IRF Policy Committee on ITS

Green Paper on TEN-T: A policy review
Towards a better integrated trans-European transport network at the service of the common transport policy

The IRF (International Road Federation) Policy Committee on ITS was initiated in November 2008 and had its constitutional meeting at the beginning of April 2009. The Committee consists of international highly experienced experts in ITS, who dedicate their proven expertise to today's major transport policy objectives: safety, sustainability, efficiency, and environmental impact of transport networks. Being fully convinced about the major role of the European Union as an important partner of activities in the field of ITS, the IRF Policy Committee on ITS contributes to the ongoing discussion on the Green Paper on TEN-T. This paper contains the response of the Policy Committee to the stakeholder consultation. Due to the working scope of the Committee the answers only regard questions 6 and 7 of the Green Paper (COM(2009)44 final).

Q6   How can ITS, as a part of the TEN-T, enhance the functioning of the transport system?

Intelligent Transport Systems play a key role to efficiently reach the major transport policy objective identified above.

ITS applications are very broad, ranging from automatic road enforcement to electronic toll collection, and are expanding rapidly across all modes of transport. Some applications, such as the pan-European in-vehicle emergency call technology "eCall", have already proved to be indispensable tools to make a substantial contribution to road safety. Another example is the positive effect on traffic efficiency generated by the use of Real-Time Passenger Information, Road User Charging, Fleet Tracking Systems, Intelligent Speed Adaptation, and others.

Cooperative Systems combining new services based on traffic data and statistics, bidirectional communication between infrastructure and vehicles (I2V, V2I), and tolling/road charging (as a financial backbone) may be a viable concept to fully unfold the potential of ITS. In addition, ITS also may contribute to public security / crime fighting.

The IRF Policy Committee on ITS very much supports the ideas presented in the EC paper "Intelligent Transport Systems: A smart move for Europe" (COM/2008/0886 final) supporting the deployment of ITS in Europe. However, significantly higher attention (also for TEN-T) has to be given to clear value chains (considering different views of the numerous stakeholders, from public & private sectors and individual users) and viable business models (on a combined national and EU level).

How can investment in Galileo and EGNOS be translated into efficiency gains and optimum balancing of transport demand?

Satellite navigation in many cases is a principal function for ITS applications. Some key applications already make use of the existing satellite navigation systems (e.g. GPS).

With the advent of the European satellite navigation system (EGNOS now and Galileo in the future) there will be a significant contribution to personal mobility of every European citizen (e.g. providing increased accuracy and robustness, signal integrity, service guarantees and certification, traceability of past performance, operation transparency, and increased availability of signals in demanding environments).

Considerable efforts are already taken on European level investigating the added value of Galileo and EGNOS for the road sector such as SISTER, GSC, GINA or GIROADS. The generated traffic data may be used e.g. for traffic and fleet management, road charging, route guidance or dangerous goods management

How can ITS contribute to the development of a multi-modal TEN-T?

Intelligent Transport Systems are predestined to support the efforts taken in the area of multi-modality. The development and efficiency of multi-modal transport modes heavily rely on accurate and real time traffic data which are generated and distributed via ITS applications. A unified connected transport network with intelligent infrastructure will have enormous positive effects on the different users, e.g. in terms of traffic efficiency or environmental performance. ITS infrastructure can provide substantial information and services by consolidating and processing available data according to their relevance to the end user in our information society.

How can existing opportunities within the framework of TEN-T funding be strengthened in order to best support the implementation of the ERTMS European deployment plan during the next period of the financial perspectives?

(As the IRF Policy Committee on ITS has low expertise on this issue, this sub-question remains unanswered.)

Q7   Do shifting borderlines between infrastructure and vehicles or between infrastructure provision and the way it is used call for the concept of an (infrastructure) project of common interest to be widened? If so, how should this concept be defined?

Due to the increasing level of communication and exchange of information, borderlines between infrastructure and vehicles are rather getting more permeable than being shifted, and therefore the corresponding interfaces become more and more important. In the current information age focus has to be widened to include both hard and intelligent infrastructure, and respective infrastructure projects are of common interest for all stakeholders. Also the human nature of the driver has to be well-considered.

As accompanying measures for promoting and accelerating the efficient deployment of ITS (especially intelligent infrastructure) one actively has to care about the removal of legal barriers (liability issues etc.) and the development of viable business models and common standards. One also has to think about regulations/directives on European level regarding information (e.g. a minimum set of data available to everybody for free; especially from the vehicle side) and public financing of intelligent infrastructure (analogous to the communication network backbones).

ITS will not reach the expected level of efficiency without using the services provided by Infrastructure-to-Vehicle communication. In turn, Vehicle-to-Infrastructure communication has to be seen as an additional information source gathering sensor information from mobile platforms, i.e. communicating vehicles. It is of great importance to recognize that the I2V/V2I communication has an irreplaceable role, to guarantee and enable an efficient and safe traffic flow. A pure V2V communication would require that almost all (!) vehicles are equipped with minimum facilities of communication capabilities. This scenario would require very long transition phases and would dramatically increase the technical complexity of ITS.

All in all the basic idea of cooperative infrastructure / vehicle systems has to be promoted more intensely especially with focus on intelligent infrastructure. If not, the present (mostly) separated development of vehicles and infrastructure will be continued, leading to sub-optimum solutions.

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