

<p>Wednesday 4 October</p> <p>PLENARY SESSION Aula Magna 0930 - 1100 Conference Opening</p> <p>Pierluigi Coppola, Chair of the Board, Association for European Transport Introduction to AET and ETC Conference arrangements Welcome from Barcelona City Council</p> <p>Keynote Address Barcelona in the 25 years since the Olympic Games</p> <p>Francesc Munoz Director, Observatori de la Urbanització Universitat Autònoma de Barcelona</p>			
	<p>Session 1 1130 - 1330</p>	<p>Session 2 1500 - 1630</p>	<p>Session 3 1700 1900</p>
<p>Connected and Autonomous Vehicles</p>	<p><u>Liability/Insurance Issues of Connected and Autonomous Vehicles</u> Session Chair: Colin Chick, Independent Consultant, UK What will autonomous cars do to the insurance companies? I Bojic, C Ratti, Massachusetts Institute of Technology; R Braendli, Allianz Group, US Civil liability in case of platooning by road W Verheyen, ESL/KULeuven/Odisee UC, BE</p>	<p><u>Connected and Autonomous Vehicles</u> Session Chair: Gav Jackman, TSS, UK Roadmap for cooperative ITS in European cities M Cartwright, Centaur Consulting Ltd, UK Leading Innovation Timeline: basis for a strategy on traffic management in a changing ITS world R Jorna, R Kleine, Mobycon; L Hendriks, Rijkswaterstaat, NL Simulating VANets with FLOURISH CCAV Project G Jackman, TSS, UK</p>	<p><u>Connected and Autonomous Vehicles: big data Discussion</u> "Intelligent Highways, Intelligent vehicles, Intelligent Data, Intelligent Models?" The next 4 years of transport development and its implication for transport planning and modelling</p>
<p>Intelligent Mobility – Management and Operations</p>			<p><u>Traffic Management</u> Session Chair: Samya Ghosh, AECOM, UK Analyzing the performance of piezo electrical cables for traffic and weight data collection on the national road network in Norway M F Böhm, E H Aakre, T Haugen, NTNU - Norwegian University of Science and Technology, NO Automatic transport network matching using deep learning M M Salvador, We Are Base/Bournemouth University; M Budka, Bournemouth University; T Quay, We Are Base, UK Is there an economical way to access hidden transport data to support seamless transport K Nur, T Gammons, Arup, UK Vehicle dynamics data collection to characterize the drivers' behaviour C Naude, T Serre, IFSTTAR; V Ledoux, Cerema, FR</p>
<p>Transport Economics, Finance and Appraisal</p>	<p><u>Application of Cost Benefit Analysis (CBA)</u> Session Chair: Pauline Wortelboer, KiM Netherlands Institute for Transport Policy Analysis, NL Uncertainties in cost benefit analyses (CBA) of infrastructure projects: do they matter for project rankings? M Aarestrup Aasness, J Odeck, Norwegian University of Science and Technology and Norwegian Public Roads Administration, NO What project? Improving value for money through early project selection M Welde, NTNU - Norwegian University of Science and Technology, NO; M Börjesson, KTH - Royal Institute of Technology, SE, J Odeck, NTNU - Norwegian University of Science and Technology, NO Contribution to the European discussion of project appraisal: the German FTIP 2030 case C Walther, PTV Planung Transport Verkehr AG and Bauhaus University Weimar; A Dahl, PTV Planung Transport Verkehr AG; V Wassmuth, PTV Transport Consult GmbH, DE Reliability in transport CBA: comparing and testing the consistency of the methods and their outcomes D Meunier, LVMT (UMR-T 9403, École des Ponts, IFSTTAR, UPEM, UPE); H Le Maitre, French Ministry of the Environment, Energy and the Sea, N Picard, THEMA (Université de Cergy-Pontoise), FR</p>	<p><u>Value of Timetable Changes and Reliability</u> Session Chair: Luuk Brederode, Goudappel Coffeng, NL Estimation of the social costs of train delays in the Netherlands F Savelberg, P Warffemius, KiM Netherlands Institute for Transport Policy Analysis; E Kroes, Significance, NL Delay valuation in rail transport and train scheduling: a simple stylised model D Meunier, LVMT (UMR-T 9403, École des Ponts, IFSTTAR, UPEM, UPE); M Perez-Herrero, SNCF Réseau, FR Derivation of updated day to day variability relationships for major UK roads G Lovett, S Sirivadidurage, Mott MacDonald, UK The economic value of timetable changes E Kroes, Significance, NL; A Daly, ITS, University of Leeds, UK</p>	<p><u>Integrated Models and their Application</u> Session Chair: Hermann Maier, Jacobs, UK Prioritising national infrastructure investment in a post-Brexit world D Simmonds, David Simmonds Consultancy, UK Forecasting the economic impacts of the Oxford to Cambridge Expressway J Swanson, J Cartmell, Steer Davies Gleave, UK A new integrated model to evaluate wider economic impacts of transport policies O Yilmaz, Ministry of Development; E Voyvoda, Middle East Technical University (METU), TR</p>

<p>Transport Economics, Finance and Appraisal</p>	<p>Funding Alternatives Session Chair: David Simmonds, David Simmonds Consultancy, UK Road investments and the trade-off between private and public funding M Welde, NTNU - Norwegian University of Science and Technology; S Brathen, J Rekdal, Moreforskning Molde AS, NO Alternative funding sources for transport infrastructure S Thomas, A Hildred, Oxera Consulting, UK</p>	<p>Special Cases in Appraisal Session Chair: The value of iconic infrastructure projects: two Dutch case studies N Mouter, Delft University of Technology, NL A willingness to pay study of removing a road from within the Stonehenge World Heritage Site J Khan, Department for Transport and Highways England, UK</p>	
<p>Planning for Sustainable Land Use and Transport</p>	<p>Transport and Cities Session Chair: Domi Esztergár-Kiss, Budapest University of Technology and Economics, HU Quantification of the emissions from personal mobility: estimation based on general mobility surveys M Pons, E Domene, M Garcia, Institut D'Estudis Regionals I Metropolitans de Barcelona (IERMB), ES The importance of the first and last mile in total door-to-door travel times, reliability and travellers' perception within the Amsterdam metropolitan region A de Koning, T Straatemeier, Goudappel Coffeng, NL Progress of implementing SUMP in Budapest: project selection, monitoring and evaluation and the role of macroscopic transport modelling M Juhasz, Szechenyi Istvan University; T Matrai, Budapest University of Technology and Economics; T Halmos, P Toth, BKK Centre for Budapest Transport, HU 10 years of the Generated Mobility Assessment Studies X Sanyer, Metropolitan Transport Authority of Barcelona, ES</p>	<p>Equity Session Chair: Pierluigi Coppola, University of Rome "Tor Vergata", IT Mobility disadvantage and sustainability: Just solutions for non-car users and for all K Stark, University of Applied Sciences Erfurt, DE Modelling the health mobility for rational resource distribution policies D Gattuso, Università Degli Studi Mediterranea di Reggio Calabria; G Quattrone, Università Cattolica del Sacro Cuore (DISES), IT Equity challenges in major transport plans A Aparicio, Technical University Madrid (UPM), ES</p>	<p>Mode Shift Session Chair, Michael Bach, Independent Consultant, UK Potentials for energy and climate efficient passenger mobility: simulation of ambitious mode shift measures in the Ruhr metropolitan region M Müller, O Reutter, Wuppertal Institute for Climate, Environment and Energy, DE Shifting towards cycling in the Greater Stockholm area: a comparison between 2005-2006 and 2011-2013 C Liu, Swedish Road and Transport Research Institute, SE Commuting trips in the metropolitan area of Barcelona: travel behaviour, socio-environmental impacts and policy assessment N Perez-Sans, M Perez-Perez, G Sole, Institut D'Estudis Regionals I Metropolitans De Barcelona (IERMB), ES The Mathilde bridge in Rouen - a study about the impact on mobility of a main road's closure in the center of an urban area M Savary, C Marchesse, D Savalle, Cerema, FR</p>
<p>Rail Policy and Planning</p>	<p>Forecasting Session Chair: Ben Condry, Imperial College London, UK An origin-destination based train station choice model M Verschuren, Nederlandse Spoorwegen, NL Development of integrated demand and station choice models for local railway stations and services M Young, S Blainey, University of Southampton, UK Understanding demand for rail travel in UK B Patrui, A Daly, C Rohr, RAND Europe; M Wardman, SYSTRA; P Connell, Leigh Fisher, UK A new timetable: from rough estimates to fact-driven insights from smartcard data N Guis, J Banninga, Nederlandse Spoorwegen; P Siderius, ProRail, NL</p>	<p>Serving Markets Session Chair: Charles Harmer, Crossrail, UK Train or bus? Travellers' perceptions of public transport modes: a qualitative analysis from a regional line D Dubois, E Perrin, C Hurez, Cerema Centre-Est, FR Passenger coverage and service sustainability: a time-cost model for the optimal choice of stops on a regional rail service F M M Cirianni, G Pavone, Regione Calabria, IT Comparison of rail commuting between 6 west European cities B Condry, Imperial College London, UK</p>	<p>Enhancing the Customer Experience Session Chair: Neil Fleming, Department for Transport, UK Passengers' assessments of thermal comfort in a railway car mock-up with displacement ventilation H-J Hoermann, J Maier, O Zierke, German Aerospace Center (DLR), Institute of Aerospace Medicine, Hamburg, DE The perfect train experience, from Engineering to Imagineering M van Hagen, E Ten Elsen, Nederlandse Spoorwegen, NL From customer insights to new services M van Hagen, J van der Made, Nederlandse Spoorwegen, NL Time valuations of rolling stock improvements F Teklu, M Wardman, R Maldonado, SYSTRA, UK</p>
<p>Local Public Transport</p>	<p>Governance Session Chair: Graham Ellis, Ellis Transport Services, UK Do bus operators go the distance? analyzing local competition in tendered bus contracts A Vigren, VTI, SE Leading from the Middle - Midlands Connect-the genesis of a sub-national transport body J Penrose, H Kelly, Department for Transport, UK A methodology for minimum services definition in Local Public Transport: Governance in Italian regional legislation F M M Cirianni, G Pavone, Regione Calabria; A S Luongo, Invitalia, IT Appraising the Bus Services Bill – lessons from the UK experience C McArdle, Department for Transport, UK</p>	<p>Innovation in Barcelona Session Chair: Niels van Oort, Goudappel Coffeng, NL TMB experience with CNG buses: main lessons learned J Ariño, TMB Transports Metropolitans de Barcelona, ES Opportunity charging of buses: effects on bus operator costs and user performance M A Estrada, Universitat Politècnica de Catalunya; J Mension, TMB, Transports Metropolitans de Barcelona, ES Technological evolution has always been an instrument for improving the quality and efficiency of transport services and mobility management M Villalante I Llaurodo, Barcelona Regional, ES Use of Opendata information to develop accessibility indicators in public transport J Llinas Serrahima, Barcelona Regional, ES</p>	<p>Networks Session Chair: Iain Macbriar, QV Associates, UK Effects of network structure on transit use: the case of new Barcelona's bus system H Badia, Technical University of Catalonia (UPC); J Argote-Cabanero, TSS-Transport Simulation Systems, ES; C F Daganzo, University of California, Berkeley and VIA Analytics, Inc., US Performance evaluation procedure for bus interchange areas J Mension, TMB; M Salicrú, University of Barcelona; M Estrada, Universitat Politècnica de Catalunya, ES Public transport optimization in Kyiv: improving accessibility under severe investment constraints A Nunez, J Oh, The World Bank, INT Patterns of using public transport and its evolution trends in the world P Zand, UITP, INT</p>
<p>Global Issues</p>			<p>Plans Session Chair: Angel Aparicio, Technical University Madrid (UPM), ES Sharing experiences on Sustainable Urban Mobility Plans: the case of Lille Metropolitan area and the Algarve poly-centric region O Heddebaut, IFSTTAR-AME-DEST, FR; E Arsenio, LNEC Department of Transport; J Coelho, Comunidade Intermunicipal do Algarve, PT Potential future scenarios for company mobility N Wuytens, I Keseru, C Macharis, Vrije Universiteit</p>

			<p>Brussel – MOBI, BE</p> <p>Business models for innovative mobility services in Nordic cities</p> <p>O Langeland, T-E Julsrud Transport Economics Institute, NO; S Sarasini, RISE Viktoria, SE</p> <p>Concept development of sustainable workplace mobility plans</p> <p>D Esztergár-Kiss, T Tettamanti, Budapest University of Technology and Economics, HU</p>
Freight and Logistics	<p>Aggregate Freight Transport Modelling</p> <p>Session Chair: Erik Verroen, RWS, NL</p> <p>Development of a multimodal transport chain choice model for container transport for BasGoed</p> <p>M de Bok, Significance, G de Jong, Significance, L Tavasszy, Delft University of Technology, NL</p> <p>TRIMODE freight & logistics model of Europe</p> <p>I Williams, TRT/Ian Williams Services; M Garratt, C Wright, MDS Transmodal, UK</p> <p>An exploration of freight transport forecasts for The Netherlands with BasGoed</p> <p>M de Bok, Significance; J Kiel, Panteia; J Francke, KiM Netherlands Institute for Transport Policy Analysis, NL</p> <p>The internalisation of short-term marginal external costs of sea transport</p> <p>I Vierth, Swedish National Road and Transport Research Institute (VTI), SE</p>	<p>Logistics Issues</p> <p>Session Chair: Helen Porter, Peter Davidson Consultancy, UK</p> <p>Grocery stores as attractors of transport demand: theoretical and empirical approaches to explain store location from agent interaction</p> <p>B Heldt, T Matteis, I Frenzel, German Aerospace Center, DE</p> <p>Who are the European modal shift champions?</p> <p>J Francke, O Jonkeren, J Visser, KiM Netherlands Institute for Transport Policy Analysis, NL</p> <p>Impact of higher maximum weights for lorries on modal split - ex-post analysis for Sweden</p> <p>I Vierth, S Lindgren, H Lindgren, Swedish National Road and Transport Research Institute (VTI), SE</p>	<p>Transport Law Issues</p> <p>Session Chair: Graham Ellis, Ellis Transport Services, UK</p> <p>Towards a legal model for horizontal cooperation in logistics</p> <p>W Verheyen, ESL/KULEUVEN/Odisee UC, BE</p> <p>Logistics systems and the use of the contract of carriage to circumvent the labour protection law</p> <p>C Tincani, University of Verona, IT</p> <p>Relationship between transport law and insurance law</p> <p>A Vermes, Széchenyi István University, HU</p> <p>Evaluating the liability of road carriers in Hungarian law with respect to international tendencies</p> <p>A Szegedi, Széchenyi István University, HU</p>
Transport Models Stream 1	<p>Big Data</p> <p>Session Chair: Olga Feldman, Arcadis, UK</p> <p>Developing public transport OD matrices from GPS and smartcard data - a test of the method's validity against household data from Tbilisi</p> <p>L Chittock, S Callighan, T van Vuren, Mott MacDonald, UK</p> <p>Recent developments of big data in the Dutch national model: study with mobile phone data</p> <p>D Joksimovic, Dutch Ministry of Infrastructure and the Environment; K Friso, DAT.Mobility; J Keij, Mezero, NL</p> <p>Fusing mobile network data with mobility data for Transport for London's Project Edmond</p> <p>C Wroe, Telefonica; S Rutherford, Jacobs; P Hanson, AECOM, UK</p> <p>Validation of floating car data for transport policy analysis and transport models</p> <p>H van der Loop, KiM Netherlands Institute for Transport Policy Analysis; M Kouwenhoven, Significance; P van Bekkum, MuConsult, NL</p>	<p>Big Data OD</p> <p>Session Chair: Paul Hanson, AECOM, UK</p> <p>Trip matrix development using mobile phone data: what have we learnt so far and what are the key principles to follow?</p> <p>R Tolouei, AECOM, UK</p> <p>Correcting variable sample rates in trip matrices derived from Automatic Number Plate Recognition cameras: a Python based simulation approach</p> <p>B Mackley, T van Vuren, Mott MacDonald, UK</p> <p>A hybrid gravity modelling approach for trip matrix synthesis</p> <p>S Psarras, R Prince, R Tolouei, AECOM, UK</p>	<p>Cycling Innovation</p> <p>Session Chair: András Munkácsy, Research Centre for Transport Development, HU</p> <p>Modeling the willingness to use non-motorized modes for mandatory and non-mandatory trips in different urban areas</p> <p>A Bamney, Rewa Engineering College; R Rastogi, Indian Institute of Technology Roorkee (IITR), IE; A Sharma, Queensland University of Technology, AU</p> <p>Updating of the Copenhagen traffic model with respect to bicycle transport</p> <p>G Vuk, Danish Road Directorate, DK</p> <p>Using crowdsourced data to improve the quality of cycling models: the case of Chelmsford</p> <p>C Kelen, G Christou, Jacobs UK</p> <p>Modelling propensity to cycle as a policy tool</p> <p>N Raha, SYSTRA; D Christie, Transport for London; A Gordon, Mott MacDonald, UK</p> <p>Development of an enhanced bicycle model to incorporate electric cyclists in the Dutch national strategic road traffic model</p> <p>N Groot, F Hofman, Rijkswaterstaat; L Harms, KiM Netherlands Institute for Transport Policy Analysis, NL</p>
Transport Models Stream 2	<p>Connected and Autonomous Vehicles</p> <p>Session Chair: Aurore Remy, TSS, ES</p> <p>Will self-driving cars impact the long term investment strategy for the Dutch National trunk road system?</p> <p>R Smit, Rijkswaterstaat Water, Traffic and Environment; H van Mourik, 4cast; M Pieters, Significance, NL</p> <p>Traffic modelling of self-driving vehicles</p> <p>S Frost, COWI, DK</p>	<p>Short term AI and Deep Learning</p> <p>Session Chair:</p> <p>Model-based short term predictor of traffic states</p> <p>L Suijs, Goudappel Coffeng; L Wismans, L Brederode, Dat.mobility, NL</p> <p>Real time short term traffic prediction for a regional MIDAS network based on a neural network prediction algorithm</p> <p>A Narh, C Goves, P Bate, Transport Systems Catapult, UK</p>	<p>Assignment</p> <p>Session Chair: Aurore Remy, TSS, ES</p> <p>Development of an agent based simulation framework for public bus operations for improving arrival reliability</p> <p>Md A Ramli, V Jayaraman, Institute of High Performance Computing, A*STAR; K H Chee, SMRT Buses Ltd, SG</p> <p>The assessment of Transit Oriented Developments using microsimulation models</p> <p>E Ruxton, T Tanoz-Sargeant, AECOM, UK</p> <p>Improving consideration of redundancy of itineraries in the modal choice</p> <p>C Derome, RATP, FR</p>