Studies in Systems, Decision and Control 155

Aleksander Sładkowski Editor

Transport Systems and Delivery of Cargo on East– West Routes



Aleksander Sładkowski Editor

Transport Systems and Delivery of Cargo on East–West Routes



Editor Aleksander Sładkowski Faculty of Transport Silesian University of Technology Katowice Poland

 ISSN 2198-4182
 ISSN 2198-4190 (electronic)

 Studies in Systems, Decision and Control
 ISBN 978-3-319-78294-2
 ISBN 978-3-319-78295-9 (eBook)

 https://doi.org/10.1007/978-3-319-78295-9
 ISBN 978-3-319-78295-9
 ISBN 978-3-319-78295-9

Library of Congress Control Number: 2018935232

© Springer International Publishing AG, part of Springer Nature 2018

This work is subject to copyright. All rights are reserved by the Publisher, whether the whole or part of the material is concerned, specifically the rights of translation, reprinting, reuse of illustrations, recitation, broadcasting, reproduction on microfilms or in any other physical way, and transmission or information storage and retrieval, electronic adaptation, computer software, or by similar or dissimilar methodology now known or hereafter developed.

The use of general descriptive names, registered names, trademarks, service marks, etc. in this publication does not imply, even in the absence of a specific statement, that such names are exempt from the relevant protective laws and regulations and therefore free for general use.

The publisher, the authors and the editors are safe to assume that the advice and information in this book are believed to be true and accurate at the date of publication. Neither the publisher nor the authors or the editors give a warranty, express or implied, with respect to the material contained herein or for any errors or omissions that may have been made. The publisher remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.

Printed on acid-free paper

This Springer imprint is published by the registered company Springer International Publishing AG part of Springer Nature

The registered company address is: Gewerbestrasse 11, 6330 Cham, Switzerland

Contents

Part I Global Logistics and Regional Aspects of Cargo Delivery	
Sustainable Development of Transport Systems for Cargo Flows on the East-West Direction Aleksandr Rakhmangulov, Aleksander Sładkowski, Nikita Osintsev, Olesya Kopylova and Natalja Dyorina	3
Analysis and Development Perspective Scenarios of Transport Corridors Supporting Eurasian Trade Aleksander Sładkowski and Maria Cieśla	71
The Role of Railway Transport in East-West TrafficFlow Conditions of the Slovak RepublicAnna Dolinayova, Lenka Cerna and Vladislav Zitricky	121
Transnational Value of the Republic of Kazakhstan in International Container Transportation	171
Economic Aspects of Freight Transportation Along the East-West Routes Through the Transport and Logistics System of Kazakhstan Zhanarys Raimbekov, Bakyt Syzdykbayeva and Kunduz Sharipbekova	205
Part II Technical and Informatics Issues of Transport Systems	
Present and Future Operation of Rail Freight Terminals Marco Antognoli, Luigi Capodilupo, Cristiano Marinacci, Stefano Ricci, Luca Rizzetto and Eros Tombesi	233
Development of the Silesian Logistic Centres in Terms of Handling Improvement in Intermodal Transport on the East-West Routes Damian Gąska and Jerzy Margielewicz	275

Perfection of Technical Characteristics of the Railway Transport	
System Europe-Caucasus-Asia (TRACECA)	303
George Tumanishvili, Tamaz Natriashvili and Tengiz Nadiradze	
Potential and Problems of the Development of Speed Traffic	
on the Railways of Uzbekistan	369
Saidburkhan Djabbarov, Makhamadjan Mirakhmedov	
and Aleksander Sładkowski	

Analysis and Development Perspective Scenarios of Transport Corridors Supporting Eurasian Trade

Aleksander Sładkowski and Maria Cieśla

Abstract The chapter deals with freight transport between Europe and Asia, supporting intercontinental exchange of goods. So first the impact of Eurasian trade on transport and logistics branch is presented. The analysis is focused on position of European Union in global trade, especially with China and its influence on the increase of services for logistics operators. In another part of the chapter analysis of transport corridors between Europe and Asia are presented. Then, the paper focuses on future development of Eurasian transport corridors. The research objective of this chapter was to prepare strategic analysis of future transport development in Eurasian region. Eurasian transport network SWOT analysis is shown and scenario building based on STEEPLE environmental analysis. The purpose of the scenario analysis was to acquire knowledge in order to rationalize future decisions in strategy building for the investments and research connected with the topic.

Keywords Eurasian trade • Eurasian transport network development Environmental analysis • Environmental scenarios

1 Introduction

Analysing the trends in the development of trade and export and import, the importance of the flows of goods between Europe and Asia cannot be ignored. Globalization, which involves moving away from local markets to global ones in terms of consumer behaviour, implies the need to develop transport between the two continents. Many studies and research at the moment goes towards the

A. Sładkowski (🖂) · M. Cieśla

Department of Logistics and Aviation Technologies, Faculty of Transport, Silesian University of Technology, Krasinskiego 8, 40-019 Katowice, Poland e-mail: aleksander.sladkowski@polsl.pl

M. Cieśla e-mail: maria.ciesla@polsl.pl

[©] Springer International Publishing AG, part of Springer Nature 2018 A. Sładkowski (ed.), *Transport Systems and Delivery of Cargo*

on East–West Routes, Studies in Systems, Decision and Control 155, https://doi.org/10.1007/978-3-319-78295-9_2