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| Collana | Lecture Notes in Intelligent Transportation and Infrastructure. |
| Altri autori (Persone) | SchirrerAlexander GratzerAlexander L ThormannSebastian JakubekStefan NeubauerMatthias SchildorferWolfgang |
| Soggetti | Trucks Trucks - Fuel consumption Traffic flow |
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| Formato | Materiale a stampa |
| Livello bibliografico | Monografia |
| Note generali | Description based upon print version of record. |
| Nota di contenuto | Part I: Introduction & Research Approach --Research Need: An Overview on Project "Connecting Austria" --Platooning Around the World --Research Design & Evaluation Strategies --Truck Platooning Requirements Analysis --Part II: Methodology --Computation Fluid Dynamics Assessment of Truck Platoons --Simulation of Platoon Dynamics, Optimization & Traffic Effects --Platoon Control Concepts --Part III: Simulations, Tests and Demonstrations --ZalaZone --Scenario-Based Simulation Studies on Platooning Effects in Traffic --Fuel Efficiency --Traffic Measurement for the Intersection Case in Hallein, Austria --Part IV: Analysis of Results --Requirements for Truck Platooning from a Road Safety Perspective --Energy, Fuel & Traffic Efficiency of Platooning --Business Models, Economy & Innovation --Truck Drives --How Platooning Research Enhances the European Innovation System – Even Without Electronically-Coupled Trucks on the Road --Discussion. |

Sommario/riassunto

This open access book presents research and evaluation results of the Austrian flagship project "Connecting Austria," illustrating the wide range of research needs and questions that arise when semi-automated truck platooning is deployed in Austria. The work presented is introduced in the context of work in similar research areas around the world. This interdisciplinary research effort considers aspects of engineering, road-vehicle and infrastructure technologies, traffic management and optimization, traffic safety, and psychology, as well as potential economic effects.
