

Global Marine Trends 2030 Maritime Industries

Global Trends 2030 Trends in Maritime Technology and Engineering Cyber Environment and International Politics Global Marine Trends 2030 The Ocean Economy in 2030 Global Trends 2030 Arctic Maritime Logistics The Ocean Economy in 2030 Maritime Science and Technology: Changing Our World Review of Maritime Transport 2020 Sustainable Power, Autonomous Ships, and Cleaner Energy for Future Shipping The Ocean Economy in 2030 Maritime Trade and Transport Logistics Corporate Social Responsibility in the Maritime Industry Navies and Maritime Policies in the South Atlantic Illusions of Location Theory: Consequences for Blue Economy in Africa The Northern Sea Route as a Shipping Lane Power and the Maritime Domain ICCWS 2019 14th International Conference on Cyber Warfare and Security Climate Change and International Shipping Eurasia's Maritime Rise and Global Security Developments in Maritime Transportation and Exploitation of Sea Resources Seafarers' Rights in China Maritime Supply Chains The UK as a Medium Maritime Power in the 21st Century Feasibility of LNG as a Fuel for the Mediterranean SSS Fleet JAIR Journal of International Relations Trade and Maritime Transport Trends in the Pacific Encyclopedia of Ocean Engineering Wireless Algorithms, Systems, and Applications Sustainable Freight Transport Critical Infrastructure for Ocean Research and Societal Needs in 2030 Handbook of Ocean Container Transport Logistics Building Industries at Sea - 'Blue Growth' and the New Maritime Economy Shipping and the Environment Handbook on Trade and the Environment Globalisation, Transport and the Environment The Sustainable City IX Climate Change and Adaptation Planning for Ports Global Atlas of Marine Fisheries

Eventually, you will extremely discover a other experience and execution by spending more cash. yet when? reach you receive that you require to acquire those all needs like having significantly cash? Why dont you try to get something basic in the beginning? Thats something that will lead you to understand even more concerning the globe, experience, some places, subsequent to history, amusement, and a lot more?

It is your totally own period to doing reviewing habit. in the midst of guides you could enjoy now is **Global Marine Trends 2030 Maritime Industries** below.

Trade and Maritime Transport Trends in the Pacific Jul 09 2020 This study seeks to help fill knowledge gaps on maritime trade in the Pacific. It examines trade flows in Fiji, Papua New Guinea, Samoa, Timor-Leste, Tonga, and Vanuatu. The study looks at shared constraints, such as the effects of climate change and exposure to external shocks, and identifies synergistic and regional approaches to address them. It aims to inform long-term planning for trade facilitation across the region by identifying key questions for governments and development partners to consider. It also addresses core questions including how trade flows in the region are changing, how growth will impact seaport operations and shipping services, and how trade efficiency can be improved.

JAIR Journal of International Relations Aug 10 2020 JAIR Journal of International Relations (JAIR J. Int. Relat.) is a biennial, peer-reviewed, refereed journal of International Relations published by The Jadavpur Association of International Relations with the financial assistance from the Indian Council of Social Science Research (ICSSR), New Delhi.

Eurasia's Maritime Rise and Global Security Feb 13 2021 This book explores Eurasia's growing embrace of its maritime geography from the Indian Ocean to Pacific Asia and the Arctic. In an age of climate change, the melting of the Arctic will transform Eurasia's importance, in addition to influencing the political,

economic, and military dynamics across Eurasia's main maritime regions. These emerging shifts have already begun to alter maritime trade and investment patterns, and thus the global political economy. It also creates a rising threat to the current status quo of world order that has long been dominated by the Atlantic World. This edited volume showcases some of the world's leading experts and examines Eurasia from a saltwater perspective, analyzing its main maritime spaces in a threefold manner—as avenue, as arena, as source—to show the significance of this geostrategic change and why it matters for the future of the world's oceans.

Global Trends 2030 Nov 05 2022 This publication covers global megatrends for the next 20 years and how they will affect the United States. This is the fifth installment in the National Intelligence Council's series aimed at providing a framework for thinking about possible futures and their implications. The report is intended to stimulate strategic thinking about the rapid and vast geopolitical changes characterizing the world today and possible global trajectories during the next 15-20 years by identifying critical trends and potential discontinuities. The authors distinguish between megatrends, those factors that will likely occur under any scenario, and game-changers, critical variables whose trajectories are far less certain. NIC 2012-001. Several innovations are included in *Global Trends 2030*, including: a review of the four previous *Global Trends* reports, input from academic and other experts around the world, coverage of disruptive technologies, and a chapter on the potential trajectories for the US role in the international system and the possible the impact on future international relations. Table of Contents: Introduction 1 Megatrends 6 Individual Empowerment 8 Poverty Reduction 8 An Expanding Global Middle Class 8 Education and the Gender Gap 10 Role of Communications Technologies 11 Improving Health 11 A MORE CONFLICTED IDEOLOGICAL LANDSCAPE 12 Diffusion of Power 15 THE RISE AND FALL OF COUNTRIES: NOT THE SAME OLD STORY 17 THE LIMITS OF HARD POWER IN THE WORLD OF 2030 18 Demographic Patterns 20 Widespread Aging 20 Shrinking Number of Youthful Countries 22 A New Age of Migration 23 The World as Urban 26 Growing Food, Water, and Energy Nexus 30 Food, Water, and Climate 30 A Brighter Energy Outlook 34 Game-Changers 38 The Crisis-Prone Global Economy 40 The Plight of the West 40 Crunch Time Too for the Emerging Powers 43 A Multipolar Global Economy: Inherently More Fragile? 46 The Governance Gap 48 Governance Starts at Home: Risks and Opportunities 48 INCREASED FOCUS ON EQUALITY AND OPENNESS 53 NEW GOVERNMENTAL FORMS 54 A New Regional Order? 55 Global Multilateral Cooperation 55 The Potential for Increased Conflict 59 INTRASTATE CONFLICT: CONTINUED DECLINE 59 Interstate Conflict: Chances Rising 61 Wider Scope of Regional Instability 70 The Middle East: At a Tipping Point 70 South Asia: Shocks on the Horizon 75 East Asia: Multiple Strategic Futures 76 Europe: Transforming Itself 78 Sub-Saharan Africa: Turning a Corner by 2030? 79 Latin America: More Prosperous but Inherently Fragile 81 The Impact of New Technologies 83 Information Technologies 83 AUTOMATION AND MANUFACTURING TECHNOLOGIES 87 Resource Technologies 90 Health Technologies 95 The Role of the United States 98 Steady US Role 98 Multiple Potential Scenarios for the United States' Global Role 101 Alternative Worlds 107 Stalled Engines 110 FUSION 116 Gini-out-of-the-Bottle 122 Nonstate World 128 Acknowledgements 134 GT2030 Blog References 137 Audience: Appropriate for anyone, from businesses to banks, government agencies to start-ups, the technology sector to the teaching sector, and more. This publication helps anticipate where the world will be: socially, politically, technologically, and culturally over the next few decades. Keywords: *Global Trends 2030* Alternative Worlds, global trends 2030, *Global Trends* series, National Intelligence Council, global trajectories, global megatrends, geopolitics, geopolitical changes

The Ocean Economy in 2030 Nov 24 2021 This report explores the growth prospects for the ocean economy, its capacity for future employment creation and innovation, and its role in addressing global challenges. Special attention is devoted to the emerging ocean-based industries in light of their high growth and innovation potential, and contribution to addressing challenges such as energy security, environment, climate change and food security. The report examines the risks and uncertainties surrounding the future development of ocean industries, the innovations required in science and technology to support their progress, their potential contribution to green growth and some of the implications for ocean management. Finally, and looking across the future ocean economy as a whole, it explores possible avenues for action that could boost its long-term development prospects while managing the use of the ocean itself in responsible, sustainable ways. This book belongs to the OECD Report Series

Globalisation, Transport and the Environment Sep 30 2019 This book looks in detail at how globalisation has

affected activity levels in maritime shipping, aviation, and road and rail freight, and assesses the impact that changes in activity levels have had on the environment.

Sustainable Freight Transport Apr 05 2020 This book is a printed edition of the Special Issue "Sustainable Freight Transport" that was published in Sustainability

Climate Change and Adaptation Planning for Ports Jul 29 2019 As key links in transportation and supply chains, the effect of climate change on seaports has broad implications for the development prospects of the global economy. However, the picture is very uncertain because the impacts of climate change will be felt very differently around the world, both positively and negatively. This book addresses the need for quality theoretical analysis, highly innovative assessment methodologies, and insightful empirical global experiences so as to identify the best international practices, planning and appropriate policies to effectively adapt to, develop resilience, and indeed benefit from, the impacts posed by climate change on transportation and supply chains. This book comprises of theories, methodologies and case studies from five continents (Asia, Europe, Latin America, North America, and Oceania) addressing climate change and the adaptation planning of ports and transportation infrastructures. With reputable contributors from academic, policymaking and professional sectors, it critically analyses the recent attempts by ports in establishing adaptation plans and strategies so to enhance ports and other transportation infrastructures' resilience to the climate change risks. This is the first book of its kind to focus on climate change adaptation for ports. It offers useful and comprehensive guidance to senior policymakers, industrial practitioners and researchers who are eager to understand the dynamics between climate change, adaptation planning of ports and transportation infrastructures.

The UK as a Medium Maritime Power in the 21st Century Oct 12 2020 This book argues that the UK, as a post-modern globalised state, will require means to have influence over events and opponents that threaten the UK's interests in the 21st century, and that its means is the Royal Navy. However, unlike other studies, this research emphasizes the role of logistics, especially afloat support logistics and the Royal Fleet Auxiliary. In doing so, the author rejects the current theory underpinning military operations at distance, that distance degrades capability, and posits an alternative theory, that time is the key factor, for maritime-based forces. The UK must reengage with its maritime status and maintain a maritime-based capability to protect its interests in the new maritime century as a leader within the international community. The book will be of use to scholars and researchers interested in naval history and defence policy.

Building Industries at Sea - 'Blue Growth' and the New Maritime Economy Jan 03 2020 Throughout the world there is evidence of mounting interest in marine resources and new maritime industries to create jobs, economic growth and to help in the provision of energy and food security. Expanding populations, insecurity of traditional sources of supply and the effects of climate change add urgency to a perceived need to address and overcome the serious challenges of working in the maritime environment. Four promising areas of activity for 'Blue Growth' have been identified at European Union policy level including Aquaculture; Renewable Energy (offshore wind, wave and tide); Seabed Mining; and Blue Biotechnology. Work has started to raise the technological and investment readiness levels (TRLs and IRLs) of these prospective industries drawing on the experience of established maritime industries such as Offshore Oil and Gas; Shipping; Fisheries and Tourism. An accord has to be struck between policy makers and regulators on the one hand, anxious to direct research and business incentives in effective and efficient directions, and developers, investors and businesses on the other, anxious to reduce the risks of such potentially profitable but innovative investments. The EU H2020 MARIBE (Marine Investment for the Blue Economy) funded project was designed to identify the key technical and non-technical challenges facing maritime industries and to place them into the social and economic context of the coastal and ocean economy. MARIBE went on to examine with companies, real projects for the combination of marine industry sectors into multi-use platforms (MUPs). The purpose of this book is to publish the detailed analysis of each prospective and established maritime business sector. Sector experts working to a common template explain what these industries are, how they work, their prospects to create wealth and employment, and where they currently stand in terms of innovation, trends and their lifecycle. The book goes on to describe progress with the changing regulatory and planning regimes in the European Sea Basins including the Caribbean where there are significant European interests. The book includes:

- Experienced chapter authors from a truly multidisciplinary team of sector specialisms
- First extensive study to compare and contrast traditional Blue Economy with Blue Growth
- Complementary to EU and National policies for multi-use of maritime space

Global Atlas of Marine Fisheries Jun 27 2019 The Global Atlas of Marine Fisheries is the first and only book to provide accurate, country-by-country fishery catch data. This groundbreaking information has been gathered from independent sources by the world's foremost fisheries experts. Edited by Daniel Pauly and Dirk Zeller of the Sea Around Us Project, the Atlas includes one-page reports on 273 countries and their territories, plus fourteen topical global chapters. Each national report describes the current state of the country's fishery; the policies, politics, and social factors affecting it; and potential solutions. The global chapters address cross-cutting issues, from the economics of fisheries to the impacts of mariculture. Extensive maps and graphics offer attractive and accessible visual representations.

Trends in Maritime Technology and Engineering Oct 04 2022 Trends in Maritime Technology and Engineering comprises the papers presented at the 6th International Conference on Maritime Technology and Engineering (MARTECH 2022) that was held in Lisbon, Portugal, from 24-26 May 2022. The Conference has evolved from the series of biennial national conferences in Portugal, which have become an international event, and which reflect the internationalization of the maritime sector and its activities. MARTECH 2022 is the sixth of this new series of biennial conferences. The book covers all aspects of maritime activity, including in Volume 1: Structures, Hydrodynamics, Machinery, Control and Design. In Volume 2: Maritime Transportation and Ports, Maritime Traffic, Safety, Environmental Conditions, Renewable Energy, Oil & Gas, and Fisheries and Aquaculture. Trends in Maritime Technology and Engineering aims at academics and professionals in the above mentioned fields.

Maritime Science and Technology: Changing Our World Feb 25 2022 This book addresses some key questions - Did the marine sector drive the developing technologies? Or did it just adopt them? It would appear that the former is the case - as the industry has moved from sail to steam, from steam to internal combustion engines, from wood to steel and to increasing sizes and types of specialist vessels - the pioneers of naval architects and marine engineers have applied the latest technologies, and our global society has benefited.

Critical Infrastructure for Ocean Research and Societal Needs in 2030 Mar 05 2020 The United States has jurisdiction over 3.4 million square miles of ocean in its exclusive economic zone, a size exceeding the combined land area of the 50 states. This expansive marine area represents a prime national domain for activities such as maritime transportation, national security, energy and mineral extraction, fisheries and aquaculture, and tourism and recreation. However, it also carries with it the threat of damaging and outbreaks of waterborne pathogens. The 2010 Gulf of Mexico Deepwater Horizon oil spill and the 2011 Japanese earthquake and tsunami are vivid reminders that ocean activities and processes have direct human implications both nationally and worldwide, understanding of the ocean system is still incomplete, and ocean research infrastructure is needed to support both fundamental research and societal priorities. Given current struggles to maintain, operate, and upgrade major infrastructure elements while maintaining a robust research portfolio, a strategic plan is needed for future investments to ensure that new facilities provide the greatest value, least redundancy, and highest efficiency in terms of operation and flexibility to incorporate new technological advances. Critical Infrastructure for Ocean Research and Societal Needs in 2030 identifies major research questions anticipated to be at the forefront of ocean science in 2030 based on national and international assessments, input from the worldwide scientific community, and ongoing research planning activities. This report defines categories of infrastructure that should be included in planning for the nation's ocean research infrastructure of 2030 and that will be required to answer the major research questions of the future. Critical Infrastructure for Ocean Research and Societal Needs in 2030 provides advice on the criteria and processes that could be used to set priorities for the development of new ocean infrastructure or replacement of existing facilities. In addition, this report recommends ways in which the federal agencies can maximize the value of investments in ocean infrastructure.

Global Marine Trends 2030 Aug 02 2022

The Sustainable City IX Aug 29 2019 Containing the proceedings of the 9th International Conference on Urban Regeneration and Sustainability this book addresses the multi-disciplinary aspects of urban planning; a result of the increasing size of cities; the amount of resources and services required and the complexity of modern society. Most of earth's population now lives in cities and the process of urbanisation still continues generating many problems deriving from the drift of the population towards them. These problems can be resolved by cities becoming efficient habitats, saving resources in a way that improves the quality and standard of living. The process however, faces a number of major challenges, related to reducing pollution,

improving main transportation and infrastructure systems. New urban solutions are required to optimise the use of space and energy resources leading to improvements in the environment, i.e. reduction in air, water and soil pollution as well as efficient ways to deal with waste generation. These challenges contribute to the development of social and economic imbalances and require the development of new solutions. Large cities are probably the most complex mechanisms to manage. However, despite such complexity they represent a fertile ground for architects, engineers, city planners, social and political scientists, and other professionals able to conceive new ideas and time them according to technological advances and human requirements. The challenge of planning sustainable cities lies in considering their dynamics, the exchange of energy and matter, and the function and maintenance of ordered structures directly or indirectly, supplied and maintained by natural systems. Topics covered include: Urban strategies; Planning, development and management; Urban conservation and regeneration; The community and the city; Eco-town planning; Landscape planning and design; Environmental management; Sustainable energy and the city; Transportation; Quality of life; Waterfront development; Case studies; Architectural issues; Cultural heritage issues; Intelligent environment and emerging technologies; Planning for risk; Disaster and emergency response; Safety and security; Waste management; Infrastructure and society; Urban metabolism.

Maritime Trade and Transport Logistics Oct 24 2021

Seafarers' Rights in China Dec 14 2020 This book critically investigates the conditions of seafarers' rights in China in legislation and in practice, focusing in particular on the restructuring process following the 2006 Maritime Labour Convention. Accordingly, it poses key research questions to major Chinese stakeholders to gauge their responses to the Convention, to determine whether the protection of Chinese seafarers has actually improved since the advent of the Convention, and further, to identify the continuing challenges for future improvement. The Convention will enter into force in China in November 2016, bringing with it significant changes.

Feasibility of LNG as a Fuel for the Mediterranean SSS Fleet Sep 10 2020 Forthcoming implementation of international and European environmental regulations, namely Marpol Annex VI and Directive 2012/33/EU, will force ship owners to assess technologies that can allow them to comply with regulation whilst helping them to improve their position in an increasingly competitive market. Given the European economy's fragile condition, prevailing uncertainty about its future and about the future evolution of key factors affecting the outcome of the ship owners' decisions, making the right choice among the multiple feasible technologies available becomes a considerable challenge. For the past two years, the undersigned team of analysts have worked together in a study leading towards the publication of this report. This analysis has been the Fundaci3n Valenciaport's contribution to the European Union (EU) co-funded project "CO2 and ship transport emission abatement by LNG" (the COSTA Action). The COSTA project has been coordinated by the Italian Ministry of Infrastructure and Transport and co-financed by the EU's Trans-European Network for Transport (TEN-T) Programme under the Motorways of the Sea Call 2011. Our objective has been to analyse which technology would give the best results for the ship owner to comply with environmental regulations concerning emissions from a financial point of view. This has been done for those vessels that are particularly affected by this regulation, that is, each of the 658 vessels deployed in short-sea shipping (SSS) lines calling at core ports in the Mediterranean and Black Sea EU countries and Portugal. Additionally, a cost-benefit analysis including externalities has been conducted. As a result of this study, different scenarios on technology uptake towards 2030 for the Southern European SSS fleet have been defined. Needless to say, there is no certainty of how many of the driving factors will behave in the next 15 years. The results published in this report are not definitive predictions of the Mediterranean shipping sector in 2030. Instead, our main findings are intended to stimulate discussions about available options for the industry. By examining the entire SSS fleet operating in the Mediterranean, Black Sea and Portuguese core ports, we hope to portray a general picture of the most convenient technological options for different kinds of vessels. In addition, we hope to draw attention to the factors explaining most of the uncertainty over future results and provide useful information for both ship owners and policy-makers who may be evaluating policies to foster the adoption of the technologies that are most environmentally friendly and contribute the most to the competitiveness of the shipping and shipbuilding sectors in Europe. Financial feasibility and cost-benefit analyses for the conversion of each vessel deployed in short-sea services in the studied area have been validated with the collaboration of prominent industrial companies. We would like to thank experts working for MAN Diesel & Turbo, Caterpillar, Wartsila, Ros Roca Indox Cryo Energy, S.L., Boluda Corporaci3n

Marítima, RINA and Bureau Veritas for the information provided and for their help validating the results on the investment required for each ship in the SSS fleet to install scrubbers, be retrofitted to LNG dual fuel or be substituted by a newly built vessel of similar characteristics and operating with LNG dual fuel engines, tanks and all the necessary installations for this newbuilding to be LNG-compatible. Their support has also been crucial to check the operational costs of the ship for each pair of alternative options (the options compared have been: installing scrubbers, retrofitting to LNG dual fuel, newbuilding with HFO engines plus scrubbers, newbuilding with MGO engines (no scrubbers) and newbuilding with LNG engines and other LNG-related installations). We share this report openly and free of charge to enhance the understanding of some of the challenges the shipping sector is facing, to encourage comprehension of the driving factors that affect the future competitiveness of short-sea shipping in the South of Europe and grasp the potential consequences that a “do nothing” scenario would bring in terms of modal backshift and increase in the use of road transport for intra-European trade flows. We hope you find this report useful and informative; and that it helps to stimulate discussion and thinking of the challenges, solutions and potential incentives to be put in place to favour the adoption of the technological options that will foster the competitiveness of the European shipping and shipbuilding industries. We sincerely hope you will enjoy reading the following pages.

Navies and Maritime Policies in the South Atlantic Aug 22 2021 This edited volume analyzes national security issues with maritime implications, and, specifically, naval projects and postures of main South Atlantic countries: Brazil, Argentina, Nigeria, and South Africa. Additionally, it provides comprehensive and multi-level analysis of the interplay among national interests in the processes of demarcation of limits of the continental shelf and contention among Uruguay, Chile, Argentina, and the United Kingdom in the Southern Atlantic and the Antarctica. This book will interest scholars, researchers, and students in the fields of Latin American politics, regional studies, foreign and defense policy, and maritime security.

ICCWS 2019 14th International Conference on Cyber Warfare and Security Apr 17 2021

The Northern Sea Route as a Shipping Lane Jun 19 2021 This book analyses the current and future viability of the Northern Sea Route as a stable transport route for the international transit traffic between Europe and the Far East. It includes the present conditions, defining and evaluating viability factors for using the Northern Sea Route (NSR). The book makes a projection for NSR in the future, taking into account the climatic change in the Arctic findings presented in the IPCC report. This study, based on the author’s PhD thesis, analyses meteorological, hydrologic, bathymetric and other data for the evaluation of the navigation criteria. It is intended for a wide spectrum of readers, from students and scientists of Earth sciences and polar geography, navigation, political science researchers and politicians interested in Arctic affairs.

Handbook on Trade and the Environment Oct 31 2019 Handbook on Trade and the Environment is a good source for those looking for a better understanding of political issues, of legal debates, and of the state of discussion between government, industry, NGO, and private sector groups on topics that are not often treated elsewhere. Judith M. Dean, *World Trade Review* I would recommend the book to anyone concerned with the interaction of trade and the environment. John Goodier, *Reference Reviews* In this comprehensive reference work, Kevin Gallagher has compiled a fresh and broad-ranging collection of expert voices commenting on the interdisciplinary field of trade and the environment. For over two decades policymakers and scholars have been struggling to understand the relationship between international trade in a globalizing world and its effects on the natural environment. The authors in this Handbook provide the tools to do just that. The editor’s well-worked introduction synthesizes the emerging themes of the collection, which is divided into three sections: trade and environmental quality, trade and environmental politics, and trade and environmental policy. Topics include the extent to which trade liberalization creates pollution havens where dirty industries flock to poorer countries with lax environmental standards, and conversely, how multinational corporations bring cleaner environmental technologies to developing countries when they choose to move abroad. The volume also addresses the extent to which national environmental policy and/or global environmental agreements clash with the emerging rules of the World Trade Organization and whether such environmental policies hinder export competitiveness. Finally, numerous political economy analyses of the complex political coalitions that arise to adapt to and mitigate changes in trade and environmental policy are provided. In addition to broader overviews of the field, in-depth case studies of nations and regions are offered, including the United States, the European Union, China, India and Mexico as well East Asia, Latin America, and Africa. The volume will serve as a guide for scholars new to the field as well as students and policy-makers needing a quick reference to the research on the interface between trade and the environment.

Climate Change and International Shipping Mar 17 2021 n Climate Change and International Shipping: The Regulatory Framework for the Reduction of Greenhouse Gas Emissions, Yubing Shi provides groundbreaking analyses of the evolving regulatory framework for the reduction of greenhouse gas emissions from international shipping.

Maritime Supply Chains Nov 12 2020 Maritime Supply Chains breaks the maritime chain into components, consistently relating them to the overall integrated supply chain. The book not only analyzes and provides solutions to frequently encountered problems and key operational issues, it also applies cutting-edge scientific techniques on the maritime supply chain. Sections consider shipping, ports and terminals, hinterland and the issues that intersect different parts of the chain. Readers will find discussions of the various actors at play and how they relate to the overall function of the supply chain. Finally, the book offers solutions to the most pressing problems, thus providing a unique, well-balanced account. Provides a comprehensive and integrative account of the maritime supply chain, from shipping, to port, to hinterland Cuts through the maritime supply chain to offer a transversal picture on how the chain functions Applies rigorous analytical techniques to give solutions to the most frequent and pressing challenges facing maritime supply chains Considers advances, such as blockchain, that are set to transform maritime supply chains

Encyclopedia of Ocean Engineering Jun 07 2020 This encyclopedia adopts a wider definition for the concept of ocean engineering. Specifically, it includes (1) offshore engineering: fixed and floating offshore oil and gas platforms; pipelines and risers; cables and moorings; buoy technology; foundation engineering; ocean mining; marine and offshore renewable energy; aquaculture engineering; and subsea engineering; (2) naval architecture: ship and special marine vehicle design; intact and damaged stability; technology for energy efficiency and green shipping; ship production technology; decommissioning and recycling; (3) polar and Arctic Engineering: ice mechanics; ice-structure interaction; polar operations; polar design; environmental protection; (4) underwater technologies: AUV/ROV design; AUV/ROV hydrodynamics; maneuvering and control; and underwater-specific communicating and sensing systems for AUV/ROVs. It summarizes the A–Z of the background and application knowledge of ocean engineering for use by ocean scientists and ocean engineers as well as nonspecialists such as engineers and scientists from all disciplines, economists, students, and politicians. Ocean engineering theories, ocean devices and equipment, ocean design and operation technologies are described by international experts, many from industry and each entry offers an introduction and references for further study, making current technology and operating practices available for future generations to learn from. The book also furthers our understanding of the current state of the art, leading to new and more efficient technologies with breakthroughs from new theory and materials. As the land resources approach the exploitation limit, ocean resources are becoming the next choice for the sustainable development. As such, ocean engineering is vital in the 21st century.

Cyber Environment and International Politics Sep 03 2022 Actors in the cyber sphere include countries' armed forces, intelligence organizations, legal authorities, and natural and legal persons. Cyber War is defined as the intrusion by one state to destroy or disrupt the computer systems or networks of another state. It is defined as “the sort of warfare in which computer systems are employed to damage or destroy adversary systems” in the United Nations Glossary, in the same way as information warfare. Cyber warfare moves at a breakneck speed. It's a global phenomenon that occurs before the traditional battleground. In order to counter cyber crimes and related issues, more studies needed to improve our understanding, inform policies and develop and strengthen cooperation between individuals, institutions and countries. All states need to take constitutional, legal, technical and administrative measures on cybersecurity. For this purpose, “national virtual environment security policies” should be developed and constantly updated. National information security should be given utmost importance. A cyber security awareness culture should be established and supported by regional and global international institutions and organizations. A common understanding on cyber security needs to be adopted at all levels. CONTENTS PREFACE PART 1. INTERNATIONAL LAW AND CYBER ENVIRONMENT CYBER ENVIRONMENT – Serkan Yenil and Naci Akdemir CYBER NEGOTIATIONS THROUGH THE LENSES OF INTERNATIONAL LAW – Öncel Sençerman PART 2. CYBER POLICIES OF THE INTERNATIONAL ORGANIZATIONS AND STATES CONCEPTUAL AND NORMATIVE BASIS OF THE EUROPEAN UNION'S CYBERSECURITY – Neziha Musao?lu and Neriman Hoco?lu Bahad?r FRANCE'S CYBER SECURITY POLICIES – Ahmet Emre Köker TURKEY'S CYBER SECURITY POLICIES – Ozan Örmeci, Eren Alper Y?lmaz, and Ahmet Emre Köker PART 3. CYBER SECURITY AND WARFARE THE IMPACTS OF USING CYBER ENVIRONMENT AS A

DOMAIN IN MODERN WARFARE: CYBER-ATTACKS AND CYBER SECURITY – Murat Pınar and Soyalp Tamçelik HOW CAN CYBER SECURITY BE ENSURED IN THE GLOBAL CYBERSPACE? – Hüsmen Akdeniz DIGITAL NON-STATE ACTORS IN CYBER CONFLICTS: HOW THE HACKTIVISTS AND CYBER SOLDIERS CHANGE THE FUTURE – Cansu Arisoy Gedik CYBERATTACK THREAT AGAINST CRITICAL ENERGY INFRASTRUCTURES AND ENERGY SECURITY – Cemal Kakışim CYBER TERRORISM IN NEW GENERATION WAR CONCEPT – Yunus Karaağaç SECURITY OF HUMANITARIAN ORGANISATIONS IN CYBERSPACE – Aslı İrin HUMAN SECURITY AND POSSIBLE INFLUENCE OF CYBERTHREATS ON DEMOCRACY: CASE OF GHANA -Burak Akır İker and Harun Abubakar Siddique NEW BATTLEFIELD BETWEEN CHINA AND THE USA: CYBERSPACE – Dogan Safak Polat RUSSIAN FEDERATION'S CYBER WARFARE CAPABILITIES – Ahmet Sapmaz CYBER SECURITY ENVIRONMENT IN THE GULF OF GUINEA – Burak Akır İker, Hasret Çomak, and Harun Abubakar Siddique PART 4. TECHNOLOGICAL INNOVATIONS AND CYBER SECURITY THE EFFECTS OF ARTIFICIAL INTELLIGENCE ON CYBERSECURITY – Erol Demir and Fahri Erenel CYBER SECURITY IN DISASTER AND RISK MANAGEMENT – Levent Uzunçobuk MEDIA AND CYBER SECURITY RISKS – Emine Kılıçaslan RISKS AND CYBER SECURITY AT MUSEUMS – Engül Aydın and Haldun Aydın PART 5. CYBER WORLD, CYBER CULTURE, AND INTERNATIONAL ECONOMY DIGITAL ENVIRONMENT OF FOREIGN TRADE AND COOPERATION: INSTITUTIONS, STRATEGIES, TECHNOLOGIES – Natalia Yevchenko A BLOCK CHAIN-BASED APPLICATION IN CYBER ECONOMIC SYSTEM: NFT – Duygu Yücel THE PHENOMENON OF DIGITIZATION IN THE TURKISH BANKING SYSTEM, RISKS AND SOLUTIONS IN THE FIELD OF CYBER SECURITY – Hatice Nur Germir INSECURITY SYNDROME IN DIGITAL ENVIRONMENT – Hüseyin Çelik CYBER SECURITY: A PERSPECTIVE FROM ORGANIZATIONAL PSYCHOLOGY – Merve Mamac THE FAR-RIGHT AND SOCIAL MEDIA – Hüseyin Pusat Kıldı

Global Trends 2030 May 31 2022 This report is intended to stimulate thinking about the rapid and vast geopolitical changes characterizing the world today and possible global trajectories over the next 15 years. As with the NIC's previous Global Trends reports, we do not seek to predict the future, which would be an impossible feat, but instead provide a framework for thinking about possible futures and their implications. In-depth research, detailed modeling and a variety of analytical tools drawn from public, private and academic sources were employed in the production of Global Trends 2030. NIC leadership engaged with experts in nearly 20 countries, from think tanks, banks, government offices and business groups, to solicit reviews of the report.

Wireless Algorithms, Systems, and Applications May 07 2020 The two-volume set LNCS 12385 + 12386 constitutes the proceedings of the 15th International Conference on Wireless Algorithms, Systems, and Applications, WASA 2020, which was held during September 13-15, 2020. The conference was planned to take place in Qingdao, China; due to the COVID-19 pandemic it was held virtually. The 67 full and 14 short papers presented in these proceedings were carefully reviewed and selected from 216 submissions. These submissions cover many hot research topics, including machine-learning algorithms for wireless systems and applications, Internet of Things (IoTs) and related wireless solutions, wireless networking for cyber-physical systems (CPSs), security and privacy solutions for wireless applications, blockchain solutions for mobile applications, mobile edge computing, wireless sensor networks, distributed and localized algorithm design and analysis, wireless crowdsourcing, mobile cloud computing, vehicular networks, wireless solutions for smart cities, wireless algorithms for smart grids, mobile social networks, mobile system security, storage systems for mobile applications, etc.

The Ocean Economy in 2030 Jul 01 2022 This report explores the growth prospects for the ocean economy, its capacity for future employment creation and innovation, and its role in addressing global challenges. Special attention is devoted to the emerging ocean-based industries.

Developments in Maritime Transportation and Exploitation of Sea Resources Jan 15 2021

Developments in Maritime Transportation and Exploitation of Sea Resources covers recent developments in maritime transportation and exploitation of sea resources, encompassing ocean and coastal areas. The book brings together a selection of papers reflecting fundamental areas of recent research and development in the fields of:- Ship Hydrodynamics-

The Ocean Economy in 2030 Mar 29 2022 Chapter 1. An overview of the ocean economy: Assessments and

recommendations Part I. Global trends and macro-factors influencing the ocean economy Chapter 2. Global trends and uncertainties to 2030/2060 Chapter 3. Expected changes to the ocean environment: Impacts on the ocean economy Part II. Critical factors influencing the emerging ocean-based industries Chapter 4. Science, technology and innovation in tomorrow's ocean economy Chapter 5. International maritime regulation and emerging ocean-based industries Chapter 6. Measuring the global economic contribution of ocean-based industries Part III. Perspectives on and projections of the future of the ocean economy Chapter 7. Growth prospects, challenges and uncertainties for selected ocean industries Chapter 8. Ocean industries to 2030 Chapter 9. Towards integrated ocean management

Review of Maritime Transport 2020 Jan 27 2022 This series contains the decisions of the Court in both the English and French texts.

Power and the Maritime Domain May 19 2021 This book offers a multi-disciplinary and multi-national approach to defining key elements required to define power within the maritime domain. The volume engages with the concept that the maritime domain is a multi-dimensional space embracing oceans, seas, waterways, including all elements of maritime power, related activities, infrastructure, resources and assets. It illustrates the complexity and interconnectivity of the factors that contribute to the appreciation, creation, and application of maritime power. In practical terms, the book highlights that the maritime domain is a continuum that interconnects countries, cultures, politics, economics, trade, environment, knowledge, and technological power globally. Perhaps most importantly, the maritime domain generates power of its own volition, as well as acting as a critical enabler for the creation of other types of nations power: economic, political, military, technological, intelligence and fiscal power, in particular. The book not only brings those various factors to the reader's attention but, in the synthesis, also clarifies the connections between the various elements in creating a greater maritime whole. This book will be of great interest to students of maritime security, strategic studies and International Relations.

Handbook of Ocean Container Transport Logistics Feb 02 2020 This book is focused on the impact of ocean transport logistics on global supply chains. It is the first book solely dedicated to the topic, linking the interaction of parties along this chain, including shippers, terminal operators and line carriers. While ocean container transport logistics has been greatly studied, there are many important issues that have yet to receive the attention they deserve. The editors and contributing authors of *Ocean Container Transport Logistics: Making Global Supply Chain Effective* seek to address these topics and shed new light on the subject. The book is divided into three parts. Part I examines the innovation, trends, competition and business model of container terminal operations. In Part II, the book looks at how tactical and operational management is used in shipping liners. The chapters cover topics such as empty container repositioning, slow steaming, routing, network design and disruption management. Finally Part III explores at shippers and global supply chain management, with chapters on transportation service procurement, hinterland transportation, green corridors, as well as competition and co-operation in maritime logistics operations. The eighteen chapters of the book all highlight the immediate effect of ocean transport logistics on global supply chain.

Arctic Maritime Logistics Apr 29 2022 The modern shipping industry has reached maturity; market demand and landscape shifts force industry agents to find new pathways to successful development. The Northern Sea Route (NSR) as a new pathway between Europe and Asia brings both opportunities and challenges to global logistics systems. These circumstances make commercial exploitation of the route a subject of intense focus in many countries actively involved in sea transportation. This book identifies specific problems and provides possible solutions to them by calling on the accumulated knowledge of researchers and practitioners with competencies from diverse areas, including transport and logistics, Arctic studies, IT and digital technologies, socio-economic systems analysis, hydrocarbon production, transport, business modeling, design of information systems and applications, and engineering requirements for IT services. It represents the integrated experience and expertise of researchers from Canada, Germany, Russia, and the Netherlands, including experts from oil and gas enterprises, shipping lines, logistics companies, and IT companies. .

Sustainable Power, Autonomous Ships, and Cleaner Energy for Future Shipping Dec 26 2021 This exciting new book highlights and discusses new concepts for enhanced efficiency of ships and how they are operated, primarily resting on reducing the environmental footprints and operational expenses. An overview of technological and regulatory developments and drivers for the challenges described above is provided. Readers learn about sustainable energies and power for propulsion, particularly maritime electrification. The book includes shore-based initiatives on greenhouse gas reduction in shipping. Status and current practices

for propulsion arrangements using renewable energy technologies are presented with examples on ships representing several categories of energies and power. Energy solutions that enable future digital and automated concepts for safe, secure, and cost-effective sustainable shipping are discussed, as well as the concept of autonomous ships as part of maritime electrification and all the possibilities. The development of renewable energies and the concept of autonomous ships provide glimpses for the development of future sustainable maritime transport solutions. Lessons learned and existing knowledge are important elements for successful transition towards future concepts for safe, secure, and efficient maritime environmentally friendly and low-cost solutions to our sustainable power and energy challenges that lie ahead. The book discusses the work ahead and provides future thoughts on this issue.

Corporate Social Responsibility in the Maritime Industry Sep 22 2021 This book addresses the environmental, legal, social, and economic aspects of corporate social responsibility in the maritime industry. It discusses the voluntary aspects of the CSR concept and how the lines between informal and formal rules are merging and becoming fuzzy. Further, it shows how regulation is enhancing responsibility and sustainability in the maritime industry. The book gathers the experiences of the WMU, IMO, UN and public and private actors in developing and developed countries in the maritime industry.

Illusions of Location Theory: Consequences for Blue Economy in Africa Jul 21 2021 "Illusions of Location Theory: Consequences for Blue Economy in Africa" questions the relevance of 'location theory' in explaining the coastal-hinterland continuum and the implications for the utilization of blue economy ecosystem in such a contested space in Africa. It pays more attention to territorial contestations, maritime disputes, vulnerabilities of landlocked states, and expansionist policies as displayed through spatial organizational regimes. These areas of investigation have previously been largely studied from the narrow perspective of 'location', unduly focusing on comparative advantages of 'distance', while neglecting the influence of 'forces' such as technology, ideology, and the power of mental mapping in spatial decision making. This volume puts forward the argument that the harmonious relationship between states, and efficient exploitation of the blue economy ecosystem in ways that promote peace between states, lies not only in the structural transformation of markets, but also in bridging the spatial and social divide between the coastal and hinterland societies. Thus, this work proffers possibilities for a holistic regime for managing Africa's coastal-hinterland continuum through innovative strategies such as SMART blue economies and the infusion of the geopolitical dimension into the management of maritime and territorial diplomacy. The combination of theoretical and empirical analysis, buttressed by in-depth case studies of what works in the management of blue economy ecosystem and what does not work, make this volume ideal for researchers, students, and practitioners interested in African regional studies, African political economy, political geography, strategic military studies, governance of seas and oceans, and maritime science/diplomacy.

Shipping and the Environment Dec 02 2019 This book focuses on the interaction between shipping and the natural environment and how shipping can strive to become more sustainable. Readers are guided in marine environmental awareness, environmental regulations and abatement technologies to assist in decisions on strategy, policy and investments. You will get familiar with possible paths to improve environmental performance and, in the long term, to a sustainable shipping sector, based on an understanding of the sources and mechanisms of common impacts. You will also gain knowledge on emissions and discharges from ships, prevention measures, environmental regulations, and methods and tools for environmental assessment. In addition, the book includes a chapter on the background to regulating pollution from ships. It is intended as a source of information for professionals connected to maritime activities as well as policy makers and interested public. It is also intended as a textbook in higher education academic programmes.