

Challenges and Opportunities of Intelligent Information Systems

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Overview

- > European Commission ITS action plan and intelligent information systems
- > European traveller information services – the EasyWay project
- > Conclusions

European Commission ITS action plan

Intelligent Transport Systems (ITS) are important tools to achieve EU policy objectives (transport, environment, security, industry etc.)

Good progress in non-road modes:

- > Inland waterways: River Information Services (RIS) to manage waterway utilisation and the transport of freight
- > Railways: the European Rail Traffic Management System (ERTMS) and Telematics applications for freight with technical specifications for interoperability
- > Shipping: SafeSeaNet and Vessel Traffic Monitoring and Information Systems (VTMIS) and in the near future: an Automatic Identification System (AIS) and Long-Range Identification and Tracking (LRIT)

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ITS action plan for road transport

- > Low uptake of ITS in road transport, hence the EC initiative to prepare an ITS Action Plan for road transport and its interfaces to other modes
- > Objective: accelerate the deployment of ITS on the road network to solve the three main challenges:
 - Lower the impact of mobility on the environment
 - Optimise the use of existing infrastructure; reduce congestion
 - Improve traffic and transport safety and security
- > Commission Communication + Legislative proposal expected for end of September 2008

ITS action plan – road travel and traffic info

- > Travel and traffic information will be an important subject of the ITS action plan
- > Many ITS applications rely on accurate and state of the art knowledge of the network, the road characteristics and traffic policy/regulations that apply (e.g. speed limits, one-way streets) + actual road, traffic and weather conditions
- > Much of the knowledge is held by road authorities but more and more as well by independent commercial and private sector sources

ITS action plan – framework on RTTI (1)

- > A framework is needed to define the co-operation between the public and private sector in all aspects of traffic and travel information and to arrange access to these data
- > This requires a set of minimum rules and procedures for Europe-wide real-time on trip traffic and travel information services for:
 - Provision of information services by the private sector
 - Provision of traffic regulation related data by the road and transport authorities
 - Guaranteed access by public authorities to safety related information collected by private companies
 - Guaranteed access of private companies to public data

ITS action plan – framework on RTTI (2)

- > Optimisation of collection and provision of road data and traffic circulation plans, traffic regulations and recommended routes for heavy goods vehicles
- > Development of a set of rules and prescriptions ensuring the accurate availability of public data for digital maps and their timely updates through the cooperation between the responsible public authority levels and digital maps providers
- > Definition of the minimum data and rules for the provision of "free of charge" traffic information services to all road users
- > Promotion of national multimodal journey planners and the development of a coordination framework to interlink and facilitate access to multimodal planners across EU borders

ITS action plan – co-operative systems

- > Evaluation of vehicle-to-vehicle and vehicle-to-infrastructure co-operative systems making use of mobile communication technologies
- > These co-operative systems can play a very important role in
 - collecting more efficiently and inexpensively information on weather and road conditions
 - informing the oncoming traffic on dangerous situations

European information services - the EasyWay project

- > Project financially supported by the EC under the Multi-Annual Trans-European Transport Network Programme to foster pan-European harmonised deployment of ITS services on the Trans-European Road Network ...
- > by enhancing concertation and synchronised actions...
- > in the area of Traffic Management, Traveller Information Services, Freight & Logistics
- > More than 20 Member States participating, 100 Mio € EC contribution for 2007-2009

EasyWay - aims

The aims of the EASYWAY project are:

- > European-wide deployment of ITS for Road Services offering
 - cross-border continuity
 - similar look & feel
 - equal level of quality

- > achievements of targets set regarding Road Safety, Efficiency, Environmental impacts

EasyWay – potential European info services

- > Traveller information services
 - Parking information and guidance
 - Multi-modal travel planning
 - Pre-trip road traffic information
 - On-trip road traffic information
 - Pre-trip public transport information
 - On-trip public transport information

Conclusions – importance of weather info

- > Reliable and up-to-date information on actual and future weather conditions is crucial for efficient and safe (road) transport.
- > E.g. in case of slippery roads in south of France it is important to hold up Spanish truckers in Spain in order to avoid road blockages in France
- > There might be a move from local fixed sensing to using the vehicles as floating sensors

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Thank you for your attention.

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