



Lyon, France, April 3-4, 2008

European Conference

on Human Centred Design
for Intelligent Transport Systems

Programme

Scientific conference

Drivers' distraction due to ITS use

Tools and methodologies for safety and usability

Modelling of drivers' behaviour for ITS design

Tools and methodologies for ITS design and drivers awareness

Diversity and specificity of road user groups

Drivers' acceptance of assistance functions



Opening session

Day 1, 10:00

Opening of the conference

Corinne Brusque (INRETS, France)

The key role of Human Factors in the EC eSafety and intelligent car initiatives

André Vits (EC-DG INFSO)

The importance for national authorities of European and international cooperation in ITS research

Régine Bréhier* (French Ministry of Ecology and Sustainable Development and Planning)

Panel discussion

Day 1, 10:30

The stakeholders' key challenges for European Human Factors research community

Session chaired by André Vits (DG INFSO)

Peter Burns (Transport of Canada, Canada), Johan Engstrom (VTEC, Sweden), Michael Regan (INRETS/MUARC, Australia), A representative of Automotive Suppliers

Drivers' distraction due to ITS use

Session chaired by Alan Stevens (TRL, United Kingdom)

Session 1

Day 1, 11:15

The effect of cognitive tasks on predicting events in traffic

Martin R.K. Baumann (DLR / BAST, Germany), Tibor Petzoldt (Chemnitz University of Technology, Germany), Chantal Groenewoud (Utrecht University, The Netherlands), Jeroen Hogema (TNO, The Netherlands), Josef F. Krems (Chemnitz University of Technology, Germany)

Neural basis for some cognitive risk of using mobile phones during driving

Takashi Hamada (AIST, Japan)

Effects of visual search task complexity on lane change task performance

Ellen S. Wilschut (IfADo, Germany), Gerhard Rinkenauer (IfADo, Germany), Karel A. Brookhuis (Groningen University, The Netherlands) Michael Falkenstein (IfADo, Germany)

Effects of simultaneous multi-modal warnings and traffic information on driver behaviour

Clemens Kaufmann (FACTUM OHG, Austria), Ralf Risser (FACTUM OHG, Austria), Arjan Geven (CURE, Austria), Reinhard Sefelin (CURE, Austria)

Naturalistic driving observations to investigate distraction exposure and IVIS patterns of use: interests and constraints of the approach

Arnaud Bonnard, Corinne Brusque (INRETS, France)

Tools and methodologies for safety and usability

Session chaired by Martin Baumann (DLR, Germany)

Session 2

Day 1, 18:45

Development of innovative methodologies to evaluate ITS safety and usability: HUMANIST TF E

Sally Cotter (TRL, United Kingdom), Alan Stevens (TRL, United Kingdom), Anke Popken (Chemnitz University of Technology, Germany), Christhard Gelau (BAST, Germany)

Evaluating driver mental workload using the driving activity load index (DALI)

Annie Pauzié (INRETS, France)

* To be confirmed

Comparison of subjective workload ratings and performance measures of a reference IVIS task
Tony Wynn (ESRI, United Kingdom), John, H. Richardson (ESRI, United Kingdom)

Impairment of lane change performance due to distraction: effect of experimental contexts
Marie-Pierre Bruyas, Corinne Brusque, Adrien Auriault, H el ene Tattegrain, Isabelle Aillerie, Max Duraz (INRETS, France)

Connecting black box data and driving behaviour observation for better understanding of driving behaviour
Clemens Kaufmann, Christine Turetschek (FACTUM OHG, Austria)

Modelling of drivers' behaviour for ITS design

Session 3

Day 1, 15:45

Session chaired by Josef F. Krems (Chemnitz University of Technology, Germany)

Modelling driver behaviour in order to infer the intention to change lanes
Matthias J. Henning (Chemnitz University of Technology, Germany), Olivier Georgeon (INRETS, France), Tony Wynn (SERI, United Kingdom), Josef F. Krems (Chemnitz University of Technology, Germany)

Analysis and modelling of driver preparatory behaviour before turning at intersections
Toshihisa Sato, Motoyuki Akamatsu (AIST, Japan)

Influence of unexpected events on driving behaviour at different hierarchical levels: a driving simulator experiment
T. W. Schaap (Twente University, The Netherlands), A. R. A. van der Horst (TNO, The Netherlands), B. van Arem (Twente University, The Netherlands)

Subjective strain estimation depending on driving manoeuvres and traffic situation
Caroline Schie l (DLR, Germany)

Identifying user strategies for interaction with in-vehicle information systems while driving in a driving simulator
Nadja Rauch, Barbara Gradenegger, Hans-Peter Kr uger (Wuerzburg University, Germany)

Parameters related to modelling Intelligent Speed Adaptation Systems with the employment of a microscopic traffic model
Ioanna Spyropoulou, Matthew G. Karlaftis (Athens University of Technology, Greece)

Tools and methodologies for ITS design and drivers' awareness

Session 4

Day 2, 09:00

Session chaired by Jos e Menendez (Polytechnic University of Madrid, Spain)

A service-oriented system architecture for the human centred design of intelligent transportation systems
Jan Ga cnik, Oliver H ager, Marco Hannibal (DLR, Germany)

Analysis and modelling methods for the design and evaluation of an eco-driving system
J r me Barb e, Guy Boy (EURISCO International, France)

An analysis of the requirements of driver assistance systems – when and why does the driver like to have assistance and how can this assistance be designed?
Julia Werneke (DLR, Germany), Astrid Kassner (DLR, Germany), Mark Vollrath (Braunschweig University of Technology, Germany)

A human factor-based approach for the effective use of driving simulators and e-learning tools in driver training and education
Jose M Pardillo Mayora (Polytechnic University of Madrid, Spain)

Comparative evaluation of training methods in improving drivers' understanding about the functionalities and potential limitations of ADAS
Villy Portouli (CERTH/HIT, Greece), Evangelos Bekiaris (CERTH/HIT, Greece), Sofie Boets (IBSR, Belgium), Per Henriksson (VIT, Sweden)

Diversity and specificity of road user groups

Session chaired by Pirkko Rämä (VTT, Finland)

Session 5

Day 2, 11:00

Applying the response code of practice for evaluation of driver assistance systems: how the age of the driver influences perception of steering torque signals

Gerrit Schmidt (Volkswagen AG, Germany)

Effect of additional tasks in driving performance: comparison among three groups of drivers

Marta Pereira (UTL / FMH, Portugal), Houda Hamama (INRETS, France), Marie-Pierre Bruyas (INRETS, France), Anabela Simões (ISEC, Portugal)

What tools are needed to develop safe and joyful cycling for senior citizens

Lars Leden (VTT, Finland)

Preliminary results of a study about the influence of an active accelerator pedal on novice and young drivers in Austria and the Czech Republic

Christine Turetschek (FACTUM OHG, Austria)

Cognitive activity modelling: a case study of lane change schemas and sensation seeking

Tony Wynn (ESRI, United Kingdom), John H. Richardson (ESRI, United Kingdom), Olivier Georgeon (INRETS, France), Thierry Bellet (INRETS, France), Matthias J. Henning (Chemnitz University of Technology, Germany), Josef F. Krems (Chemnitz University of Technology, Germany)

Risk awareness analysis: a comparison between car drivers and motorcyclists

Aurélie Banet, Thierry Bellet (INRETS, France)

Drivers' acceptance of assistance functions

Session chaired by Ralf Risser (FACTUM OHG, Austria)

Session 6

Day 2, 14:00

Drivers' reliance on lane keeping assistance systems: effects of different levels of assistance

Anke Popken (Chemnitz University of Technology, Germany), Lena Nilsson (VTI, Sweden) Josef F. Krems (Chemnitz University of Technology, Germany)

User acceptance and effectiveness of warning and motor priming assistance devices in car driving

M. El Jaafari (Renault, France), J-F. Forzy (Renault, France), J. Navarro (IRCCyN, France), F. Mars (IRCCyN, France), J-M. Hoc (IRCCyN, France)

REFLEKTAS – Usage of reflexive driver reactions in ADAS-development

Ingmar Ehrenpfordt (DLR, Germany), Anke Kullack (Braunschweig University of Technology, Germany), Frank Eggert (Braunschweig University of Technology, Germany)

Meet the driver needs by matching assistance functions and task demands

Astrid Kassner (DLR, Germany)

Perceptions of risk and control: understanding acceptance of advanced driver assistance systems

Somya Joshi (ICCS, Greece), Angelos Amditis (ICCS, Greece), Thierry Bellet (INRETS, France), Vanessa Bodard (INRETS, France)

The effect of ISA in relation to speed limit credibility

Nicole van Nes, Ingrid van Schagen (SWOV, The Netherlands)

Closing ceremony

Day 2, 16:00

Summary of the main outcomes of the conference

Jean-Pierre Médevielle (INRETS, France)

Young researchers award ceremony

Guy Boy (EURISCO, France)

Roger Fougères (Région Rhone-Alpes)*

Sponsored by Foundation Rhone-Alpes Futur through a grant of Région Rhone-Alpes

The expectations of EC towards HUMANIST researchers' community

Emilio Davila-Gonzalez (EC-DG INFSO)

* To be confirmed



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IET Intelligent Transport Systems, a peer-reviewed academic journal from the Institution of Engineering and Technology (The IET) is delighted to announce its collaboration with the EUROPEAN CONFERENCE ON HUMAN CENTRED DESIGN FOR INTELLIGENT TRANSPORT SYSTEM to produce a Special Issue of suitably expanded papers from this event.

Authors of conference papers that are considered suitable for expansion for consideration in the 2009 (Human Centred Design) Special Issue will receive a formal invitation to submit, no later than May 31st 2008.

Details on how to submit your extended paper/s etc will also be provided at this time.

Scientific committee

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- Martin Baumann (DLR, D)**
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- Emilio Davila-Gonzalez (DG-INFSo, EC)**
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- Mathilde Bruyère (ERT, F)**