Detailed instructions for authors and contacts to editors can be found on journal’s webpage: www.archivesoftransport.com

The Archive of Transport is indexed by the Polish Ministry of Science and Higher Education.

All articles are peer-reviewed by two external reviewers. Reviewers list is published once each year in the last issue of the journal and also on journal’s webpage.

Copyright © 2021 by Warsaw University of Technology.

All rights reserved. No part of this publication may be modified, reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopying, recording, or by any information storage and retrieval system, without permission in writing from publisher.

Online publication.
Associate Editors (Subject Editors)

Transport Engineering
Andrzej Chudzikiewicz, Warsaw University of Technology, Poland;
Radim Lenort, VŠB-Technical University of Ostrava, Czech Republic;

Transport Infrastructure and Management
Gebhard Hafer, University of Applied Sciences in Berlin, Germany;
Edward Michlowicz, AGH University of Science and Technology, Poland;

Optimization and Algorithmic in Transport
Tadeusz Nowicki, Military University of Technology, Poland;
Askoldas Podviezko, Vilnius Gediminas Technical University, Lithuania;

Logistics Engineering
Goran Dukic, University of Zagreb, Croatia;
Tomasz Nowakowski, Wroclaw University of Technology, Poland;

Railway Transport
Yurii Domin, Volodymyr Dahl East Ukrainian National University, Ukraine;
Andrzej Lewiński, University of Technology and Humanities, Poland;

Road Transport
Dusan Malindzak, Technical University of Košice, Slovakia;
Juan Carlos Villa, Texas A&M Transportation Institute, USA;

Air Transport
Jerzy Manerowski, Warsaw University of Technology, Poland;
Jozsef Rohacs, Budapest University of Technology and Economics, Hungary;

Maritime Transport
Zbigniew Burciu, Gdynia Maritime University, Poland;
LU Huaqing, Zhejiang Ocean University, China;

Ecology of Transport
Jerzy Merkisz, Poznan University of Technology, Poland;
Vitalii Naumov, Kharkov National Automobile and Highway University, Ukraine;

Telematics in Transport
Vladimir Hahanov, Kharkov National University of Radioelectronics, Ukraine;
Miroslaw Siergiejczyk, Warsaw University of Technology, Poland;

Transport Safety
Geza Tarnai, Budapest University of Technology and Economics Hungary;
George P. Sakellaropoulos, Aristotle University of Thessaloniki, Greece;

Mobility in Transport
Włodzimierz Choromański, Warsaw University of Technology, Poland;
Burford J. Furman, San Jose State University, USA;

Editorial Committee Contact:
ARCHIVES OF TRANSPORT
Faculty of Transport, Warsaw University of Technology
Koszykowa 75, 00-662 Warsaw
Poland
E-mail: aot.wt@pw.edu.pl
Phone: +48 22 234-58-55
## Contents

Ronald Sukwadi, Angela Susanto, Yun-Chia Liang  
Airline service quality evaluation for Indonesian low-cost carriers based on Extenics innovation theory ........................................................................................................... 7

Anthony Perl, Taotao Deng, Leandro Correa, Dandan Wang, Yulin Yan  
Understanding the urbanization impacts of high-speed rail in China ...................................................... 21

Leszek Ułanowicz, Ryszard Sabak  
Unmanned aerial vehicles supporting imagery intelligence using the structured light technology ........................................................................................................... 35

Ireneusz Pielecha  
Energy management system of the hybrid ultracapacitor-battery electric drive vehicles ........ 47

Jerzy Kisilowski, Jarosław Zalewski  
An example of a power-off maneuver of a vehicle without a straight line motion control ..... 63

Jakub Młyńczak, Piotr Folęga, Ireneusz Celiński  
Specifics of the traffic scene identification problem observed at level crossings, analysed from the train driver’s perspective ........................................................................................................... 81

Marcin Budzynski, Agnieszka Tubis, Mateusz Rydlewski  
Preliminary safety assessment of Polish interchanges ............................................................................... 99

Marek Bauer, Romanika Okraszewska, Matthias Richter  
Analysis of the causes and effects of cyclist-pedestrian accidents in biggest Polish cities ..... 115

Juliusz Karolak  
Interface and connection model in the railway traffic control system ................................................ 137