



Session on Reliability, Safety and Life Cycle Management of Transportation Systems

Safety and reliability are among the most important requirements on transportation systems, including passenger as well as freight transportation. Safety and reliability are critical for the successful operation of transportation networks and management of multi-modal transportation chains.

Due to the complexity of transportation systems, their reliability is determined by manifold factors, including infrastructure, vehicles, safety and control systems, communication systems, applied technology and processes.

High service reliability and availability under acceptable residual risk levels achieved with low life cycle costs under increasing load and stress factors are pivotal requirements on modern transportation systems. The pertinent maintenance regimes need to be foreseeable, efficient and affect operation as little as possible. Concurrently, the requirements on the capacity are increasing steadily.

The transportation of hazardous substances and combustible materials poses additional challenges on all involved stakeholders to provide adequate protection against the risks to life, property and environment.

Recently available monitoring devices provide new opportunities for real-time control, condition-based and predictive maintenance and improved asset management of transportation systems.

In this context, the aim of this session is to gather experts and collect their contributions to support transportation operators, authorities and suppliers in improving reliability and safety. Both theoretical contributions and papers on practical applications are expected to highlight the challenges, solutions, new approaches, experiences and methodology in this field as well as the needs for further developments.

We encourage you to submit an abstract for this session. Please submit your abstract through the conference website: <http://esrel2015.ethz.ch/system/index.php/esrel/2015/login>. Upon submission, please kindly also send the title of your abstract to olga.fink@zhaw.ch.

The deadline for abstract submission is the 31.01.2015.

Organizers:

Prof. Dr. Ulrich Weidmann (weidmann@ivt.baug.ethz.ch), full professor for Transport Systems at the Institute for Transport Planning and Systems at ETH Zurich and Head of the Department of Civil, Environmental, and Geomatic Engineering at ETH Zurich

Dr. Olga Fink (olga.fink@zhaw.ch), senior lecturer at the Zurich University of Applied Sciences (ZHAW)