



Project funded by ERA-NET Transport III Flagship Call 2013 "Future Travelling"

Flagship call initiative 2013 "Future Travelling"

SMART-PT

Smart Adaptive Public Transport

Call for papers hEART symposium – Special session on Adaptive Transport Systems

The ERA-NET Transport-III SMART-PT project consortium is organizing a special session at hEART 2015 on challenges in adaptive transport systems.

Travellers needs evolve in space and in time following evolution of the urban development. Current bipolarized and inherently inefficient operational model of urban transportation - either fully flexible (cars and taxis) or heavily regulated (trams and buses) will be extended to include the variety of shared transportation modes. This future *Adaptive Transport System* should adjust seamlessly to perpetual evolution of users' spatiotemporal activities.

Adaptive Transport Systems demand radical changes in operation and design. The spectrum of these changes can be understood via pervasive ICT and ubiquitous traffic and travel Big Data collected from mobile phones, GPS equipped smartphones and smartcards. To implement these changes we need to develop new big data-based algorithms of the instantaneous coadaptation of the transport supply and travel demand.

We are thus interested to promote a concept and develop a methodological framework for establishing a multi-modal urban *Adaptive Transport System*. We invite extended abstracts or full papers with strong conceptual or methodological contributions related to the following topics:

1. Algorithms for spatially-explicit high-resolution estimation of evolving travel demand and activities based on ICT-generated data (mobile phone records, GPS, smartcard etc.)
2. Mining large amounts of ICT generate data for travel demand modeling
3. Algorithms of the transport system adaptation to the evolving demand
4. Modeling and simulation of new forms of mobility – carsharing and ridesharing
5. Assessment and modeling users' preferences and travel choice in an adaptive transport system.

Papers and extended abstracts must be submitted no later than 27/3/2015 via hEART submission service.

All submissions will be peer-reviewed according to the hEART guidelines.

Please send a copy of your submission to the session organizers

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