An Integrated Approach to the Traffic Efficiency Impact Evaluation of Cooperative Systems in FOTs and Traffic Simulation

Abstract:
This work describes an integrated approach to determining the effects of cooperative Intelligent Transportation Systems (ITS) on traffic efficiency and road safety by combining different test environments: a Field Operational Test (FOT) in real traffic, its interactions with a traffic simulation environment and the usage of data from other sources like a driving simulator. Since each of the test environments has its own advantages and limitations, the authors present a solution for combining them in terms of scenario design and evaluation planning. Such an integrated test and analysis concept offers the possibility of a holistic evaluation for traffic impacts of cooperative ITS. It is the basic design principle of the German research project simTD, which shows its feasibility in practical use.

Stichworte: integrated traffic analysis, cooperative ITS, traffic simulation, FOT evaluation

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