



Special Session on “Cooperative Intelligent Transport Systems”

The vision

The intelligent transport systems (ITS) area, in the past mainly focused on transport infrastructures and technology systems for traffic management (telematics and tolling), are now getting a holistic service perspective. The transportation is getting an integrated dimension as a result of globalization and the need to offer agile and flexible transport services for both people and goods (logistics). This shift of requirements has motivated the interest from other knowledge bodies to adhere ITS by adding synergies for the upcoming challenges. Transports are not anymore only infrastructures or traffic management but rather a collaborative environment where a diversity of scientific areas are contributing to the construction of an intelligent service oriented cooperative ITS. Services offering people a coherent and integrated bucket of facilities during their move in work or leisure has been growing, preferably offered by a unique provider (one invoice) but involving the participation of a diversity of stakeholders. As an example, the vision of a person reserving for a meeting at some place in the world and receiving an integrated plan, possibly optimized, and involving car, plain, train, tram, hotel and eventually a rented car for the extra leisure time, all, in one bill from some service provider, the one the person trusts is offering the best (competitive) proposal. Another scenario might be the need for the transportation of goods, eventually manufacturing raw material, by some transportation service provider, eventually involving road transport, train, eventually repeating transportation means, and considering restrictions like the maximization of train involvement on the transport, based on environmental or cost constraints. From both scenarios it is possible to imagine a number of challenges to put a diversity of stakeholders with different social, process and technology cultures, to collaborate on service provisioning and on its lifecycle management. For this cooperative/collaborative environment there is a need for cooperation of panoply of systems from intelligent sensors, controllers, process orchestrations, intelligent computational agents, development and management frameworks, decision makers, and other roles. The crescent adoption of a service perspective involving a diversity of stakeholders requires the construction of virtual environments where a number of collaborative processes need to be executed. A number of heterogeneous systems held by multicultural distributed participants (networked nodes) need to cooperate to cope such a diversity of integrating business models.

The session aims to put a number of stakeholders and researchers presenting and discussing such move for a global integrated service world, focused on a new perspective of (cooperative) intelligent transport systems (ITS) on the understanding the complexity to construct the required collaborative breeding environment.

Session Program

Organization: *Luis Osório* – ISEL; **Session chair:** *Ana Paula Vitorino* – State Secretary of Transports (*)

14:00 – Opening

14:10 – Cooperative ITS: a moulding industry perspective

Joaquim Menezes – IBEROMOLDES; CENTIMFE

14:25 – Pan-European cooperative tolling system: a multi-technology approach

Johannes Springer; Alain Estiot – Toll Collect GmbH

14:40 – Cooperative Networked Innovation on ITS

João Bento; Sales Gomes; Rui Camolino – Brisa SA

14:55 – Cooperative Vehicle Infrastructure Systems (CVIS)

Knut Evensen – Q-Free ASA

15:10 – Global Value Chains – ICT as Competitive Advantage

João Quaresma Dias – ISEL; *João Calado* – IDMEC/ISEL

15:25 – Cooperative Systems in the EU research Framework Programmes

Francisco Ferreira – EC DG INFSO

15:40 – Discussion

16:00 – Closing

(*) – to be confirmed