ITF Pre-Summit Research Day
Transport Safety and Security

22 May 2018, Leipzig, Germany
9:30 – 18:00

Programme

The International Transport Forum (ITF), together with the European Conference of Transport Research Institutes (ECTRI), the European Road Transport Research Advisory Council (ERTRAC), the Forum of European Road Safety Research Institutes (FERSI), the Transportation Research Board (TRB) and the World Conference on Transport Research Society (WCTRS), are pleased to announce the holding of a Research Day on “Transport Safety and Security”. This Research Day will be held in Leipzig, Germany on Tuesday 22 May 2018, in conjunction with the International Transport Forum’s 2018 Annual Summit.

Objectives

The objectives of the Pre-Summit Research Day are to bring together top academics and researchers to present and discuss topics relevant to the Summit’s theme, providing highly valued input to the Summit’s core programme.

It is critically important that research results are brought into practice, especially considering the pace with which our transport system is currently evolving. The Research Day offers a great opportunity to exchange ideas not only between researchers, but also with representatives from governments, cities, and other decision makers.

Focus

While the 2018 ITF Summit on “Transport Safety and Security” will address issues ranging from terrorism and cyber-security to road safety and extreme weather disruption, including the risks and benefits of automated driving, the Research Day will limit its scope to road safety and transport resilience. In particular, in order to plan their actions and investments for the coming years, policy makers need the input from researchers to provide knowledge and solutions on how to:

- better protect vulnerable road users, particularly in a context of an ageing society;
- cut the number of seriously injured people;
- ensure automation and connected systems are implemented safely;
- develop resilient transport systems.
Programme

9h30-9h45: Welcome and Introduction of the Research Day
Stephen Perkins (OECD/ITF, Paris)

9h45-10:00: Key safety and security challenges in Latvia
Jānis Kalninš (Ministry of Transport of the Republic of Latvia, Road Transport Department, Latvia) on behalf of ITF 2018 Presidency Country

10h00-11h20: Vulnerable road users in cities
Moderator: Suzanne Andersson (City of Gothenburg, Sweden)

Electric bicyclists – an emerging group of vulnerable road users?
Tina Gehlert (German Insurance Association, Germany)

Infrastructure improvements to reduce motorcycle crash risk, enabled through policy change
David Milling (Australian Road Research Board Brisbane, Queensland, Australia)

Pedestrians road crossing preferences in Delhi, India
Geetam Tiwari (IIT Delhi, New Delhi, India)

11h20-11h40: Coffee Break

11h40-13h00: Automated and connected vehicles
Moderator: Torsten Klimke (European Commission, DG MOVE, Belgium)

Markus Deublein (EBP Schweiz AG, Switzerland)

Diagnosis of Hazardous Road Surface Caused by Adverse Weather Using Connected Vehicle
Jinhwan Jang (Institute of Civil Engineering and Building Technology, South Korea)

Bridging formal techniques for safe-by-design automated transport systems
Zakaryae Boudi (Ecole Mohammadia d’Ingénieurs, Université Mohammed V de Rabat, Maroc)

Formalization of scenarios for testing automated driving functions
Hardi Hungar (German Aerospace Center, DLR, Germany)

13h00-14h00: Lunch break
14:00-14:20: Benchmarking road safety in Latin American Countries
Sandra Vieira Gomes (Laboratório Nacional de Engenharia Civil, LNEC, Portugal)

14h20-15h40: Serious injuries
Moderator: Graziella Jost (European Transport Safety Council, Belgium)

- Updated estimates of the relationship between the business cycle and traffic fatalities
  Rune Elvik (Institute of Transport Economics, Oslo, Norway)

- Underreporting of cyclist and car injuries in Denmark
  Anne Vingaard Olesen (The Traffic Research Group, Department of Civil Engineering, Aalborg University, Denmark)

- Classification of road traffic crash injuries
  Horst Schulze (FERSI, Federal Highway Research Institute, BASt, Germany)

15h40-16h00: Coffee Break

16h00-17h20: Transport Resilience
Moderator: Yoshi Hayashi (WCTRS, Japan)

- Resilience of road infrastructure during unforeseen disruptions
  Alexander Stolz (Federal Highway Research Institute, BASt, Germany)

- European Resilience Management Guidelines: definition and validation in real-life environments
  Evangelia Gaitanidou (Centre for Research and Technology Hellas/Hellenic Institute of Transport, Thessaloniki, Greece)

- Security of Future Stations - Risk Assessment Tool for Analysing Impact of Terrorist Attacks
  Emmanuel Matsika (NewRail, Newcastle University, UK)

17h20-18h00: Conclusions of the Research Day
Meike Jipp (ECTRI, DLR) and Peter Urban (ERTRAC, RWTH Aachen) – VRU and Automation
Dominique Mignot (FERSI, Ifsttar) and Yoshi Hayashi (WCTRS) – Injuries and Resilience
Background

Road safety
Each year more than 1.3 million people died and 50 million are seriously injured in road traffic crashes. In response, the UN Decade of Action for Road Safety was launched in May 2011 and in 2015, Sustainable Development Goals were endorsed by the UN General Assembly. These included two road safety targets: SDG 3.6, which aims by 2020, to halve the number of global traffic deaths; and SDG 11.2 which, by 2030, calls for “access to safe, affordable, accessible and sustainable transport systems for all”). Several countries have now embarked on a “Safe System” (or Vision Zero) policy with a long term goal that no one should be killed or seriously injured in road traffic crashes.

Ensuring safe, secure and efficient mobility for all citizens should be a daily concern in all countries. In this respect, several issues would benefit from discussions at the Research Day:

- **Vulnerable road users in cities:** In most cities, vulnerable road users represent more than half of traffic casualties and often affect the most vulnerable among us – the children and the elderly. Active mobility, walking and cycling, are healthy and essential to keep our growing cities attractive and clean. This raises new challenges, in particular in the context of the emergence of e-bikes and the ageing of society. To keep cyclists and pedestrians safe, adequate infrastructure (e.g. obstacle-free, safe routes, low speeds in mixed traffic) and better interactions and attention from drivers are needed.

- **Serious injuries:** While most statistics, safety targets, measures and evaluation refer to the number of road deaths, the pain and economic burden of those who survive a road crash cannot be ignored. Reducing serious injuries is a full objective of the Safe System and is receiving increased attention with the growing popularity of cycling in cities. There is still a lot to learn in this area. Measures which have proven effective in reducing the number of road deaths are not always as effective in reducing the number of people seriously injured. Several countries, as well as the European Union, have now set a target to reduce the number of people seriously injured. However collecting and monitoring accurate data is a challenge and underreporting is an issue in many countries.

- **Automation:** Technological advancements, including automation and digitalization, provide opportunities to make Safe System a reality. First, the automation of some driving tasks is likely to reduce the occurrence of human errors. Second, connected vehicles are likely to share and receive precious information on the live traffic environment, helping to anticipate appropriate actions, leading to better road safety outcomes. Nevertheless, the new systems will raise new questions: How will automated and connected vehicles interact with, and be understood by other traffic participants? Will security threats be introduced? If perceived as a silver bullet, will the prospect of autonomous vehicles reduce the importance of road safety on the political agenda?
• Transport Resilience: The 2018 ITF Summit makes the connexion between transport safety, security and resilience, as three policy areas related to incidents and disruptions affecting the transport system. Unforeseen disruptions from natural disasters, technical failures, crashes or terror attacks have significant economic costs as they affect the movement of goods and people. Decision makers will benefit from discussion of insights from the most recent research on the impacts of such events, on their prevention, on system resilience and on system recovery.
Practical Information

Date: The Research Day will take place on Tuesday 22 May, one day prior to the official opening of the ITF Summit on Wednesday 23 May.

Where: The venue for the Research Day is Kongresshalle am Zoo, Leipzig.

Who can attend: The event is aimed at researchers and policy makers involved in transport safety and security questions.

Registration: All participants must be registered to the ITF Summit. Practical considerations depend on your current situation, as detailed below.

If you are already registered to the ITF Summit, you can attend the Research Day at no extra costs, up to the capacity of the venue. Please email Ms. Geetam Tiwari at itf2018researchday@gmail.com.

If you are not yet registered to the ITF Summit, a registration fee of €450 will apply. This will cover attendance at both the Research Day as well as the subsequent three Summit days. The fee covers meals (lunches and dinners, except the evening of 22 May) and transport during the Summit days (23, 24 & 25 May): transfer from hotels to the main Summit venue, Congress Center Leipzig. To register, please email Ms. Geetam Tiwari at itf2018researchday@gmail.com. If space is still available, you will receive in return a registration code to use on the ITF Summit registration portal: https://2018.itf-oecd.org/.

If you are a speaker/moderator/organiser of the Research Day, you should have received a special registration code from Ms. Geetam Tiwari at itf2018researchday@gmail.com and registered on the ITF Summit registration portal: https://2018.itf-oecd.org/.

Please note that there will not be a shuttle service to the venue, Kongresshalle am Zoo. The Kongresshalle is located less than 1km from official hotels.

ITF Summit badges will be ready for collection at the Research Day.

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More information
ITF 2018 Pre-Summit Research Day: https://2018.itf-oecd.org/transport-research-day