Contents

Container Terminals and Maritime Transportation

A Multi-product Maritime Inventory Routing Problem with Undedicated Compartments ....................................................... 3
   Elise Foss, Trine N. Myklebust, Henrik Andersson, and Marielle Christiansen

A MIP Based Local Search Heuristic for a Stochastic Maritime Inventory Routing Problem ........................................... 18
   Agostinho Agra, Marielle Christiansen, Lars Magnus Hvattum, and Filipe Rodrigues

2D-Packing with an Application to Stowage in Roll-On Roll-Off Liner Shipping ................................................................. 35
   Jone R. Hansen, Ivar Hukkelberg, Kjetil Fagerholt, Magnus Stålhane, and Jørgen G. Rakke

A Vessel Pickup and Delivery Problem from the Disruption Management in Offshore Supply Vessel Operations .................. 50
   Nils Albjerk, Teodor Danielsen, Stian Krey, Magnus Stålhane, and Kjetil Fagerholt

Path Planning for Autonomous Inland Vessels Using A*BG ............................................................ 65
   Linying Chen, Rudy R. Negenborn, and Gabriel Lodewijks

Agent-Based Support for Container Terminals to Make Appointments with Barges ..................................................... 80
   Martijn Mes and Albert Douma

A Logic-Based Benders Decomposition Approach to Improve Coordination of Inland Vessels for Inter-Terminal Transport .... 96
   Shijie Li, Rudy R. Negenborn, and Gabriel Lodewijks

Scenarios for Collaborative Planning of Inter-Terminal Transportation ................................................................. 116
   Herbert Kopfer, Dong-Won Jang, and Benedikt Vornhusen

Solving the Robust Container Pre-Marshalling Problem .................. 131
   Kevin Tierney and Stefan Vöß

A Cooperative Approach to Dispatching and Scheduling Twin-Yard Cranes in Container Terminals .............................. 146
   Shell Ying Huang and Ya Li
<table>
<thead>
<tr>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Online and Offline Container Purchasing and Repositioning Problem</td>
<td>159</td>
</tr>
<tr>
<td>Neil Jami, Michael Schröder, and Karl-Heinz Küfer</td>
<td></td>
</tr>
<tr>
<td>Towards Real-Time Automated Stowage Planning - Optimizing Constraint Test Ordering</td>
<td>175</td>
</tr>
<tr>
<td>Zhuo Qi Lee, Rui Fan, and Wen-Jing Hsu</td>
<td></td>
</tr>
</tbody>
</table>

### Intermodal Transport

- Optimizing Train Load Planning: Review and Decision Support for Train Planners 193
  - Hilde Heggen, Kris Braekers, and An Caris
- Analysis of Cost Allocation Techniques for Freight Bundling Networks in Intermodal Transport 209
  - Katrien Ramaekers, Lotte Verdonck, An Caris, Dries Meers, and Cathy Macharis
- Service and Transfer Selection for Freights in a Synchronmodal Network 227
  - Arturo Pérez Rivera and Martijn Mes
- A Revenue Management Approach for Network Capacity Allocation of an Intermodal Barge Transportation System 243
  - Yunfei Wang, Ioana C. Bilegan, Teodor Gabriel Crainic, and Abdelhakim Artiba

### Location and Routing

- LORE, A Decision Support Tool for Location, Routing and Location-Routing Problems 261
  - Rui Borges Lopes, Carlos Ferreira, and Beatriz Sousa Santos
- Two Echelon Location Routing Problem with Simultaneous Pickup and Delivery: Mixed Integer Programming Formulations and Comparative Analysis 275
  - Ece Arzu Demircan-Yildiz, Ismail Karaoglan, and Fulya Altiparmak
- Vehicle Routing for Fleets with Electric- and Combustion-Powered Vehicles 290
  - Herbert Kopfer and Kristian Schopka
- The Bi-Objective $k$-Dissimilar Vehicle Routing Problem 306
  - Sandra Zajac
- A Branch-and-Price Algorithm for the Vehicle Routing Problem with 2-Dimensional Loading Constraints 321
  - Telmo Pinto, Cláudio Alves, and José Valério de Carvalho
The Static Bicycle Repositioning Problem - Literature Survey and New Formulation .............................................. 337
Hans Martin Espegren, Johannes Kristianslund, Henrik Andersson, and Kjetil Fagerholt

Service Network Design of Bike Sharing Systems with Resource Constraints .................................................. 352
Bruno Albert Neumann-Saavedra, Teodor Gabriel Crainic, Bernard Gendron, Dirk Christian Mattfeld, and Michael Römer

(General) Logistics and Supply Chain Management

An Agent-Based Simulation Framework to Evaluate Urban Logistics Schemes .................................................. 369
Wouter van Heeswijk, Martijn Mes, and Marco Schutten

Continuous-Time Formulation for Oil Products Transportation Scheduling ..................................................... 384
Hossein Mostafaei and Pedro M. Castro

Impact of Collaborative Decision Making in Optimized Air Traffic Control: A Game Theoretical Approach .......... 397
Manish Tripathy, Marcella Samà, Francesco Corman, and Gabriel Lodewijks

Impact of Dwell Time on Vertical Transportation Through Discrete Simulation in SIMIO .................................. 411
Marcelo Henriques, António A.C. Vieira, Luís M.S. Dias, Guilherme A.B. Pereira, and José A. Oliveira

Improving Order Picking Efficiency by Analyzing Combinations of Storage, Batching, Zoning, and Routing Policies ................................................................. 427
Teun van Gils, Kris Braekers, Katrien Ramaekers, Benoît Depaire, and An Caris

Improving Production Logistics Through Materials Flow Control and Lot Splitting .................................... 443
Catarina Gomes, Andreia Ribeiro, João Freitas, Luís Dias, Guilherme Pereira, António Vieira, Nuno O. Fernandes, and Silvio Carmo-Silva

Author Index ................................................................................................................................................. 455
Computational Logistics
7th International Conference, ICCL 2016, Lisbon, Portugal, September 7-9, 2016, Proceedings
Paias, A.; Ruthmair, M.; Voß, S. (Eds.)
2016, XIII, 456 p. 105 illus., Softcover
ISBN: 978-3-319-44895-4