

Transport Research Arena – Europe 2012

Athens, Greece – 23-26 April 2012

<http://www.traconference.eu>



Supported sessions and events

The Transport Research Arena (TRA) 2012 serves the purpose to enable the exchange of knowledge among those who play an active role in the transport sector and to promote the dissemination of research findings, best practice, and application techniques that have been successfully implemented in some parts of the world. At the same time, it provides experts from different disciplines with a forum for creative discussions about the future of transport.

TRA 2012 will focus on all aspects of all surface transport modes with the exception of overseas shipping. TRA 2012 seeks to reflect the multidisciplinary nature of the transport sector and, for this reason, addresses all stakeholders in both the public and private sectors and all professionals, regardless of their roles (researchers, practitioners, designers, constructors, operators, administrators etc.). The main theme of TRA 2012 is **Sustainable mobility through innovation**.

ECTRI has been actively involved in the preparation of the Conference through the participation under ERTRAC platform of C. Piehler, ECTRI President and G. Giannopoulos, HIT as members in TRA 2012 Programme Committee. About 50 experts from the ECTRI network have been involved in papers reviewing for all 6 TRA pillars. ECTRI also promoted the YEAR 2012 competition, to which ECTRI was partner in 2010, by encouraging its Young Researchers to participate. ECTRI finally widely advertises about the Conference over the last months first among its members but also in number of other events in order to attract the widest transport research Community to take part in the event.

With the event approaching, C. Piehler, President and C. Alm eras, ECTRI Secretary General, would like to highlight the sessions and side events in which ECTRI and its Members are participating. ECTRI official delegates are involved in 4 sessions: 2 strategic sessions (STS3: Infrastructure for the 21st century & STS10: Transport research cooperation and R&D trends around the world), 1 thematic session (THS24: Travel behavior and cultural aspects (PVI)) and 1 Special Session (SPS21: Developing the European Transport Research Alliance (DETRA)). More than 120 researchers from 17 ECTRI Members (AIT, BAST, CERTH-HIT, DLR, DTU, DVS, FhG, Ifsttar, KTI, LNEC, POLITO, SWOV, TNO, TRL, UPM, VTI and VTT) are participating as speakers or authors. They are involved in 4 strategic sessions (STS), 15 special sessions (SPS) and 36 thematic sessions (THS) out of which 17 sessions are moderated by ECTRI Members.

We look forward to seeing you there.

*ECTRI, The Leading European Research Association
For Sustainable and Multimodal Mobility*

ectri.org

Monday 23 April 2012

9:00 – 16:00

Final WEATHER Conference, Athens Concert Hall

Researchers, policy-makers and transport professionals are invited to participate in the closing event of the FP7 [Weather project](#) conference, a side event of TRA, and by that to support the development of a roadmap to deal with weather extremes and transportation systems on various levels. The event is organised and coordinated by ECTRI member, the Fraunhofer Institute for Systems and Innovation Research (Fraunhofer - ISI) in close collaboration with the Centre for Research and Technology Hellas/Hellenic Institute of Transport (local host).

14:30 – 15:45

Strategic Session STS3 – Infrastructures for the 21st century

Chaired by Hans Jeekel, DVS

ECTRI President C. Piehler, DLR is invited speaker at this session that will discuss steps for transport infrastructure renewal that need to be taken until 2025-2030 to achieve an intermediate milestone towards 2050, when an affordable and advanced European mobility network needs to be achieved. J.H. Dronkers, from ECTRI Member DVS is invited speaker to this session.

Tuesday 24 April 2012

8:30 – 11:30

EUTRAIN project meeting

The [EUTRAIN](#) partners will meet for a project meeting as side event of TRA in order to present ongoing activities, project's progress and to prepare the next steps activities. The EUTRAIN project, FP7 funded and coordinated by ECTRI, aims to put forward a framework for such international cooperation in Transport research between the European Transport Research Area (ERA-T) and other regions of the World (USA, China, Russia, India, South Africa, Japan, Tunisia, Egypt, Turkey, Ukraine).

12:15 – 13:45

ERTRAC networking lunch

This lunch is an occasion to get together between ERTRAC Members and representatives of the other organizations involved in the TRA Conference: Greece, the European Commission, CEDR, ERRAC and WATERBORNE. Guests will be welcomed by the ERTRAC Chairman Prof. Wolfgang Steiger and Vice-Chairman Prof. Zissis Samaras. ECTRI representatives, member of ERTRAC Steering Group and Plenary, will join this lunch.

16:45 – 18:00

Thematic Session THS24 – Travel behavior and cultural aspects (PVI)

Moderated by C. Piehler, DLR and ECTRI President

Wednesday 25 April 2012

11:00 – 12:15

Strategic Session STS10 – Transport research cooperation and R&D trends around the world

Moderated by C. Alméras, ECTRI Secretary General

This session aims at presenting some facts and figures concerning transport R&D around the world and discussing the issues that exist for the promotion of a more rigorous and far reaching transport research cooperation around the world. It consists of the following presentations:

- “Transport research trends around the world”, George A. Giannopoulos , HIT
- “The context for international cooperation in Transport research in the EU”, Alessandro Damiani, EC DG RTD
- “EU-US cooperation experience and prospects for the future”, Michael Trentacoste, US FHWA
- “EU cooperation with USA and Japan on ICT cooperative systems”, Juhani Jaaskelainen, EC DG INFSO
- “UD-DoT international cooperation activities and experience”, Kevin Womack, US/DoT
- “Experience on ERTICO’s cooperation with emerging economies (BRICS) in the field of road/urban transport research”, Vincent Blervaque, ERTICO

16:45 – 18:00

Special Session SPS14 – Gender issues in Transportation - Bridging the gap

Moderated by Prof. Sandra Rosenbloom, Chair of the TRB Executive Committee, Former leader and founder (1978) of the Women’s issues in Transportation Committee of the TRB

B. Lenz, DLR, J. Armoogum and C. Coquelet, Ifsttar are invited speakers at this session that will address the specific needs and particularities in travel behaviour and patterns of its users, male and female. This session is linked to the 5th International Conference on Women’s Issues in Transportation to be held in April 2014, Paris, France, which is supported by ECTRI.

18.15 – 19.30

Special session SPS21 – Developing the European Transport Research Alliance (DETRA)

Moderated by Steve Phillips, FEHRL

The session will provide feedback on the status of the European Transport Research Alliance and the steps that need to be taken for the Alliance to achieve its objectives.

N. Paulley, ECTRI Vice-President will be speaker at this session along with the representatives of the other DETRA Partners: J. AL, FEHRL, E. Bekiaris, CERTH-HIT, J.-P. Médevielle, HUMANIST and W. Steinicke, EURNEX.

Thursday 26 April 2012

11:00 – 12:15

Closing session: Preparing the future of an integrated transport system for Europe

Prof. G. Giannopoulos, Director of ECTRI Member HIT, is speaker at this session that looks at the future of transport systems and draw conclusions on research priorities, in relation to the Strategic Transport Technology Plan (STTP).

Friday 27 April 2012

9:00 – 14:00

HERMES project – Progress meeting

The FP7 [HERMES](#) project which aims to develop closer and more effective communication between researchers working in the field of transport technologies in the EU and their counterparts around the world, by facilitating the exchange of information and developing a framework for long-term collaboration, will hold a progress meeting. ECTRI will attend this meeting in order to share information and see synergies with the EUTRAIN project.

In addition to the above mentioned sessions and events, ECTRI Members will be participating in the following sessions:

Monday 23 April 2012

- 14:30-15:45** **STS1 Innovation in Transport: new trends from the EU** (J.-P. Médevielle, Ifsttar)
- 16:15-17:30** **THS1 Client Focused Road Maintenance (PI) moderated by J. van der Velde, DVS:** *Evaluation of highway contractors based on the actual performance of their past projects* (L.Gaspar, KTI)
- THS4 Transport Modeling and Simulation I (PII):** *Functional-spatial sustainability potentials of integrated infrastructure planning* (J. Artsa, DVS); *Improving bus transit in cities with appropriate dynamic lane allocating strategies* (X. Xie, N. Chiabaut, L. Leclercq, Ifsttar)
- THS5 Road Vehicles (PV) moderated by T. Bein, FhG:** *Comparison of the performance of heavy vehicles results of the OECD study* (K-P. Glaeser, BAST)
- 17:30-18:45** **THS7 Financing of Transport Infrastructure (PI):** *Public-Private collaboration: how private involvement can contribute to network performance* (S. Lenferink, DVS)
- THS10 Transport Modeling and Simulation II (PII):** *Augmenting the floating car data approach by dynamic indirect traffic detection* (S. Ruppe, M. Junghans, M. Haberjahn, C. Troppenz, DLR); *Simulation of V2X applications with the iTETRIS system* (D. Krajzewicz, L. Bieker, DLR)
- THS11 Railway design and construction (PV):** *Automated and cost effective maintenance for railway (ACEM-Rail)* (N. Bosso, POLITO; F. Schubert, F. Heinicke, A. Simroth, FhG)
- THS12 New transport and mobility concepts (PVI):** *Intermodal passengers terminals: design standards for better level of service* (P. Iordanopoulos, HIT), *A strategy on how to utilize smartphones for automatically reconstructing trips in travel survey* (P. Nitsche, P. Widhalm, S. Breuss, P. Maurer, AIT)

STS: Strategic session; THS: Thematic session, SPS: Special Session

Tuesday 24 April 2012

- 11:00-12:15** **STS5 Efficient Services for Intermodal Freight Transport and Logistics** (B. Jacob, Ifsttar, G. Aifadopoulou, CERTH-HIT)
- 13:45-15:00** **THS14 Safety on Driver oriented issues (PIII) moderated by T. Mäkinen, VTT:** *Thoracic injury assessment for improved vehicle safety* (D. Hynd, J. Carroll, TRL), *ADSEAT: Adaptive seat to reduce neck injuries for female and male Occupants* (A. Linder, VTI)
- THS15 Freight Transport I (PII) moderated by G. Giannopoulos, CERTH-HIT**
- THS16 Vulnerable users (PIII):** *The ITF/OECD working group on powered two wheeler safety: developing guidelines for an integrated safety strategy* (P. Van Elslande, Ifsttar), *Evaluation of rider's support systems in Power Two Wheelers (PTWs)* (K. Toulidou, D. Margaritis, P. Spanidis, S. Nikolaou, E. Bekiaris, CERTH/HIT)
- THS17 Pavement modeling (PV):** *Analysis of the long term structural performance of flexible pavements using full-scale accelerated pavements tests* (J. Ritter, R. Rabe, A. Wolf, BAST)
- THS18 Moving More Efficiently (PIV):** *EU-CargoXpress; wind propulsion concept* (P. Izaguirre-Alza, L. Pérez- Rojas, A. Torres-Benayas, F. Pérez-Arribas, UPM)

- 15:30-16:45** **STS8 Integrated Transport from the Travellers' Perspective** (S. Trommer, DLR)
- 16:45-18:00** **THS19 Efficient Transport Policies (PI): Stimulating transportation policy-making through an effective traffic information communication mechanism: the case of Athens** (A. Kortsari, M. Chatziathanasiou, CERTH-HIT), *Technology Gaps and Research Priorities to support EU Maritime Transport Policy* (M. Boile, I. Sdoukopoulos, CERTH-HIT)
- THS20 Safety Assessment (PIII): Results and lessons learned of a subjective field operational test on the lane departure warning function** (L. Guidotti, G. Perboli, R. Tadei, POLITO), *Assessment of integrated vehicle safety systems for improved vehicle safety* (C. Rodarius, TNO)
- THS21 Freight Transport II (PII): Manually guidable Freight Transport System for Urban Shipment and Delivery** (M. Brüning, W. Schönewolf, FhG)
- THS22 Cooperative and Automated Systems (PII): Using I2V communication to reduce traffic emissions at urban signalized intersections** (R.T van Katwijk, TNO), *Distributed and centralized approaches for cooperative road traffic dynamics* (J. Monteil, D. Rey, N.-E. El Faouzi, Ifsttar)
- THS24 Travel Behaviour and cultural aspects (PVI) moderated by C. Piehler, ECTRI, DLR**
- 18:15-19:30** **SPS10 Measuring Carbon Footprint of Freight Transport Chains moderated by A. Lewis, TRL: Measuring Carbon Footprint of Freight Transport Chains** (V. Ehrler, DLR and K. Makela, VTT)
- SPS11 Automated driving moderated by J.-M. Blosseville, Ifsttar** with S. Glaser, Ifsttar as speaker

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Wednesday 25 April 2012

- 13:45-15:00** **STS13 Road Safety: A decade of Action** (F. Wegman, SWOV)
- THS25 Infrastructure Management (PII): Procedures for Cross Asset Management Optimisation** (S. Deix, K. Alten, AIT); *The deployment of river freight terminals: the example of the concrete industry in Ile de France* (O. Gavaud, M. Douet, Ifsttar)
- THS26 Transport Policy for Sustainability (PI): A paradigm shift in European transport and urban-planning-fact or fable?** (A. Tuominen, H. Kanner, VTT), *New governance approaches for sustainable project delivery* (J. Arts, DVS)
- THS27 Mitigating Noise Pollution (PIV): Anomalous data of END noise mapping for major roads on the website of the European Environment Agency** (W. Alberts, DVS), *Integrated solutions for noise & vibration control in vehicles* (T. Bein, FhG)
- THS29 Logistics and intermodal transport (PVI) moderated by B. Jacob, Ifsttar: The role of intelligent logistics centres in a multimodal and cost-effective transport system** (J. Eckhardt, VTT)
- 15:30-16:45** **THS30 Transport Mode Shifts (PI): Modeling Freight Mode Choice in Greece** (G. A. Giannopoulos, HIT), *How simplifying urban driving cycles influence fuel consumption estimation* (B. Jeanneret, R. Trigui, L. Leclercq, Ifsttar), *Evaluation of a high occupancy vehicle lane in central business district Thessaloniki* (I. Stamos, CERTH-HIT), *An individualized travel information system for optimizing mode and route choice behaviour of commuters* (C. Rudloff, M. Ray, AIT)
- THS31 Safety on Vehicles oriented issues I (PIII): Detection and tracking of moving objects for automotive driver assistance system** (E. Vanpoeringhe, M. Wahla, Ifsttar)

THS32 Mobility & Accessibility I (PII) moderated by B. Lenz, DLR: *Research roadmap towards an accessible public transport system for all* (E. Bekiaris, E. Gaitanidou, CERTH-HIT)

THS33 Energy and Emissions Modeling I (PIV): *Coupling traffic, pollutants emission, air and water quality models: technical review and perspectives* (M. Fallahshorshani, M. André, Ifsttar), *Energy and environmentally efficient road management: the case of the Spanish motorway network* (A. Monzon, N. Sobrino, S. Hernandez, UPM), *Improving an evolutionary multi-objective approach for optimizing railway energy consumption* (A. Lejeune, R. Chevrier, J. Rodriguez, Ifsttar), *Estimation of pollutants emissions from the road traffic at a city scale, and its sensitivity regards the calibration traffic models* (E. Brutti-Mairesse, S. Teillac, M. André, L. Leclercq, Ifsttar)

THS35 Safety infrastructures related issues I (PIII) moderated by S. Deix, AIT: *A simulation framework for assessing the safety effects of soft and hard shoulders as examples of forgiving roadside treatments* (P. Nitsche, R. Stütz, P. Saleh, P. Maurer, AIT), *Assessing the safety impacts of intersection safety systems* (A. Schirokoff, E. Pilli-Sihvola, N. Sihvola, VTT), *The influence of the infrastructure characteristics in urban road accidents occurrence* (S. Vieira Gomes, LNEC), *Improving the links between research and road safety policy: the case of France and England's speed management* (F. Hamelin, M. Moguen-Toursel, Ifsttar)

16:45-18:00 **SPS14 Gender issues in Transportation – Bridging the gap** with B. Lenz, DLR, J. Armoogum, Ifsttar and C. Coquelet, Ifsttar as invited speakers

THS37 Safety on Vehicles oriented issues II (PIII): *Accurate localisation Based on GNSS and propagation knowledge for safe applications in guided transport* (J. Marais, Ifsttar), *Evaluation method of GNSS-Based positioning functions for safety applications in operational conditions* (J. Beugin, Ifsttar), *Characterization and simulation of optical sensors* (M. Grapinet, J.-C. Smal, J.-M. Blosseville, Ifsttar), *Vehicle trajectory analysis: an advanced tool for road safety* (B. Jacob, Ifsttar)

THS39 Energy and Emissions Modeling II (PIV): *Development of a methodology and tool to evaluate the impact of ICT measures on road transport emissions* (A. Monzon, UPM), *Reducing Freight transport CO2 emissions by increasing the load factor* (C. Cruz, M. Mbacké, Ifsttar)

THS40 Pavement maintenance and operation (PV) : *Developments of calculation tool for assessing the energy demand of warm mix Asphalt* (J. Jansen, DTU)

THS41 Transport Decision Support & User Acceptance (PVI) moderated by A. Bekiaris, CERTH-HIT

18:15-19:30 **SPS15 Development of the European Road Safety Observatory – The DaCoTA project** with N. Muhlrads, Ifsttar, N. Bos, SWOV as speakers

SPS16 iMobility Forum Research & Innovation Recommendations 2011-2020 co-moderated by J.-P. Médevielle, Ifsttar

SPS17 Transport, NMP and ICT NCP networks join forces aiming towards an improved participation of EU organizations in FP7 with M. Chefki, DLR as speaker

SPS20 The Talent Challenge in Electro Mobility with D. Misul, POLITO as speaker

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- 9:00-10:15** **THS42 Robust and Resilient Transport Systems (PI)** moderated by H. Jeekel, DVS: *How can procurement contribute to network performance? Streamlining network, project and procurement objectives* (J. Arts, DVS)
- THS43 General safety approaches (PIII)** moderated by J.-P. Médevielle, Ifsttar: *Best practice in European traffic incident management* (M. Kusters, G. Broekhuizen, DVS)
- THS44 Traffic Management (PII)** moderated by T. van Rooijen, TNO
- THS45 Innovative Electromobility Schemes (PIV):** *Spatial exploration of effective electric vehicle infrastructure location* (E. Mitsakis, HIT)
- THS46 Combined infrastructure and vehicle effects (PV):** *The DIRECT-MAT web database – a source of knowledge in road recycling* (J.-B. Gobert, Ifsttar)
- THS47 Safety infrastructures related issues II (PIII):** *Tools needed for enhancing transferability of cost-effective road safety measures* (H. Peltola, R. Rajamäki, J. Luoma, VTT)
- 13:45-15:00** **SPS24 Research and Innovation Policies to enhance uptake of Sustainable Transport Solutions** with W. Schade, FhG, E. Arsénio, LNEC as speakers
- SPS25 Public Private Partnerships for Transport Infrastructure : Theory and Practice** with P. Leviäkangas, VTT as invited speaker
- SPS26 Transport planning and traffic information systems in cities** with Y. Tyrinopoulos, CERTH-HIT as invited speaker
- SPS27 Working on Active Safety Systems: The euroFOT and interactive projects** with T. Hesse, DLR as invited speaker
- SPS29 Trends in Maritime Logistics and Port Operations** moderated by M. Boile, HIT
- 15:45-17:00** **SPS30 New Solutions for sustainable distribution of freight in Urban Areas** with W. Schoenewolf, FhG as speaker
- SPS32 Safety of Vulnerable Road Users (VRUs)** moderated by E. Bekiaris, CERTH-HIT with S. Nikolaou, CERTH-HIT, D. Margaritis, CERTH-HIT, S. Espie, Ifsttar and A. Anund, VTI as speakers
- SPS35 Building up the future infrastructure networks in Europe** moderated by F. Bourquin, Ifsttar with S. Proeschel, Ifsttar as speaker

STS: Strategic session; THS: Thematic session, SPS: Special Session

For locations of sessions and events, please refer to the TRA2012 Final Programme