

EUROPEAN CONFERENCE
OF MINISTERS OF
TRANSPORT



UNITED NATIONS
ECONOMIC COMMISSION
FOR EUROPE
STATISTICAL DIVISION



UNITED NATIONS
ECONOMIC COMMISSION
FOR EUROPE

EUROPEAN UNION
EUROSTAT



GLOSSARY FOR TRANSPORT STATISTICS

Document prepared by the Intersecretariat Working Group
on Transport Statistics
EUROSTAT, ECMT, UN/ECE

Second edition, 1997

MARITIME TRANSPORT

MARITIME TRANSPORT

I. INFRASTRUCTURE

01. Port

Place having facilities for merchant ships to moor and to load or discharge goods or passengers to or from seagoing vessels.

II. TRANSPORT EQUIPMENT (VESSEL)

01. Seagoing vessel

Floating marine structure with one or more surface displacement hulls.

Hydrofoil, air cushion vehicles (hovercraft) and barges are included. Vessels under repair are included. Vessels suitable for inland navigation but which are authorised to navigate at seas (mixed seagoing and inland waterways vessels) are excluded.

02. Ship

Seagoing self-propelled surface-displacement vessel.

Hydrofoil, air cushion vehicles (hovercraft), submersible, submarine are excluded. A seagoing ship actually goes to sea, that is, outside the boundary within which inland waterway technical safety regulations apply, and outside which the ship's operators must satisfy the seagoing regulations.

03. Merchant ship

Ship designed for the carriage of goods, transport of passengers or specially fitted out for a specific duty.

Naval ships and ships used by public administration and public services are excluded. Merchant ships are divided into cargo carrying ships and ships of miscellaneous activities. Ships of miscellaneous activities include fish catching and processing ships, tugs, dredges, research/survey ships, and ships designed for offshore production and support.

04. Cargo carrying ship

Merchant ship designed for the carriage of goods and/or public transport of passengers.

05. Flag state

Country of registry of a sea going vessel.

A sea going vessel is subject to the maritime regulations in respect of manning scales, safety standards and consular representation abroad of its country of registration.

06. Sea going vessel under national flag

Sea going vessel which is registered at a given date in the reporting country.

07. Sea going vessel under foreign flag

Sea going which is registered at a given date in a country other than the reporting country.

08. Merchant fleet

Number of merchant ships registered at a given date in a country and authorised to navigate at sea.

Changes in the fleet refer to changes in total or within a ship type, in the seagoing fleet of the reporting country, resulting from new construction, modification in type or capacity, transfers to or from a different flag state, scrapping, casualties, or transfer to or from the fluvial register. Vessels under repair are included.

09. Tanker

Ship designed with a single deck and an arrangement of integral or independent tanks specifically for the bulk carriage of liquid cargo.

10. Bulk carrier

Ship designed with a single deck and holds for the bulk carriage of loose dry cargo of a homogenous nature.

11. Bulk/oil carrier

Bulk carrier arranged for the carriage of either bulk dry cargoes or liquid cargoes in the same cargo spaces but not simultaneously.

12. Ore carrier

Bulk carrier strengthened for the carriage of ore cargoes.

13. Container ship (fully cellular - fc)

Ship fitted throughout with fixed or portable cell guides for the carriage of containers.

14. Specialised carrier

Ship specially designed for the carriage of particular cargoes.

This category includes vehicle carrier, livestock carrier, irradiated fuel carrier, barge carrier.

15. Passenger ship

Ship designed specifically to carry more than 12 fare-paying passengers whether berthed or unberthed.

A ship designed with one or more decks specifically for the carriage of passengers, and where there is either no cabin accommodation for the passengers (un-berthed) or not all of the passengers are accommodated in cabins where cabins are provided, is sometimes referred to as a "ferry".

Ro-Ro passenger ships are excluded.

16. General cargo ship

Ship designed with holds for the carriage of diverse types and forms of goods.

This category includes reefer ships, Ro-Ro passenger ships, Ro-Ro container ships, other Ro-Ro cargo ships, general cargo/passenger ships and other multi-purpose ships.

17. Reefer ship

General cargo ship with 80 per cent or more insulated cargo space.

18. Ro-Ro ship

Ship arranged for Ro-Ro loading/unloading.

Ro-Ro is a way of loading/unloading a vessel by the vessel's doors/ramps by a wheeled means of conveyance. Ro-Ro passenger ship and Ro-Ro container ship are included. Specialized vehicle carriers are excluded from this group but are included under specialised carriers.

19. Ro-Ro cargo ship

Ro-Ro ship with facilities for the carriage of goods only.

Ro-Ro container ships are included.

20. Ro-Ro passenger ship

Ro-Ro ship with facilities for the carriage of both passengers and goods.

Commercial factors have led to increased complexities of ship design and many ships are designed for a combination of purposes. The main combinations are Ro-Ro passenger ship and general cargo/passenger ship.

21. Seagoing barge

Vessel designed as non self-propelled unit for the carriage of goods by sea in holds, in tanks or on a weather deck space only.

Barges are considered as vessels designed as non self-propelled units, and may be goods carrying or specially out-fitted for a specific activity. The units are towed/pushed by ship, or may be moored for the purpose of storing goods or whilst they perform their specific activity. The definitions of the various types of barges are virtually identical to their self-propelled counterparts. (Some barges may have a propulsion system for limited manoeuvring only - their main method of movement is by way of ship).

22. Seagoing tug

Ship designed for the towing and/or pushing of ships or other floating structures.

Port tugs are included.

23. Hydrofoil

A fast vessel which, when at speed, lifts her hull clear of the surface of the water, supporting herself upon foils, or wings or legs, which project beneath her bottom.

Hydrofoils are used mostly as passenger ferries.

24. Hovercraft (air cushion vehicle)

A vessel which supports herself a short distance above the surface of the water (or land) on a cushion of air contained by a flexible skirt attached to the outer perimeter of the vehicle.

Hovercrafts are used mostly as passenger ferries.

25. Catamaran

Ship consisting of two hulls connected with a deck.

Catamarans are used mainly as passenger ferries but some cargo-carrying catamarans also exist.

III. ENTERPRISES, ECONOMIC PERFORMANCE AND EMPLOYMENT

01. Transport for hire or reward

Carriage, for remuneration, of persons or goods on behalf of third parties.

02. Transport on own-account

Transport which is not for hire or reward.

03. Enterprise

Institutional unit or smallest combination of institutional units that encloses and directly or indirectly controls all necessary functions to carry out its production activities.¹

The requirements of an enterprise are that it has one ownership or control. It can, however, be heterogeneous with regard to its economic activity as well as to its location.

04. Sea transport enterprise

Enterprise carrying out in one or more places activities for the production of sea transport services and whose main activities according to the value added is sea transport.

In terms of activity classifications the following classes are involved:

-- ISIC/Rev.3: 6110 - Sea and coastal water transport

-- NACE/Rev.1²: 61.10 - Sea and coastal water transport

Even those enterprises without salaried employees are taken into account. Only units that actually carry out an activity during the reference period should be included. "Dormant" units or those that have not as yet begun their activity are excluded. Ports, and other units providing supporting and auxiliary transport services are excluded.

05. Public sea transport enterprise

Sea transport enterprise which is principally owned (more than 50 per cent of the capital) by the State or public authorities and their enterprises.

06. Employment

Number of persons employed at 31 December in a sea transport enterprise (inclusive of working owners, partners working regularly in the enterprise and unpaid family workers), as well as persons employed outside the enterprise but who belong to it and are directly paid by it.

07. Turnover

¹ ISIC/Rev.3 - International Standard Industrial Classification of All Economic Activities, Statistical Papers, Series M, No.4, Rev.3, United Nations, 1990.

² NACE/Rev.1 - Statistical Classification of Economic Activities in the European Communities, Official Journal, No. L 83, 3 April 1993.

Total amount invoiced by the sea transport enterprise during the period under review. This total corresponds to market sales of goods or services supplied to third parties. Turnover includes all duties and taxes on the goods or services invoiced by the enterprise with the exception of VAT invoiced by the unit *vis-à-vis* its customers. It also includes all other charges to customers. Reductions in prices, rebates and discounts as well as the value of returned packing must be deducted, but not cash discounts for prompt payments.

Turnover does not include sales of fixed assets. Operating subsidies received from public authorities are also excluded.

08. Revenues

Amounts expressed in monetary units which are entered in the accounts as credit to the sea transport enterprise.

09. Types of revenues

The main categories of revenues to be considered are:

-- Revenues from transport operations

This category includes goods and passenger traffic revenues.

-- Amounts received from the State or other public bodies

This category includes compensation receipts and other subsidies.

-- Other revenues

This category includes revenues not related to transport activities, e.g. financial revenues, etc.

10. Costs

The amount of available resources spent by the sea transport enterprise in connection with an operation or service, or with a series of operations and services.

11. Types of costs

The main categories of costs are:

-- Labour costs

Including wages and salaries of active staff, pensions, various social charges, etc.

-- Material and service costs

Including purchases of other material and services supplied by third parties, charters, but excluding energy consumption cost.

-- Energy consumption costs

-- Taxes

-- Financial charges

-- Other costs

Including amounts allocated to depreciation and provisions, etc.

12. Value added

Gross output of the sea transport enterprise less the value of its intermediate consumption. Value added of domestic production of all of a country's sea transport enterprises is equal to their contribution to the GDP of that country.

It is understood that Value added, in this context, is expressed in market prices.

13. Tangible investment

The outlay (purchases and own account production) of sea transport enterprises on additions of new and used capital goods (commodities) added to their stocks of fixed capital assets minus their net sales of similar second-hand and scrapped goods.

The contribution of all sea transport enterprises to the gross fixed capital formation of that country is equal to the total of their tangible investment less the balance between the purchase and sale of land.

14. Investment expenditure on infrastructure

Expenditure on new construction, extension of existing infrastructure, including reconstruction, renewal and major repairs.

15. Investment expenditure on vessels

Expenditure on purchase of vessels.

Expenditures on major structural alterations and major repairs, including replacement of major items such as engines or "jumboizing" are included.

16. Maintenance expenditure on infrastructure

Expenditure for keeping infrastructure in working order.

Maintenance dredging is included.

17. Maintenance expenditure on vessels

Expenditure for keeping vessels in working order.

IV. TRAFFIC

01. Sea traffic

Any movement of a sea going vessel at sea.

One port traffic (movements of sea going vessels to offshore installations, or for dumping at sea, or traffic from the sea bed to ports) is included.

Fluvio-maritime movements of sea going vessels are included. Movements on inland waterways between sea ports and inland waterway ports are excluded and are included in inland waterway traffic. Movements of sea going vessels internally, between different basins or docks of the same port, are excluded.

02. National sea traffic

Sea traffic between two ports of a national territory or one port sea traffic, irrespective of the country in which the vessel is registered.

03. Unladen sea traffic

Sea traffic for which neither goods nor passengers are carried.

The movement of a sea going vessel carrying empty equipment such as containers, swap-bodies and pallets is not considered to be an unladen journey.

04. Sea voyage

Sea traffic from a specified point of origin to a specified point of destination.

A voyage can be divided into a number of stages or sections. Sea voyages are sometimes referred to as sea journeys.

05. Ship-kilometre

Unit of measurement representing the movement of a ship over one kilometre.

The distance taken into account is the distance actually travelled. Movements of unladen vessels are included. Movements of hydrofoils and hovercrafts are included.

06. Tonne-kilometre offered

Unit of measure representing the movement of one tonne of carrying capacity in a seagoing vessel over one kilometre.

The distance to be considered is the distance actually travelled. In practice, carrying capacity will be measured in deadweight tonnes (DWT). The DWT includes the weight of all cargo, fuel,

water, ballast, stores, crew etc., which a seagoing vessel can carry. The deadweight is expressed in tons (2240 lbs) or tonnes (metric ton of 1000 kilogrammes)

07. TEU-kilometre offered

Unit of measure representing the movement of one TEU of capacity in a container ship over one kilometre.

08. Passenger-kilometre offered

Unit of measure representing the movement of one authorized passenger carrying capacity in a seagoing vessel over one kilometre.

09. Arrival of a seagoing vessel

Any laden or unladen seagoing vessel which entered a port in the territory of the country.

10. Departure of a seagoing vessel

Any laden or unladen seagoing vessel which left a port in the territory of the country.

V. TRANSPORT MEASUREMENT

01. Sea transport

Any movement of goods and/or passengers using seagoing vessels on voyages which are undertaken wholly or partly at sea.

One port transport (movements of goods shipped to offshore installations, or for dumping at sea, or reclaimed from the sea bed and unloaded in ports) is included. Bunkers and stores supplied to vessels are excluded.

Fluvio-maritime movements of goods by seagoing vessels are included. Movements of goods on inland waterways vessels between sea ports and inland waterway ports are excluded. (They are included in inland waterway transport). Movements of goods carried internally between different basins or docks of the same port are excluded.

02. Cabotage (maritime context)/ national sea transport

Sea transport between two ports (a port of loading/embarkment and a port of unloading/disembarkment) located in the same country irrespective of the country in which the seagoing vessel is registered.

Cabotage (maritime context) can be performed by a seagoing vessel registered in the reporting country or in another country. One port transport is included.

03. International sea transport

Sea transport between two ports (a port of loading/embarkment and a port of unloading/disembarkment) located in two different countries.

International one port transport is included.

04. Cross-trade sea transport

International sea transport performed by a seagoing vessel registered in a third country.

A third country is a country other than the country of loading/embarkment or than the country of unloading/ disembarkment.

05. Sea passenger

Any person who makes a voyage on a seagoing vessel. Service staff assigned to seagoing vessels are not regarded as passengers.

06. Passenger-kilometre

Unit of measure representing the transport of one sea passenger over one kilometre.

The distance to be taken into consideration is the distance actually travelled by the passenger .

07. Purpose of a sea passenger voyage

The reasons for undertaking a voyage are:

- Work and education (Commuting)
- Business
- Holidays
- Other (shopping, leisure, family)

08. Sea passenger embarked

Passenger who boards a seagoing vessel to be conveyed by it.

A transfer from one seagoing vessel to another is regarded as embarkment after disembarkment .

09. Sea passenger disembarked

A passenger disembarking from a seagoing vessel after having been conveyed by it.

A transfer from one seagoing vessel to another is regarded as disembarkment before re-embarkment.

10. Sea passenger transport link

Combination of the port of embarkment and the port of disembarkment of the passenger conveyed by sea whatever itinerary is followed.

Those ports are maritime ports (except for fluvio-maritime transports for which it may be inland waterway ports), coded with international classification systems such as UN-LOCODE (codification for ports and other places).

Those ports can be grouped according to their geographical location by using international classification systems such as NUTS (Nomenclature for Territorial Units for Statistics - EUROSTAT).

11. Port of embarkment

The port taken into account is the port where the passenger boarded a seagoing vessel to be conveyed by it.

A transfer from one seagoing vessel to another is regarded as embarkment after disembarkment.

12. Port of disembarkment

The port taken into account is the port where the passenger disembarked from a seagoing vessel after having been conveyed by it.

A transfer from one seagoing vessel to another is regarded as disembarkment before re-embarkment.

13. Goods carried by sea

Any goods moved by sea.

This includes all packaging and equipment such as containers, swap-bodies or pallets.

Mail is included; goods carried on or in wagons, lorries, trailers, semi-trailers or barges are also included. Conversely, the following items are excluded: road passenger vehicles with drivers, bunkers and stores of vessels, fish landed from fishing vessels and fish-processing ships, goods carried internally between different basins or docks of the same port.

14. Weight

The weight to be taken into consideration is the gross-gross weight of goods.

This includes the total weight of the goods, all packaging, and the tare weight of the container, swap-body and pallets containing goods as well as road goods vehicles, wagons or barges carried by sea. When this tare-weight is excluded, the weight is the gross weight.

15. Tonne-kilometre

Unit of measure of goods transport which represents the transport of one tonne by sea over one kilometre.

The distance taken into account is the distance actually travelled.

16. TEU-kilometre

Unit of measure of container transport which represents the transport of one TEU over one kilometre.

The distance taken into account is the distance actually travelled.

17. Categories of goods carried by sea

The categories of goods carried by sea are those defined by the NST/R (Standard Goods Nomenclature for Transport Statistics/ revised - EUROSTAT) or CSTE (UN-ECE Commodity Classification for Transport Statistics in Europe) nomenclatures.

18. Dangerous goods

The classifications of dangerous goods are those defined by the United Nations Committee of Experts on the Transport of Dangerous Goods and subsidiary bodies (ST/SG/AC.10/1/Rev.5).

There are nine classes of dangerous goods:

1. *explosives;*
2. *gases;*
3. *flammable liquids;*
4. *flammable solids, substances liable to spontaneous combustion, substances which, on contact with water emit flammable gases;*
5. *oxidizing substances, organic peroxides;*
6. *poisonous (toxic) and infectious substances;*
7. *radioactive material;*
8. *corrosives; and,*
9. *miscellaneous dangerous substances.*

19. Goods loaded

Goods placed on a seagoing vessel and dispatched by sea.

Transshipment from one seagoing vessel to another is regarded as loading after unloading.

Goods loaded include national goods, transshipment goods (national or foreign goods arriving in port by sea) and land transit goods (foreign goods arriving in port by road, rail, air or inland waterway).

20. Goods unloaded

Goods taken off a seagoing vessel after transport by sea.

Transshipment from one seagoing vessel to another is regarded as unloading before re-loading.

Goods unloaded include national goods, transshipment goods (national or foreign goods leaving a port by sea) and land transit goods (foreign goods leaving a port by road, rail, air or inland waterway).

21. Goods having left the country by sea

Goods which, having been loaded on a seagoing vessel in the country, left the country by sea and were unloaded in another country.

22. Goods having entered the country by sea

Goods which, having been loaded on a seagoing vessel in another country, entered the country by sea and were unloaded there.

23. Goods sea transport link

The combination of the port of loading and the port of unloading of the goods transported by sea whatever itinerary is followed.

Those ports are maritime ports (except for fluvio-maritime transports for which it may be inland waterway ports), coded with international classification systems such as UN-LOCODE (codification for ports and other places).

Those ports can be grouped according to their geographical location by using international classification systems such as NUTS (Nomenclature for Territorial Units for Statistics - EUROSTAT).

24. Port of loading

The port taken into account is the port where the goods were loaded on a seagoing vessel to be transported by it.

Transshipments from one seagoing vessel to another are regarded as loading after unloading.

25. Port of unloading

The port taken into account is the port where the goods were unloaded from a seagoing vessel after having been transported by it.

Transshipments from one seagoing vessel to another are regarded as unloading before re-loading.

26. Ro-Ro (Roll-on Roll-off)

Loading/unloading by the vessel's doors/ramps by a wheeled means of conveyance.

27. Lo-Lo (Lift-on Lift-off)

Loading/unloading by the vessel's own derricks/cranes or by shore based cranes.

VI. ENERGY CONSUMPTION

01. Energy consumption by ships

Final energy consumption by ships.

This includes final energy consumption by unladen ships.

02. Tonne of oil equivalent (TOE)

Unit of measurement of energy consumption (1 TOE = 0.041868 TJ).

Conversion factors adopted by the International Energy Agency (IEA) are as follows:

-- Gas/diesel oil 1.035

-- Heavy fuel oil 0.96

03. Joule

Unit of measurement of energy consumption.

(1 terajoule = 10^{12} J = 2.78×10^5 kWh)

(1 terajoule = 23.88459 TOE)

04. Gas/diesel oil (distillate fuel oil)

Oils obtained from the lowest fraction from atmospheric distillation of crude oil.

Gas/diesel oils include heavy gas oils obtained by vacuum re-distillation of the residual from atmospheric distillation. Gas/diesel oil distils between 200⁰C and 380⁰C, with less than 65 per cent in volume at 250⁰C, including losses, and 80 per cent or more at 350⁰C. Heavy oils obtained by blending are grouped together with gas oils, provided that their kinematic viscosity does not exceed 25cST at 40⁰C.

Calorific value: 43.3 TJ/1000 t.

05. Heavy fuel oil (residual)

Heavy oil that makes up the distillation residue.

This comprises all residual fuel oils (including those obtained by blending). The viscosity of heavy fuel oil is above 25 cST at 40⁰ C. The flashpoint is always above 50⁰ C and their density is higher than 0.90.