LDIC 2012 was the 3rd International Conference on Dynamics in Logistics held in Bremen (Germany) from 27th February to 1st March 2012 together with a Doctoral Workshop. The LDIC 2012 was held in conjunction with the new conference “The Impact of Virtual, Remote and Real Logistics Labs” (ImViReLL’12). Similar to its predecessors LDIC 2007 and LDIC 2009, it was organized by the Bremen Research Cluster for Dynamics in Logistics (LogDynamics) of the University of Bremen in cooperation with the Bremer Institut für Produktion und Logistik (BIBA), which is a scientific research institute affiliated to the university.

The scope of the conference targets the identification, analysis, and description of the dynamics of logistic processes and networks. The spectrum of topics ranges from modeling and planning of processes and innovative methods like autonomous control and knowledge management to the new technologies provided by radio frequency identification, mobile communication, and networking. The growing dynamics in the area of logistics poses completely new challenges: logistic processes and networks have to rapidly and flexibly adapt to continuously changing conditions. LDIC 2012 provided a venue for researchers from academia and industry interested in the technical advances in dynamics in logistics. The conference addressed research in logistics from a wide range of fields, e.g., engineering, computer science, and operations research.

The LDIC 2012 proceedings consist of two invited keynotes and 49 papers selected by a strong reviewing process. The volume is organized into the following ten subject areas: “Invited Papers”, containing the contributions of the invited speakers, “Transport Logistics and Dynamic Routing”, “Production Logistics and Job Shop Scheduling”, “Modeling, Simulation, Optimization and Collaboration”, “Identification Technologies”, “Mathematical Modeling in Transport and Production Logistics”, “Information, Communication, Risk and Failure”, “Autonomous Control”, “Global Supply Chains and Industrial Application” and “Considerations for a Future Internet of Things”.

We would like to thank the members of the program and organization committee and the secondary reviewers Jan Ole Berndt, Melanie Bloos, Marcus Ermler, Vaggelis Giannikas, Michael Görges, Marc-André Isenberg, Farian
Krohne, Sabine Kuske, Walter Lang, Melanie Luderer, Michael Lütjen, Jeanette Mansfeld, Afshin Mehrsai, Susanne Schukraft, Michael Teucke, Hendrik Thamer, Dirk Werthmann, and Jiani Wu for their help in the selection process. We are also grateful to Aleksandra Himstedt, Jakub Piotrowski, Ingrid Rügge, Dieter Uckelmann, and several other colleagues for their support in the local organization and for the technical assistance in running the conference system. Special thanks go to Ingrid Rügge and Marcus Seifert for organizing the doctoral workshop of LDIC 2012. We are particularly indebted to Caroline von Toth for her support in editing this volume and in careful unification of the print files of all the contributions. Moreover, we would like to acknowledge the financial support by the BIBA, the Research Cluster for Dynamics in Logistics (LogDynamics), the Center for Computing and Communication Technologies (TZI), and the University of Bremen. Finally, we appreciate once again the excellent cooperation with the Springer-Verlag.

Bremen, November 2012

Hans-Jörg Kreowski
Bernd Scholz-Reiter
Klaus-Dieter Thoben
Dynamics in Logistics
Third International Conference, LDIC 2012 Bremen, Germany, February/March 2012 Proceedings
Kreowski, H.-J.; Scholz-Reiter, B.; Thoben, K.-D. (Eds.)
2013, XIV, 580 p., Hardcover
ISBN: 978-3-642-35965-1