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*Maritime*

*transport*

*Seaports all over the world*

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# Maritime transport

Maritime traffic still accounts for almost 90% of all international trade. It has even increased substantially, in line with the increase in international trade and globalisation. This is reflected in the fact that, while 500 million tons of goods were traded by sea in 1950, a total of 8 billion tons are currently transported across the oceans every year. Every day, almost 50,000 ships travel along international shipping routes, maritime motorways consisting of straits, ports and canals. It is, in fact, only the maritime transportation of people that has declined. For centuries, boats were the only means of crossing the oceans, carrying settlers, migrants, slaves, etc. Today, they are only used for short distances – small stretches of water, islands near the mainland and archipelagos – or by the poorest refugees and clandestine migrants. Leisure cruises have to be added to the list, a significant and booming activity, with several million people embarking every year on the 500 cruise ships operating worldwide.

## WHAT IS THE ENVIRONMENTAL IMPACT OF MARITIME TRANSPORT?

Whether they run aground or sink, tankers are responsible for oil slicks, which are among the most tragic and highly publicised marine pollution factors. However, such shipwrecks have decreased due to the advances made in the safety of ships (such as the progressive use of double hulls), the introduction of inspections and procedures established by the International Marpol Convention and, finally, national regulatory systems such as those implemented in the USA after the Exxon Valdez disaster (40,000 tonnes of oil in Alaska in 1989) and in Europe after the Erika disaster (30,000 tonnes of oil off the coast of Brittany in 1999). Nowadays, major disasters account for only a small share of the oil discharged into the ocean, a long way behind the illegal degassing of storage tanks. These discharges aside, maritime transport is often presented as a low-risk pollution activity. Indeed, ships have the advantage of transporting large quantities of freight, which enables them to be less polluting, ton for ton, than road or air transport. Maritime transport now accounts for only 3% of CO<sub>2</sub> emissions of human origin. However, the fuel used at sea has a very high sulphur level, around 27,000 parts per million, and the engines consequently emit sulphur dioxide, a greenhouse gas and a harmful pollutant.

Maritime transport : Paulina Rychter , 4TEPT

references: [http://unctad.org/en/PublicationsLibrary/rmt2015\\_en.pdf](http://unctad.org/en/PublicationsLibrary/rmt2015_en.pdf)

## ***SUSTAINABLE AND RESILIENT MARITIME TRANSPORT SYSTEMS***

The year 2015 is a milestone for sustainable development. With the international community currently elaborating a post-2015 development agenda, there is a renewed opportunity to strengthen the international commitment to sustainable development and consider how best to mainstream sustainability principles across all economic sectors, including maritime transport.

With over 80 per cent of world merchandise trade being carried by sea, maritime transport remains the backbone of international trade and globalization. Equally, the sector is a key enabling factor for other sectors and economic activities such as marine equipment manufacturing, maritime auxiliary services (for example, insurance, banking, brokering, classification and consultancy), fisheries, tourism and the offshore energy sector, as well as other marine-based industries such as shipbuilding and ship demolition. In this context, sustainable maritime transport systems entail, among other factors, transport infrastructure and services that are safe, socially acceptable, universally accessible, reliable, affordable, fuel-efficient, environmentally friendly, low carbon and climate-resilient.

Achieving greater sustainability in transport, including maritime transport, has long been recognized as a key development objective, including in the context of the 1992 Earth Summit, the United Nations Conference on Sustainable Development, UNCTAD XIII, the third International Conference on Small Island Developing States (SIDS), the second United Nations Conference on Landlocked Developing Countries, and, more recently, the United Nations General Assembly resolution on the "Role of transport and transit corridors in ensuring international cooperation, stability and sustainable development" (A/RES/69/213). Additional momentum is also generated by the work carried out by the United Nations Secretary-General High-Level Advisory Group on Sustainable Transport. Established with a view to providing recommendations on sustainable transport that are actionable at global, national and local as well as sectoral levels, the High-Level Advisory Group is expected to publish a report on the global transport outlook and convene the first international conference on sustainable development in 2016.

Against this background the following sections highlight selected relevant issues that lie at the interface of maritime transport and sustainable development.

# Seaports

***Seaport***-type water port, located on the ocean, sea or internal waters of the State concerned. It consists of water bodies and the land area and related port infrastructure. It is the primary point enabling navigation, maritime transport and passenger traffic.

The port is one of the main features of town-and for this reason the term is also used in reference to the city where the seaport is located.

***Parts port***-Port area is divided into a part of the water - akwatorium - covering the approach, road or pools inside and part of the road, where handling equipment, storage yards, shunting, stores, warehouses and access roads (and rail bite). According to the Law of the Sea akwatorium sea port is part of the internal waters of the State concerned.

## ***Port in Kołobrzeg:***



## ***Machinery In The Port:***

Of the existing handling equipment at the port can mention cranes (Portal, rigs and cranes) and conveyors and pipelines. Also important are the devices used for bunkering, or ship supply of fuel and fresh water. An important role is played by such technical facilities as breakwaters, piers, quays, piers, wharfs and equipment repair (slips, docks)

## *The crane in sea port:*



In Polish law, maritime ports and war are separate types of ports.

In Poland there are 33 objects that have the status of a seaport. 3 Polish seaports are not situated by the sea, but on the rivers. These are: the port on the river Elblag Elblag, Port Police and the port of Szczecin on the Oder River. Sections of the river from the mouth to the port are the internal waters Polish.

Shipping (water transport) - one of the forms of transport. This means in particular, the transport ships, for profit, passengers and cargo, by sea or inland waters.

Transport of goods used in many specialized vessels: bulk carriers, general cargo ships, container ships, oil tankers, chemical tankers and others.

Passenger represents a marginal percentage of the overall transport of people, and this is due to the long travel time. Only in some regions of the world, for example in areas with heavily developed shoreline or island states, the important role of communication ferry.

Shipping companies

Shipping is between sea ports using specialized vessels, such as .:

passenger ships to transport people

RORO vessels for the transport of trucks and railway wagons with goods

container for the transport of goods in containers

various kinds of gas tankers to transport gas in various forms

tankers to transport liquid goods, especially petroleum products

general cargo transport of goods calculated in pieces

bulk carriers for transporting bulk goods.

Due to the swimming area navigation can be divided into:

domestic voyages - travel the internal waters and territorial sea

coastal shipping - traveling across the Baltic Sea to 8 ° east longitude (each country has its own definition of the area and the inland)

international voyages - voyages on the sea areas other than the territorial sea, also called a lot of inland

The concept of inland waterways is subject to evolution and has never been legally defined. On the basis of the Act have water inland waterways can be defined as the so-called general or particular form of use of water, consisting of transport, ie transport of passengers and goods, fishing, maintaining the trail navigable, exploitation of aggregates, sport, recreation and tourism on the water, the supervision of water rescue on the water, training on the water, gastronomy on the water, hotel on the water, living on the water, office water, workshops on water, plants bath with floating equipment with or without traction drive called inland waterway also ferry, hydrofoil or hovercraft , in waters that are called inland waterways, including, for example. waters regulated, or other inland waters. With keeping the waterways linked to the notion of a river port, navigable route, transit depth. When the activity is conducted outside of the waterways to be subject to specific regulation, which is the law on inland waterway transport, should concern only: międzybrzegowych transport, commercial transport of passengers, cargo, commercial fishing, the performance of works or technical mining aggregates. Part of the waterway, which we call water transport is the mode of transport, which the State has devoted special attention. The advantages of inland waterway] meant that this type of transport should be promoted on the basis of the Law on Inland Shipping Fund and Reserve Fund. River transport is run by operators of inland waterway transport, which are: the owner, the carrier inland waterway, inland ship pilot, crew, shipyard. Inland waterway transport in Europe plays an important role in the transport chain.

Seaports : Kornel Śmigielski , Bartosz Wąsowicz, 4 TEPT

references: [https://pl.wikipedia.org/wiki/Port\\_morski](https://pl.wikipedia.org/wiki/Port_morski)

## Types of contemporary ships

A **cargo ship** or **freighter** is any sort of ship or vessel that carries cargo, goods, and materials from one port to another. Thousands of cargo carriers ply the world's seas and oceans each year, handling the bulk of international trade.



**Container ship**- ship specially equipped with tracks and allocated for the transport of containers, at assuming their vertical loading and discharge.



**Bulk carrier** - ship, usually with the single deck and the double bottom, with top containers and obłowymi and with the single or double skin, assigned mainly to the transport of dry mass charges loose, i.e. without the package, put directly into the cargo hold, like e.g. coal, ore, mineral fertilizers, cereal crops, granulated sulphur, and the like.



**Gas carrier** - the ship intended for the transport of the liquefied natural natural gas - LNG (Eng. Liquefied Natural Gas) or of liquefied gas porafinacyjnego - LPG.



**Tanker ship** - intended for transporting fluent materials. Tankers belong to the biggest merchant ships. In contrast with other freighters they don't have a cargo hold, and loading containers - loading/discharge is held via the system of pipelines and pumps.

Sea ferries constitute the type of ships which developed from passenger liners. Regular connections between ports are operating ferries (so-called pendular navigation).



**Passenger liner** - vessel intended for the carriage of persons. Also ships earning above all can be passenger liners with carriage of goods. Already in 1948 in provisions of the London Convention they determined that every merchant ship was a passenger liner taking to the deck and having cabin places for over 12 passengers. For the following years a division into passenger liners taking above 100 passengers and freight-and-passanger became common being able to hold from 12 to 100 persons. More and more a ferry navigation became widespread, also new types of ships appeared e.g. hovercraft, high-speed passenger liners (so-called HSC). Very travel time started growing shorter and today ships taking to the deck are already passenger liners, rather than into cabins of 12 passengers.



**Fishing cutter** - fishing subdivision which offers fishermen trawlers for the fishing in the system similar to the fishing. Cutters are sharing on small (for lengths of 13-15 metres), averages (up to 17 metres) and supercutters (up to 24



metres). Cutters can be wooden (in the disappearance), steel or made of laminated fabrics. Halves on distant basins are held based on dishes of the base. The drive of the contemporary cutter usually constitutes the internal-combustion engine about the power to 400 h.p., before a rig was it to 45<sup>2</sup> m of the area.



Types of contemporary ships :Adrian Dudziak, 4 TEPT

references : [https://pl.wikipedia.org/wiki/Typy\\_statk%C3%B3w](https://pl.wikipedia.org/wiki/Typy_statk%C3%B3w)

## Sea ferries

Ferries are a type of marine ships, which evolved from passenger ships. Ferries operate regular services between the ports (ie. Shipping Swing). Sometimes only passenger ferries, but now among medium-sized and larger ferries dominate passenger and freight unit, or car-passenger ferries or combi (combination) - connecting more features (passenger-car-train). Slightly more units only passenger among individuals of smaller, shorter range and fast. Load (passenger cars, trucks, wagons) is loaded and unloaded through the gate (the so-called. Gate) stern, side or bow to the so-called. car deck (rail). Therefore, it is increasingly built ferries, a very large capacity is placed hull many car deck fixed and movable - most often raised hydraulically. In order to separate the loading of pedestrian traffic, passengers embark on the ship usually by the gate side through trapom or sleeves as connected directly to the passenger terminal. Available to them on board the ferry provides a highly developed infrastructure and hospitality - catering, which includes m.in .: passenger cabins, restaurants, bars, duty free shops, fitness clubs. With the development of technology came a new class of ferries called shortcut HSC - "fast ships", "fast ferries" or improperly "fast catamarans." These units are characterized by high operating speed above 38 knots and maximum journey times specified by the regulations for four hours.

Sea ferries : Joanna Konaszewska, 4 TEPT

references: <https://pl.wikipedia.org/wiki/Prom>

# The carriage of goods by sea

Among the different types of transport routes, some of which is associated with complex types of logistics activities while others come down only to essential projects. A number of factors is directly linked with involvement in issues concerning transport in the broad sense. It concerns not only those companies directly involved in the production and require commutation of components or finished parts, as well as those companies that are focused only on distribution. Carriage by sea is carried out mainly in those cases where we are dealing with transport carried out between different continents. Not always in the case of air transport it is fully possible- very often the whole attention is focused only on the sea route. Airfreight and sea freight are among the most important, but also the most advanced methods of transport over long distances. On the other hand, there is no doubt that they allow aspects that until recently were impossible to realize.

Such projects can be very complex and their implementation becomes an element inherent in the whole of the activities undertaken logistics and transport. However, it was possible to realize such transport, you are all kinds of ancillary activities, which are responsible for a number of factors directly related to these areas. Within transport there are also other factors such as transport containers. They are used for building purposes, and their operation is based precisely on such factors. Containers generally have a temporary nature, in the intensive construction and change, which is why their transport is an element implemented on the agenda.

Less and less attention is drawn while rail transport, which does not mean, however, that it is not used in any way and in any form. On contrary - its implementation it is very often in areas in which functioned already so far.

The carriage of goods by sea : Opracował Damian Szajna

references: <http://www.pkswmlawa.pl/przewoz-towarow-droga-morska,853786.html>

All texts were presented during lessons „Professional English for adolescents” in Zespół Szkół nr 1 in Nowe Miasteczko. The lessons were provided by Ms Marta Zientek, ELT

**Opieka merytoryczna oraz pomysł na tematykę czwartego numeru gazetki „Vocational English”: Marta Zientek, nauczycielka języka angielskiego**