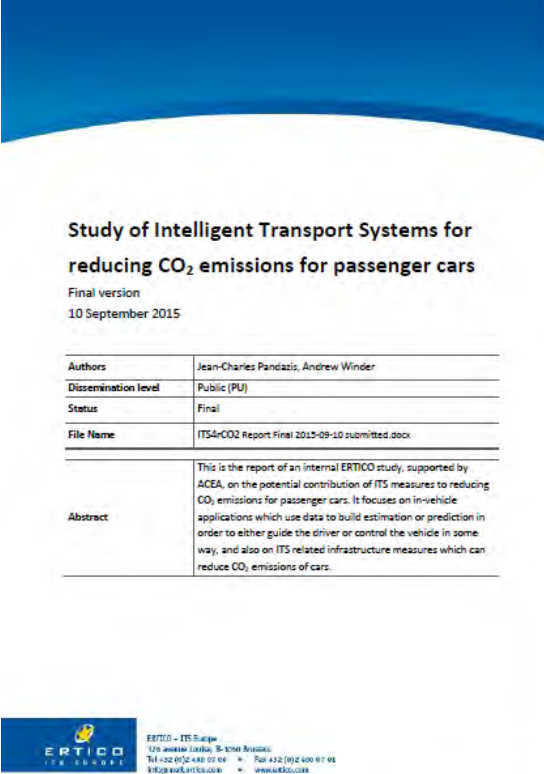
**TOMTOM** TELEMATICS

**ika** INSTITUT FÜR KRAFTFAHRZEUGE RWTH AACHEN UNIVERSITY

# Not the only eco-driving action, but the biggest one

## ERTICO CO<sub>2</sub> study in cooperation with ACEA (2015)

- Looked at in-vehicle, infrastructure and cooperative Intelligent Transport Systems (ITS)
- Desk study of their potential contribution to reducing CO<sub>2</sub> emissions
- Sources for eco-driving:
  - eCoMove, ICT-EMISSIONS, COSMO, GERICO, HECO2
  - Continental, Navteq (HERE), RAC Foundation, TNO



**Study of Intelligent Transport Systems for reducing CO<sub>2</sub> emissions for passenger cars**

Final version  
10 September 2015

Authors	Jean-Charles Pandazis, Andrew Winder
Dissemination level	Public (PU)
Status	Final
File Name	ITS4CO2 Report Final 2015-09-10 submitted.docx

**Abstract**

This is the report of an internal ERTICO study, supported by ACEA, on the potential contribution of ITS measures to reducing CO<sub>2</sub> emissions for passenger cars. It focuses on in-vehicle applications which use data to build estimation or prediction in order to either guide the driver or control the vehicle in some way, and also on ITS related infrastructure measures which can reduce CO<sub>2</sub> emissions of cars.

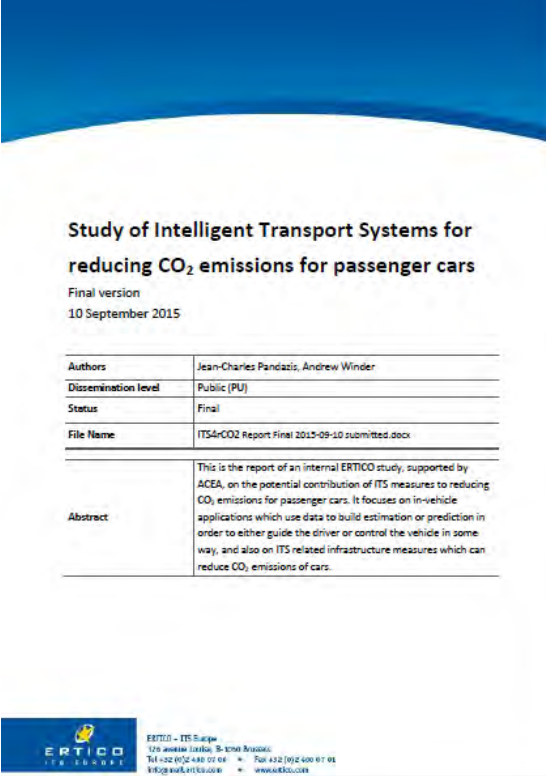
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# Not the only eco-driving action, but the biggest one

## ERTICO CO<sub>2</sub> study in cooperation with ACEA (2015)

- Potential fuel use savings between 5% and 20% depending on road type, topography, traffic levels, etc.
  - ... can be close to 0% in some cases (e.g. congestion)
  - ... and over 20% in other cases (e.g. approaching traffic signals)
- <http://erticonetwork.com/its-for-reducing-co2-emission-of-passenger-cars>



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# ERTICO and other ecoDriver partners are also looking at....

Field Operational Tests, naturalistic driving,...



DAIMLER



ecoDriver has made a valuable contribution to these areas:

- A wide breadth of experience of on-road trials has been acquired
- Naturalistic trials in ecoDriver at 3 partner sites using 35 vehicles (cars, vans, trucks, buses) and 60 drivers

# What comes next?

**ERTICO is continuing to work with ACEA to benchmark project results for contributions to CO<sub>2</sub> emissions and safety**

- Looking at real results: the good, the bad and the ugly!
- What are the success factors and quick wins?
- Under which circumstances or what combinations of systems lead to different results?
- Baseline is important! The better the performance, the harder it is to further improve it at reasonable cost

**ecoDriver results will make a highly valuable contribution to the state-of-the-art**



# Conclusions

**The future... eco-driving support as well as other intelligent transport systems (on-board, infrastructure-based and co-operative)**

- Costs and benefits, especially effects of multiple systems
- Standardisation issues
- Safety issues
- User reaction: willingness to use and trust; effects on non-users

**Agreement on common assessment methodologies is also a key to benchmarking and hence learning and succeeding**

**Thank you!**

[www.ecodriver-project.eu](http://www.ecodriver-project.eu)

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