



**XXIVth WORLD
ROAD CONGRESS**
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Cooperative ITS - Future Information & Services for Travellers and Infrastructure Operators

Paul Kompfner

ERTICO – ITS Europe

Head of Sector Cooperative Mobility

p.kompfner@mail.ertico.com



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Mobility 2.0: New information & services for operators and users

Opportunities for a road operator...

- Seamless traffic (speed and flow) monitoring from “floating” vehicles, over whole network
 - Immediate detection of incidents
- “Window” into each user’s vehicle
 - address messages by location, vehicle type
- “Micro” traffic control
 - manage vehicle clusters, micro-tuned speed & route advice
- Instant safety management
 - speed limits, end-of-queue, wrong-way driver warnings
- Infrastructure-free tolling & fee collection



Traffic centre of the future?



The road user's needs

- Best information on traffic status, route & travel options, hazard warnings
- Wide range of mobility applications available
 - driving, parking, public transport, ride/car sharing
- New, local services downloaded when available
- “Mandatory” applications by regulation
 - tolling, eCall, green zone access
- Personal mobility services
 - mobile payment, personal subscription services

Cooperative ITS “app-store”



Cooperative ITS applications



Requirements for deployment

Widespread Benefits of Cooperative ITS

- Energy efficiency, reduced environment impact
- Effective interactive & preventive safety
- Improved traffic efficiency & reduced congestion
- Lower costs for network, fleet, vehicle operation
- Better integration of transport modes
- Growth of innovative mobility services
 - e.g. electromobility)
- Greater user satisfaction
 - personalised information & adapted services

Issues for deployment

- How to implement a new paradigm for interactive traffic management & control...?
 - are products available?
 - integration with existing systems?
- “Personal traffic management”...
 - but need a framework for data protection
- Value of services depends on penetration
 - how to deliver value even at low penetration
 - mix of equipped and non-equipped vehicles

Issues for deployment

- Government may regulate → fast deployment
 - e.g. eCall, safety applications, tolling
- Agree joint public-private deployment plan
 - infrastructure operators + vehicle makers (+ SP?)
 - deploy early-winner services at low penetration
 - coordinated rollout of OB, RS equipment
- What role for portable, after-market systems?
 - might the market decide after all?

Cooperative ITS in Europe

FREILOT – Energy efficient urban freight



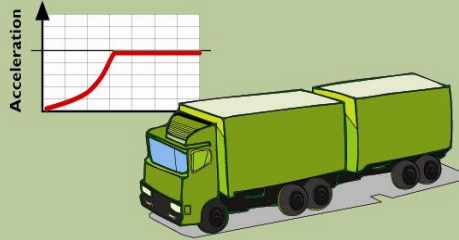
ECO driving support



Delivery Space Booking



Energy Efficient Intersections

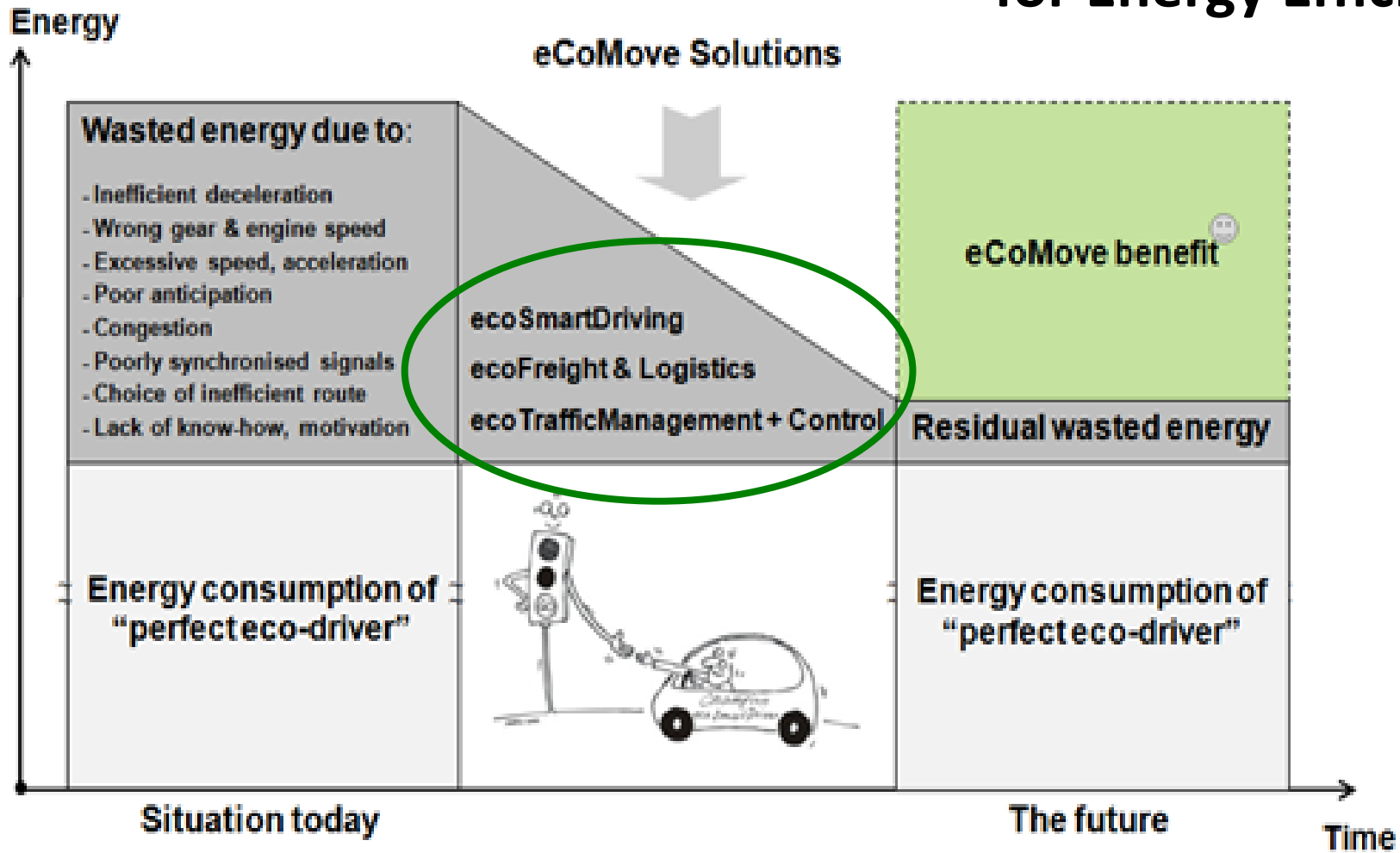


Acceleration/Speed Limiter

- **Truck-to-traffic light communication**
- **Signal priority for trucks**
- **Green wave synchronisation**



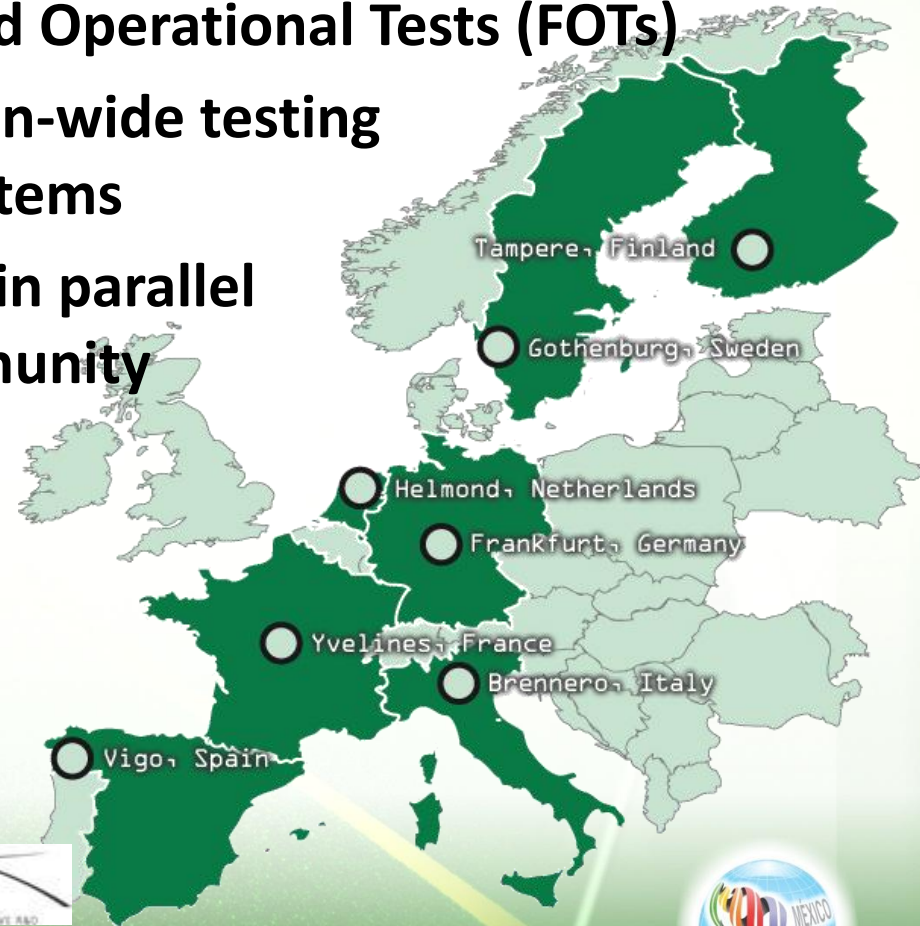
Cooperative Mobility Systems & Services for Energy Efficiency



Target: reduce by 20% fuel consumption & CO₂ emissions

DRIVE C2X – Accelerate cooperative mobility

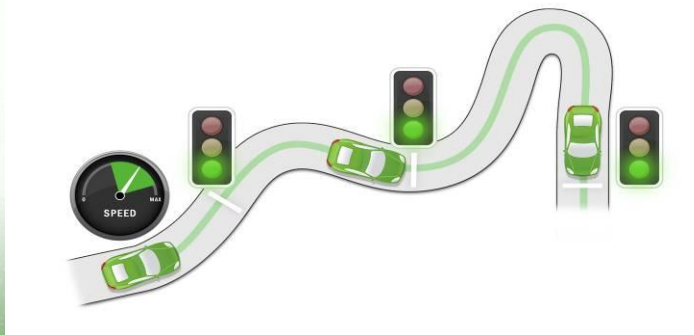
- Comprehensive assessment of cooperative systems through extensive European Field Operational Tests (FOTs)
- Create and harmonise a European-wide testing environment for cooperative systems
- Coordinate the tests carried out in parallel throughout the DRIVE C2X community
- Evaluate cooperative systems
- Promote cooperative driving



Instant Mobility – Future Internet for ITS

The Instant Mobility project is:

- Exploring novel mobility & transport scenarios using future Internet
 - For travellers, drivers, goods transport, collective transport & traffic management
- Developing a future-Internet enabled architecture for mobility services
- Creating a virtual demonstrator
- Plan for multi-city trials of next-generation mobility services in urban areas



HeERO – Harmonised eCall European Pilot

Define

- Operational and functional requirements
- Potential value-added services
- Training material for eCall operators

Implement & test

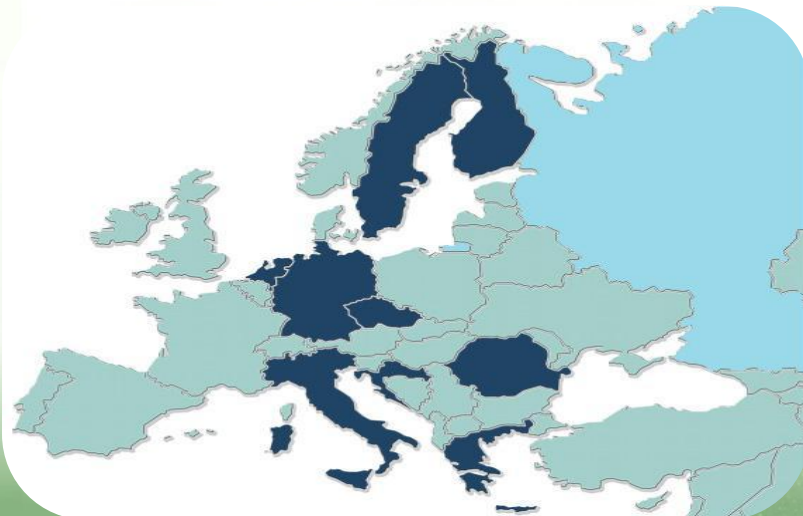
- European eCall standards
- Relevant infrastructure upgrades
- Identified value added services
- eCall emergency procedures

Evaluate

- eCall full value-chain
- Certifications procedures for the eCall service
- Interoperability and continuity of harmonised EU-wide eCall service

Promote

- Pilot results
- Best practices
- Recommendations and guidelines for future eCall pre-deployment and deployment activities



EU Transport Policy

New EU Policies on ITS



Action Plan for the Deployment of ITS in Europe (December 2008)

Directive 201/40/EU: Framework for the Coordinated and Effective Deployment and Use of ITS (August 2010)

Road transport and interfaces with other modes

- Coordinate and accelerate deployment of ITS
- Make road transport more sustainable

4 Priority Areas

Optimal Use of Road,
Traffic and Travel Data

Continuity of
Traffic and
Freight Management

Road Safety
and Security

Linking Vehicle and
Transport Infrastructure

Directive 2010/40/EU: Framework for the Deployment of Intelligent Transport Systems

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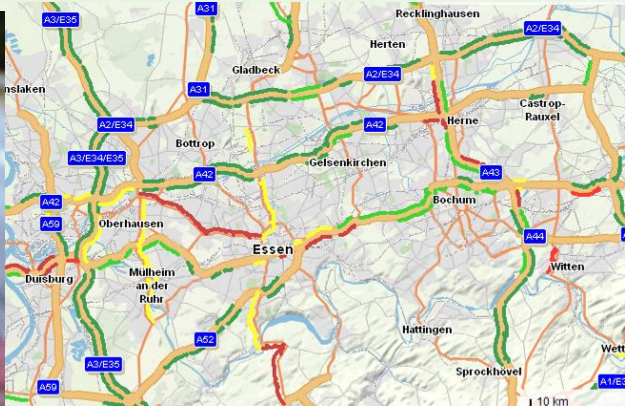
Linking Vehicle and
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Directive 2010/40/EU: Framework for the Deployment of Intelligent Transport Systems

6 Priority Actions



EU-wide Multi-Modal
Travel Information



EU-wide Real-Time
Traffic Information



Free Safety-Related
Minimum Traffic Information



Interoperable
EU-wide eCall



Information Services
for Truck Parking



Reservation Services
for Truck Parking

EC eCall Recommendation



EUROPEAN COMMISSION

Brussels, 8.9.2011
C(2011) 6269 final

COMMISSION RECOMMENDATION

of 8.9.2011

on support for an EU-wide eCall service in electronic communication networks for the transmission of in-vehicle emergency calls based on 112 ('eCalls')

(Text with EEA relevance)

Published 8 September 2011

Commissioner Neelie Kroes:

“I should underline that some of functionalities used by the eCall system, such as positioning and communication, could be part of a common platform and shared by other connected services...”

Conclusions

- Users need excellent information, choice of alternative ways to travel, help to be green
- Road operators need to know what is happening on their network, tools to influence
- Governments need new policy options
- Business needs confidence in standards, partnerships for deployment
- Cooperative ITS can deliver...

Thank you...



Thank you...



19th ITS World Congress
Vienna, Austria
22 to 26 October 2012

Congress

Exhibition

Demonstrations



www.itsworldcongress.com

19th World Congress on Intelligent Transport Systems and Services

- **22 - 26 October 2012** in Vienna at Reed Messe Wien GmbH
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- **Slogan: Smarter on the way**
- **Target groups:** industry, operators, scientific community, R&D community, public authorities, politicians, associations, press, public

