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Aleksander Ślaskowski
Wiesław Pamuła *Editors*

Intelligent Transportation Systems – Problems and Perspectives



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Contents

Deployment of ITS in Road Transport

Part I Deployment of ITS in Road Transport

Autonomic Transport Management Systems—Enabler for Smart Cities, Personalized Medicine, Participation and Industry Grid/Industry 4.0	3
Jörn Schlingensiepen, Florin Nemtanu, Rashid Mehmood and Lee McCluskey	

Increase of City Transport System Management Efficiency with Application of Modeling Methods and Data Intellectual Analysis. . .	37
Irina Makarova, Rifat Khabibullin, Eduard Belyaev and Vadim Mavrin	

ITS Services Packages as a Tool for Managing Traffic Congestion in Cities	81
Renata Źochowska and Grzegorz Karoń	

The Traffic Flow Prediction Using Bayesian and Neural Networks.	105
Teresa Pamuła and Aleksander Król	

Dimensioning of Multiple Capacity Transport Line with Mutual Traffic Correlation	127
Srećko Krile	

Part II ITS Case Studies

Design of an ITS for Industrial Enterprises	161
Alexandr Rakhmangulov, Aleksander Śladowski and Nikita Osintsev	

European Rail Traffic Management System (ERTMS).	217
Jakub Młyńczak, Andrzej Toruń and Lucyna Bester	

Intelligent Transport Systems in Aerospace Engineering	243
Anatoliy Kulik and Konstantin Dergachev	

Design of an ITS for Industrial Enterprises

Alexandr Rakhmangulov, Aleksander Śladkowski
and Nikita Osintsev

Abstract One of the factors limiting the increase in quality of traffic with the increasing complexity of the freight traffic in Russia is the lack of interaction consistency of the main modes of transport and transport uncommon in areas of direct transport service production and transport units. Lack of practical operating experience of intelligent transport systems in Russian enterprises, poor prevalence of well-known methods of accumulation and analysis of knowledge in transport, decision-making (genetic algorithms, neural networks, knowledge bases, Big Data methods, etc.) require improvement of the existing interaction methodology between industry and transport, in particular transport and technological systems providing direct cargo transport services. This methodology should be based not only on modern progress in technology and organization of rail transport, but also taken into account the economic and informational factors and constraints that arise in the interaction of industrial and mainline rail. This article proposes an approach to the formation and composition of intelligent transport systems in industry. This approach is based on the original combination of analytical and simulation models of transport and technological system realizing the complex of transport and logistic methods of functioning organization of rail transport and technological systems. Intelligent transport system of proposed functional composition is focused on improving the efficiency of interaction between production and transport in terms of complicating the structure of freight traffic and the increasing quality requirements for freight.

A. Rakhmangulov (✉) · N. Osintsev
Magnitogorsk State Technical University, Magnitogorsk, Russia
e-mail: prtrans@gmail.com

N. Osintsev
e-mail: nikita.osintsev@gmail.com

A. Śladkowski
Silesian University of Technology, Gliwice, Poland
e-mail: aleksander.sladkowski@polsl.pl