

Table of Contents

Introduction	5
1. Globalization and international logistics	7
1.1. Conditions of functioning and development of logistics on the global scale	7
1.2. Theoretical foundations of international logistics	9
1.3. Networks and channels of international logistics	14
2. Management methods in international logistics	20
2.1. Tools facilitating international logistics management	20
2.2. LM – Lean Management	23
2.3. AM – Agile Management	24
2.4. TQM – Total Quality Management	25
2.5. Efficient Consumer Response – ECR	27
2.6. SCOR – the Supply Chain Operation Reference model	31
2.7. VMI – Vendor – Managed Inventory	32
3. Logistics centers	36
3.1. Definition and functions of logistics centers	36
3.2. Classification of logistics centers	39
3.3. Equipment and infrastructure of a logistics center	41
4. Transport for the needs of international logistics	44
4.1. Transport classification by EU standards	44
4.2. Intermodal transport	48
4.3. Companies of transport and logistics services area	50
5. Documents in foreign and domestic transport	53
5.1. Consignments	53
5.2. Documentation on the road	59
5.3. Electronic pen and paper documentation	60
6. Transport in foreign trade	62
6.1. Transport Management	62
6.2. Incoterms® 2010 delivery formulas	64
6.3. International transport insurance	66
7. Automatic identification in transport processes	69
7.1. Packaging in transport	69
7.2. Package marking	72
7.3. GS1 barcodes vs. the Electronic Product Code (EPC)	76
8. IT systems for the needs of logistics	81
8.1. IT technologies supporting and integrating information flow	81
8.2. Instruments and tools used in modern transportation systems	91
8.3. Telematics in transportation processes	98

9. International logistics security	105
9.1. Security risks	105
9.2. Security management of international logistics	107
9.3. Instruments used in practical safety management in international logistics	110
Bibliography	115
Internet websites	118

Introduction

The *International logistics* monograph is the answer to the demand of students of logistics and managers dealing with the logistics processes in the company, which are the links in the supply chain.

The presented material is related to logistics implemented within global economy, with particular attention paid to European requirements and conditions. Today, leading economists come to a conclusion that the efficiency of economy and the well-being of the society are first and foremost dependent on the condition of companies, which in turn is influenced by the service level of processes carried out within international logistics that is closely linked with global business.

The volatility of economic conditions (such as the legal ones on the national, European and global level, environmental protection, trade connections, the structure of production, technical and technological progress, the pursuit of modernity) leads to systematic improvement of the management function as regards the movement of goods, services and information between particular links of the supply chain, on international scale, but not only.

The above-mentioned problems have been described in the below-mentioned chapters, where theory has been backed up with practical application.

1. Globalization vs. international logistics
2. Management methods in international logistics
3. Logistics centers
4. Transport for international logistics
5. Documents in national and international transport
6. Transport in foreign trade
7. Automatic identification in global transport processes
8. IT systems for international logistics
9. Security in international logistics

The content of the chapters and the sub-chapters has been selected in such a way that a student of logistics would be able to:

- define the basic concepts related to international logistics;
- describe the most frequently used management methods and tools applied in the creation and functioning of international logistics;
- explain the principles by which particular kinds of transport function on the global scale and measure its significance for the creation of logistic channels of a single transport area;
- describe the operation principles of logistics distribution centers;

- identify information technologies favorable for improvement of logistics processes within the confines of international logistics;
- work out tools that guarantee operation security within international logistics.

I would like to express my sincere gratitude to the reviewers, Assoc. Prof. Wojciech Nyszk, the Head of the AON Logistics Institute in Warsaw and Assoc. Prof. Ewa Kulińska, the Head of the Chair of Marketing and Logistics in Opole for all their involvement and care for the best possible shape of this monograph.

Their remarks and suggestions took into consideration the latest solutions as regards the subject of the hereby work and thus they helped to improve the quality of the final version of this monograph, both in terms of content and methodology.