# TABLE OF CONTENTS

GM2018_01001
*Magdalena Adamowicz*
DEREGULATION OF LAWS AND BORDER FACILITATIONS, AND THEIR IMPACT ON THE INCREASE OF COMPETITIVENESS OF POLISH SEAPORTS

GM2018_01002
*Michalina Bielawska, Oskar Czechowski, Ernest Czermański, Aneta Oniszczuk-Jastrząbek Tomasz Owczarek*
A PRELIMINARY EVALUATION OF THE IMPACT OF SULPHUR EMISSIONS CONTROL AREA IN THE BALTIC SEA ON AIR QUALITY IN PORT CITIES. CASE PORT – THE CITY OF GDAŃSK

GM2018_01003
*Agnieszka Budziewicz-Guźlecka, Anna Drab-Kurowska*
SELECTED ASPECTS OF CORPORATE SOCIAL RESPONSIBILITY IN MARITIME FREIGHT SERVICES ON THE EXAMPLE OF SELECTED COURIER COMPANIES

GM2018_01004
*Leo Čampara, Nermin Hasanspahić, Srđan Vujičić*
OVERVIEW OF MARPOL ANNEX VI REGULATIONS FOR PREVENTION OF AIR POLLUTION FROM MARINE DIESEL ENGINES

GM2018_01005
*Jędrzej Charlampowicz*
ANALYSIS OF THE MARKET CONCENTRATION OF THE CONTAINER SHIPPING MARKETS – SELECTED ISSUES

GM2018_01006
*Nil Kula Degirmenci*
LEGAL APPROACH TO MARINE ACCIDENTS: A COMPERATIVE RESEARCH BETWEEN TURKISH AND INTERNATIONAL PERSPECTIVES

GM2018_01007
*Soner Esmer*
A RESEARCH ON THE FACTORS OF THE NEW GLOBALIZATION MODEL INFLUENCING THE MARITIME TRANSPORT

GM2018_01008
*Mihhail Fetissov, Robert Aps, Kaidi Katus, Anni Konsap, Liisi Lees, Nele Kristin Meyer, Anneliis Peterson, Olev Tõnismaa, Riku Varjopuro*
TOWARDS NAVIGATIONAL SAFETY OF ECOSYSTEM BASED MARITIME SPATIAL PLANNING SOLUTIONS

GM2018_01009
*Ludmila Filina-Dawidowicz, Izabela Kotowska, Marta Mańkowska, Michal Pluciński*
A METHOD TO ESTIMATE THE DEMAND FOR FREIGHT TRANSPORT IN ABSENCE OF HISTORICAL DATA. A CASE STUDY OF THE ODER WATERWAY
Ludmila Filina-Dawidowicz, Mykhaylo Postan
STOCHASTIC MODEL OF DETERIORATING CARGO TRANSSHIPMENT AT PORT’S TERMINAL UNDER IRREGULAR ARRIVAL OF SHIPS

Esa Hämäläinen, Tommi Inkinen
IMPACTS OF VESSEL SPEED ON BUNKER COST IN SHORT SEA SHIPPING: A CROSS-EXAMINATION

Patrycja Jerzyło, Aleksandra Wawrzyńska
RESEARCH OF THE CHANGEABILITY OF THE VESSELS TRAFFIC INTENSITY OF INLAND WATERWAYS – CASE STUDY FOR LOWER VISTULA

Marcin Kalinowski, Rafał Koba, Magdalena Matczak
SOCIO-ECONOMIC IMPACT OF THE INTERNATIONAL WATERWAY E60 ON THE POLISH AND LITHUANIAN COASTAL REGIONS

Adam Kaliszewski, Arkadiusz Kozłowski, Janusz Dąbrowski, Hanna Klimek
CONTAINER TERMINALS COMPETITIVE FACTORS – RESULTS OF AN INTERNATIONAL SURVEY

Ilona Kamińska, Tomasz Zarzycki, Jacek Zaucha, Dorota Ciołek
HOW TO MEASURE THE ECONOMIC VALUE OF ECOSYSTEM FUNCTIONS AND PROCESSES AND LINK SUCH VALUE TO THE MSP?

Karolina A. Krośnicka
SPATIAL EVOLUTION OF THE EUROPEAN CONTAINER PORTS’ SYSTEM IN PERSPECTIVE OF THE LOCATION THEORY

Bartłomiej Laskowski
THE LONG ARM OF THE SUSTAINABLE PORT

Robert Marek
THE EVALUATION OF THE ATTRACTIONNESS OF MARINE CONTAINER TERMINAL SECTOR: ANALYSING THE POLISH SECTOR

Dariusz Milewski, Beata Milewska
THE EFFICIENCY OF A SUPPLY CHAIN WITH THE USE OF MARITIME TRANSPORT ON THE EXAMPLE OF THE APPAREL INDUSTRY
Andrzej Montwill

ANALYSIS OF THE SEAPORT VALUE CHAIN AS A METHOD FOR ASSESSING ITS STRATEGIC POTENTIAL

Aneta Oniszczuk-Jastrząbek, Barbara Pawłowska

SEA PORT AS AN ELEMENT OF A SUSTAINABLE CITY ON THE EXAMPLE OF GDAŃSK

Nergis Özispa, Gamze Arabelen


Chris Peeters, Ruben Pilon, David van der Linden

A NEW RELATIONSHIP BETWEEN GOVERNMENT, INDUSTRY AND KNOWLEDGE INSTITUTES, THE CASE OF THE MARITIME SECTOR

Ritta Pöntymen, Anne Erkkilä-Välimäki, Hanna Nieminen

MAIN DRIVERS FOR MARITIME CLUSTER AND SHIPPING IN THE BALTIC SEA

Joanna Przedrzymirska, Jacek Zaucha, Mario Cana Varona, Daniel Depellgrin, Rhona Fairgrieve, Andronikos Kafas, Helena Maria Gregório Pina Calado, Marta Horta de Sousa Vergilio, Mario Cana Varona, Marija Lazić, Angela Schultz-Zehden, Ivana Lukic, Eva Papaioannou, Martina Boci, Rianne Läkamp, Ioannis Giannelos, Aneta Kovacheva, Bella Buck

MULTI-USE OF THE SEA: FROM RESEARCH TO PRACTICE

Dorota Pyć

ECA COMPLIANCE AND ENFORCEMENT – LEGAL REGIME FOR SHIPS

Magdalena Rozmiarek, Ad Faasse

EXTERNAL EFFECTS IN THE MARITIME SECTOR LEADING TO NEW ECONOMIC PERSPECTIVES

Barbara Szejgiec-Kolenda, Jacek Zaucha

DEALING WITH MARITIME ECONOMY AT THE LOCAL LEVEL. TRENDS ALONG THE COASTAL POLAND

Dariusz Tłoczyński, Marta Mańkowska

THE COMPETITIVENESS OF FERRY AND AIR TRANSPORT IN THE BALTIC SEA REGION: INFRASTRUCTURE APPROACH
Ilona Urbanyi-Popiołek

CHALLENGES FOR POLISH FERRY MARKET DEVELOPMENT IN BALTIC SEA REGION

Peter Wells, Stephen Pettit, Wessam Abouarghoub, Jane Haider, Anthony Beresford

FUTURE CO2 EMISSIONS FROM SHIPPING: FOUR-SCENARIOS USING A MULTI-LEVEL PERSPECTIVE – A PROPOSED METHODOLOGY

Bogusz Wiśnicki, Dariusz Milewski

ASSESSING THE ECONOMICAL EFFICIENCY OF INTERMODAL CHAINS IN GLOBAL TRADE

Jacek Zaucha, Maciej Matczak

ROLE OF MARITIME PORTS AND SHIPPING IN THE CREATION OF THE ECONOMIC VALUE OF THE SEA AREAS
Introduction

The maritime economy, extended with the concept of Blue Economy, is considered to be highly important in the present world. The rapidly growing marine space and increasing numbers of resource stakeholders have given rise to a global problem of sustainable use of world oceans and seas, as well as a challenge to solve conflicts between different marine space users.

Shipping, one of the foremost industries to exploit the waters, has raised a challenging issue for all those, who have an interest in using marine environment in a commercial and non-commercial way. The variety of these ways has faced us with the problem of marine spatial planning, in the process of which all stakeholders will share in the drive for sustainability.

Sustainable shipping with its complexity (vessels, ports and terminals, shipbuilding, maritime administration) is facing the challenge of reducing the negative environmental impact, safety, security, biodiversity preservation and many other issues calling for a modification to the existing approaches to the maritime economy.

On the other hand, all maritime business is under increasing pressure to provide efficiency in economic and energetic terms, which often has the opposite effect to global trend forces. In such difficult conditions, the operation and development of the maritime transport requires smart solutions, innovations and awareness from all maritime stakeholders.

In this meaning, The Global Maritime Conference (GLOBMAR) 2018 has taken the challenge of gathering high-level experts, researchers and professionals and presenting new concepts and solutions for sustainable shipping development and took place on 19-20th April 2018 in Sopot, at the University of Gdańsk – Faculty of Economics,

The conference was organized in a cooperation of City University of Applied Sciences Bremen, Free Hanseatic Bremen, University of Szczecin, Maritime University of Szczecin, Gdynia Maritime University and Maritime Institute in Gdansk.

The Honorary Patronage over the conference was assumed by Minister of Maritime Economy and Inland Navigation, Marek Gróbarczyk, Marshal of the Pomorskie Voivodeship, Mieczysław Struk, Rector of the University of Gdańsk, prof. Jerzy Gwizdala.

The conference was supported by Business Partners: Port Gdańsk, Rezerwa Sp. z o.o. and Media Partners: Baltic Transport Journal, Harbours Review, NAMIARY and the Baltic Sea Region Interreg Programme 2014 – 2020 project BalticLINes.

The event brought together 37 speakers, including scientists and professionals in the academia, industry and government. The thematic areas of the conference were divided into 7 sessions: the role of green & sustainable shipping, global impact of shipping industry, Baltic sea region impact shipping industry, shipping in maritime spatial planning, delivering MSP, digitalization of shipping & port operations and efficiency improvement.

This Conference Proceedings consists of 33 blind peer reviewed papers in an alphabetical order, but, primarily forming four basic thematic groups:

1. Sustainable shipping
2. Port & Harbours sustainable development
3. Maritime Spatial Planning
4. Maritime Law & Administration

Finally, we want to express our huge gratitude to all participant, particularly keynote speakers, session moderators, presenters, the scientific and organizing committee, editors and reviewers. He also expressed his satisfaction with the wide-range of topics discussed during the conference and hope that the extensive networking would continue in the future, for instance Sustainable Shipping Conference 2019 in Bremen and GlobMar 2020 in Sopot.
Chairman of the Scientific Committee
Prof. Aneta Oniszczuk – Jastrzabek

Scientific Committee Members
Prof. Kevin Cullinane, University of Gothenburg
Prof. Nil Kula Demirgen, Dokuz Eylül University of Izmir
Prof. Juliusz Engelhardt, University of Szczecin
Prof. Helena Maria Gregorio Pina Calado, University of the Azores, Portugal
Prof. Andrzej Grzelakowski, Gdynia Maritime University
Prof. Tommi Inkinen, Centre for Maritime Studies, Turku
Prof. Stanislaw Iwan, Maritime University in Szczecin
Prof. Igor Kabashkin, Transport and Telecommunication Institute of Riga
Prof. Wladyslaw Kacznynski, University of Washington, Seattle
Prof. Izabela Kotowska, Maritime University in Szczecin
Prof. Hanna Klimek, University of Gdansk
Prof. Behzad Kordnejad, Roayl Institute of Technology, Stockholm
Prof. Jerzy Kujawa, University of Gdansk
Prof. Maria Lekakou, University of Aegean
Prof. Burkhard Lemper, ISL Bremen, City University of Applied Sciences Bremen
Prof. Peter Marlow, emeritus professor of the University of Cardiff
Prof. Maciej Matczak, Gdynia Maritime University
Prof. Theo Notteboom, Shanghai Maritime University
Prof. Vytautas Paulauskas, Klaipeda Shipping Research Centre
Prof. Thomas Pawlik, City University of Applied Sciences Bremen
Prof. Chris Peeters, University of Antwerp & Policy Research Corporation
Prof. Michal Plucinski, University of Szczecin
Prof. Dorota Pyć, University of Gdansk
Prof. Wlodzimierz Rydzkowski, emeritus professor of the University of Gdansk
Prof. Thierry Vanelslander, University of Antwerp
Prof. Gordon Wilmsmeier, Universidad de los Andes, Bogota, Colombia and City University of Applied Sciences Bremen
Prof. Jacek Zaucha, University of Gdansk
Prof. Janusz Żurek, emeritus professor of the University of Gdansk

Proceedings editors
Prof. Theo Notteboom, Shanghai Maritime University
Prof. Chris Peeters, University of Antwerp & Policy Research Corporation
Prof. Helena Maria Gregorio Pina Calado, University of the Azores, Portugal
Dr Ernest Czermanński, University of Gdańsk