

Preface

A port is a location on a coast or shore containing one or more harbors where ships can dock and transfer people or cargo to or from land. Port locations are selected to optimize access to land and navigable water, for commercial demand, and for shelter from wind and waves.

Maritime transport is the shipment of goods and people by sea and other waterways. Port operations are a necessary tool to enable maritime trade between trading partners. To ensure smooth port operations and to avoid congestion in the harbor it is inevitable to permanently upgrade the port's physical infrastructure, invest in human capital, fostering connectivity of the port and upgrade the port operations to prevailing standards. Hence, port operations can be distinct as all policies, reforms and regulations that influence the infrastructure and operations of port facilities including shipping services.

More than 80% of world trade is carried by sea, constituting by far the most important means of transport of goods. Maritime transport has been growing annually by around 3.1% for the past three decades. Although there are many shipping companies in the maritime industry, most of them are small with insignificant market shares.

International maritime transport costs tend to be on average between two to three times as high as custom duties of importing countries. Still it is the cheapest way of transporting large amounts of goods compared to other transport methods.

Maritime-Port Technology and Development contributes to efficiency and reliability of seaborne transport and operations. This book is a reference tool for academics and engineers involved in marine technology-related research and the marine industry.

Editor