What changes have been brought about in France with ITS ?

UNECE ITC Policy Segment

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Summary: Sustainability, a new challenge for ITS

- Big changes in France : ITS for road safety, traveller's information, tolling, CO_2 emissions

- Intermodality: ITS can link all the actors of transport and not only driver, vehicle and infrastructure .

- Interoperability:
  - For traveller's information and smart ticketing
  - Methods of CO_2 evaluation and information

- Conclusion: conditions enabling to base a sustainable transport policy on ITS.

2.1. Great changes in France: ITS for sustainability

Great changes:

- In **road safety**: decrease from 8000 fatalities in 2002 to 4000 in 2007, following the automated enforcement of speed limits

- Development of **traveller's information** websites based on local initiatives (www.passim.info) A national Agency (AFIMB) has been created in 2010 to coordinate multimodal information and smart ticketing initiatives

- A distance-based « **Ecotaxe** » has been decided in 2010 for heavytrucks. The construction of the system was launched in 2011, to be operational in 2013.

- From 2013 onwards, transport operators will be obliged to give information to their clients about **CO_2 emissions** caused by the journey made for them .

Intermodality: ITS can link all the actors of transport

ITS is often described as a link between the vehicle, the infrastructure and the driver. It is a simplified and "car centric" view. In fact, transport services imply:

- Clients, who pay to have persons or freight moved from A to B
- Transport organizers, who choose the ways and means to satisfy the clients and are paid by them.
- Transport operators, who manage vehicles, drivers, buy energy, toll, taxes... and are paid by organizers.
- Infrastructure managers, who decide on the transport modes allowed at a certain moment on a certain street/road.
- Enforcement authorities
- Passengers and freight owners who have real time decisions to take and are concerned by the quality of service.

ITS can be useful to all of them

Interoperability: Traveller's information and ticketing

Multimodal information and "smart ticketing":

- Information about precise location of public transport stops, description of routes, time tables, tariffs and all their variations in time are generally delivered by the transport operator to their clients.

- Interoperable services for information and ticketing, available on large territories could facilitate the use of public transport for occasional visitors in a city.

- Smartphones and other personal assistants could provide good support for these applications, but interoperability at large scale is by itself an international project involving manufacturers, transport operators and public authorities of different countries, to protect privacy and security of transactions.

Interoperability needs trust between actors, and long term agreements at industrial and political levels.

Interoperability: CO2 evaluation

Very few people have a precise idea about the emissions associated to a journey made by different modes of transport. This information is not easy to deliver (because it depends on the context, for instance congestion and the number of passengers in the vehicles) But something has to be done to induce more sustainable behaviour:

- **Methods of calculation: standards and reference data are necessary to assure continuity of information in the case of international journeys**

- **The assumptions and the meaning of the data will be easier to explain to end users (travellers, citizens...) if they are based on best practice exchanged in international fora and standardization bodies.**

Interoperability needs common understanding of the data exchanged.

Conclusions (1)

Transport systems are required to be:

- "Smart": easy to use, attractive for clients
- Efficient: provide good service for reasonable price
- Green: no congestion, no noise, no smokes, no health hazards, no CO_2 emissions
- Sparing of work (for the staff) and money (for tax payers)
- Safe: in theory to do exactly what it has been designed to do in any circumstances, and in practice less crashes
- Secure: resist in case of attacks or inappropriate behaviour.

The complexity of the system comes from the huge number of decision makers, interests and strategies.

To face existing and emerging problems, "Intelligence" could be a tool to improve design, planning, operation, monitoring and evaluation methods... under certain conditions...

Conclusions (2)

ITS can support a transport policy, but the best systems can't be a substitute for a policy.

- Interoperability and intermodality depend on coordination of initiatives, but all the interests concerned need, as far as possible, to be involved in the process

- The role of local authorities is very important, but a new culture of evaluation need to be developed about evaluation of systems in terms of costs (direct and indirect) and satisfaction of customers

- Cooperation is necessary, not only in academic and industrial fields, but also between public authorities at all geographic levels, from local to international.