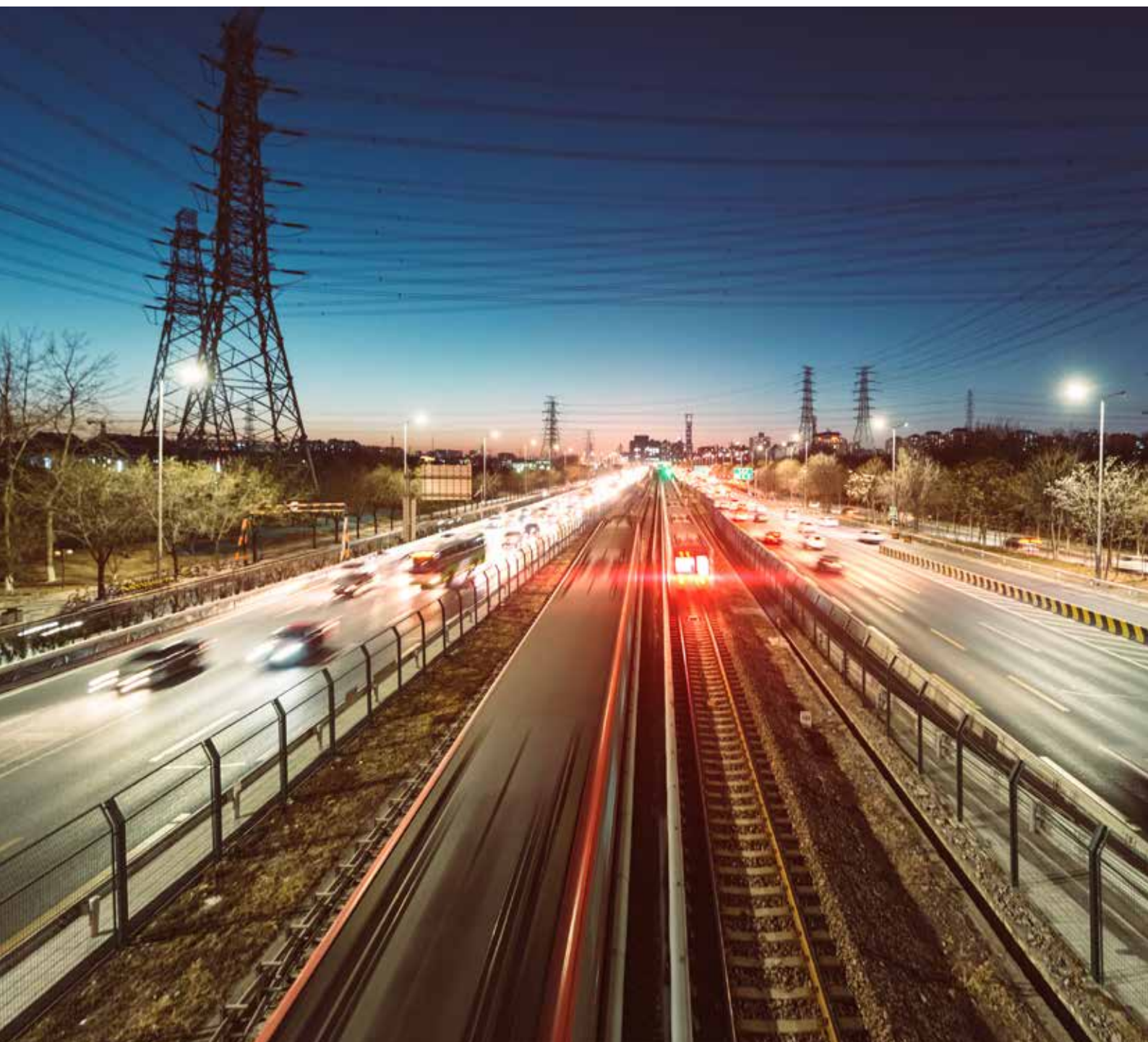


# Glossary for transport statistics

5TH EDITION

2019





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**5<sup>TH</sup> EDITION**

**2019**

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# Glossary Introduction

The Glossary for transport statistics was published for the first time in 1994 with the purpose of assisting member countries during the collection of data on transport using the Common Questionnaire developed by the UNECE, ITF and Eurostat. It has since evolved to cover all areas of transport statistics.

The present fifth edition is the result of continuing valuable cooperation between the three organisations, that — through the action of the Intersecretariat Working Group (IWG. Trans.) — has put a sustained effort into harmonizing transport statistics at the European and international level. The IWG provided valuable input with respect to missing definitions, terminology that is outdated, as well as definitions that should be reformulated or clarified, revised and illustrated.

The new 5th edition of the Glossary comprises 744 definitions and represents a point of reference for all those involved in transport statistics. By following the guidance contained within these definitions, a considerable contribution will be given to the improvement in both the quality and comparability of the data.

In this edition, the rail, road, inland waterway, maritime, air and intermodal freight transport chapters have been substantially revised. In addition, a completely new Accidents section has been added to the Maritime transport chapter.

A new chapter 'Energy consumption' has been created, combining and harmonizing the previous energy sections in the individual modal chapters. The intermodal definitions in each transport mode were removed from all chapters and inserted into the updated Intermodal Freight Transport chapter.

The title of section III was changed to 'Enterprises, investment and maintenance' from 'Enterprises, economic performance

and employment'. The definitions for Enterprise, Employment and Turnover were deleted from all chapters as these are general terms and are not transport specific. New chapters on 'Environmental impact of transport' and 'Passenger mobility' were developed and added as new chapters to the Glossary. The new annex 'Symbols and Abbreviations' consists of all symbols, abbreviations, organisations and units mentioned in the 5th edition of the Glossary.

The proposed definitions have been extensively discussed and implemented with the input of a Group of Experts, relevant international sectoral bodies, agencies and Member States. The knowledge and experience of the EU agencies was useful for improving and completing the definitions contained in the 'Accidents' section for the modes of transport. The recent European legal acts in each specific domain were taken into account.

The fifth illustrated edition has been translated into all the official languages of the European Union. The objective of the illustrated version is to provide users with a better understanding of the concepts underlying the definitions on the basis that one picture is worth a thousand words.

Units of measurement given in the Glossary are those recommended for international comparison. Some countries may wish to collect and report data in other units for national use.

## Notice:

*The explanatory notes in italics, given below some of the definitions, are intended to help understanding of them and to assist countries in filling in questionnaires. The notes are not part of the definitions themselves.*

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Numerous national experts and officials of international and non-governmental organisations were consulted on the different chapters. The countries included Austria, Canada (coordinators of work on the rail chapter), Croatia, Czechia,

Estonia, Ireland, Finland, France, Germany, Greece, Latvia, Norway (coordinators of work on the maritime chapter), Poland, Portugal, Russian Federation, Serbia, Slovenia, Spain, Sweden (coordinators of work on the road chapter), Switzerland, Turkey, the United Kingdom of Great Britain and Northern Ireland and the United States of America. Organizations included the International Roads Federation, the Union Internationale des Chemins de Fer, the Central Commission for Navigation on the Rhine and the Danube Commission. Specialized European institutions involved were the European Union Agency for Railways, European Maritime Safety Agency and the European Aviation Safety Agency. The European Commission's Directorate General for Mobility and Transport provided significant input throughout the process. The revisions process was reviewed and approved by the members of the UNECE Working Party on Transport Statistics (WP.6) at its meeting in June 2018.



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# A

## Railway transport







# A. Railway transport

## A.I INFRASTRUCTURE

### A.I-01 TRACK

A pair of rails over which rail borne vehicles can run maintained by an infrastructure manager. Metro, Tram and Light rail urban lines are excluded.

*In the context of the EU reporting the cumulative length of railway tracks excludes also the following:*

- Lines solely used for operating touristic trains and heritage trains;
- Lines constructed solely to serve mines, forests or other industrial or agricultural installations and which are not open to public traffic;
- Private lines closed to public traffic and functionally separated (i.e. stand-alone) networks;
- Private lines used for own freight transport activities or for non-commercial passenger services and light rail tracks occasionally used by heavy rail vehicles for connectivity or transit purposes.



#### A.I-01.1 MAIN/RUNNING TRACK

A track providing end-to-end line continuity designed for running trains between stations or places indicated in timetables, network statements, rosters or other indications/publications as independent points of departure or arrival for the conveyance of passengers or goods.

#### A.I-01.2 OTHER TRACKS

All other tracks than main/running ones:

- tracks maintained, but not operated by the infrastructure manager;
- tracks at service facilities not used for running trains, including sidings.

*Tracks at service facilities not used for running trains are excluded. The boundary of the service facility is the point at which the railway vehicle leaving the service facility cannot pass without having an authorization to access the mainline or other similar line. This point is usually identified by a signal.*

*Service facilities are passenger stations, their buildings and other facilities; freight terminals; marshalling yards and train formation facilities, including shunting facilities; storage sidings; maintenance facilities; other technical facilities, including cleaning and washing facilities; maritime and inland port facilities which are linked to rail activities; relief facilities; refuelling facilities and supply of fuel in these facilities.*

### A.I-02 RAILWAY LINE

Line of transportation made up by rail exclusively for the use of railway vehicles and maintained for running trains.

A line is made up of one or more tracks, according to the definition A.I-01 Track and the corresponding exclusion criteria.

*Excluded are:*

- Stretches of road or water even if rolling stock is conveyed over such routes, e.g. by wagon-carrying trailers or ferries.





# A

### A.I-02.1 PRINCIPAL RAILWAY LINES

Railway lines maintained and operated for running trains.

*The cumulative length of the principal railway lines within the territory of a country corresponds to its railway network.*

### A.I-02.2 OTHER LINES

All other lines than principal lines, including lines maintained for possible future use, but not operated.

### A.I-03 CONVENTIONAL RAILWAY LINE

A principal railway line that is not classified as high-speed railway line.

### A.I-04 HIGH-SPEED RAILWAY LINE

A principal railway line allowing traffic at speeds on the main segments equal to or greater than 200 km/h on upgraded lines and 250 km/h on especially built lines.



#### A.I-04.1 DEDICATED HIGH-SPEED RAILWAY LINE

A line specially built to allow traffic at speeds equal to or greater than 250 km/h for the main segments.

*High speed lines may include connecting lines, in particular connecting segments into town centre stations located on them, on which speeds may take account of local conditions.*

*Includes lines on which new tracks were added to existing tracks that are not upgraded.*

#### A.I-04.2 UPGRADED HIGH-SPEED RAILWAY LINE

A conventional line specially upgraded to allow traffic at speeds equal to or greater than 200 km/h for the main segments.

*They include specially upgraded high speed lines which have specific features as a result of topographical, relief or town-planning constraints, on which the speed must be adapted for each case.*

### A.I-05 METRO LINE/SUBWAY

An electric rail line mainly for urban transport with the capacity for heavy volumes of traffic involving very frequent train movements. Metro lines are also characterised by closely spaced stations.

*Also known as 'subway', 'metropolitan railway', 'rapid rail', 'rapid transit', 'metro' or 'underground'. These metro lines are excluded from tracks and lines.*





### A.I-06 LIGHT RAILWAY/RAIL LINE

A rail line mainly for urban and interurban transport of passengers often electrified characterised by lower travel speed and more frequent stops compared to a conventional railway line.

*In comparison to metros, light rail is more lightly constructed, is designed for lower traffic volumes and usually travels at lower speeds. Normally the power is drawn from an overhead electric line via a trolley or a pantograph. It is sometimes difficult to make a precise distinction between light rail and trams; trams are generally not separated from road traffic, whereas light rail may be separated from other systems.*

*Urban light railway lines are excluded from tracks and lines.*



### A.I-07 TRAM LINE (STREETCAR LINE)

A railway line mainly installed on and well integrated into the urban road system. The tramcars are powered either electrically or by diesel engine, particularly for special rail borne road vehicles.

*Also known as trolley car line, tramcar line or streetcar line.*



### A.I-08 SIDINGS

Tracks branching off running main tracks/lines.

*The length of sidings is included in the length of tracks if the sidings are publicly accessible and managed by the infrastructure manager, private sidings being excluded.*

### A.I-09 PRIVATE SIDINGS

Privately operated pieces of rail infrastructure, connecting loading facilities (normally industry and other manufacturing sites) to the public rail network.

### A.I-10 MARSHALLING YARD

Site especially equipped with a number of tracks or other equipment for railway vehicle marshalling (switching) operations.

*Sometimes also referred to as classification yard.*



**A.I-11 HALT**

Stop-off point generally open to passenger traffic only and not usually staffed.

*Sometimes also referred to as a flag stop.*

**A.I-12 TRAIN STATION**

Railway establishment used for loading and unloading of passenger and/or goods, for formation, dispatch, reception and temporary stabling of trains and/or for stabling and marshalling of rolling stock.

*Halts are excluded.*

*Sometimes also referred to as rail or railway station.*

**A.I-12.1 PASSENGER STATION**

Train station for passenger traffic, equipped with specific facilities for the access of the passengers and providing related services.

**A.I-12.2 RAIL FREIGHT TERMINAL**

Train station used exclusively or predominantly for loading and unloading of goods, for formation, dispatch, reception and temporary stabling of trains and/or for stabling and marshalling of rolling stock.

**A.I-13 INTERMODAL TRANSPORT TERMINAL**

See G.I-10.

**A.I-14 LEVEL CROSSING**

Any level intersection between a road and a railway, as authorised by the infrastructure manager and open to public or private road users.

*Passages between platforms within stations are excluded, as well as passages over tracks for the sole use of employees.*

*Sometimes also referred to as grade crossing.*



### A.I-14.1 ACTIVE LEVEL CROSSING

A level crossing where the crossing users are protected from or warned of the approaching train by devices activated when it is unsafe for the user to traverse the crossing.

Protection by the use of physical devices includes:

- half or full barriers,
- gates.

Warning by the use of fixed equipment at level crossings:

- visible devices: lights,
- audible devices: bells, horns, klaxons, etc.

Active level crossings are classified as:

- Manual: a level crossing where user-side protection or warning is manually activated by a railway employee.
- Automatic with user-side warning: a level crossing where user-side warning is activated by the approaching train.
- Automatic with user-side protection: a level crossing where user-side protection is activated by the approaching train. This shall include a level crossing with both user-side protection and warning.
- Rail-side protected: a level crossing where a signal or other train protection system permits a train to proceed once the level crossing is fully user-side protected and is free from incursion.

Sometimes also referred to as active grade crossing.

### A.I-14.2 PASSIVE LEVEL CROSSING

A level crossing without any form of warning system or protection activated when it is unsafe for the user to traverse the crossing.

Sometimes also referred to as passive grade crossing.



### A.I-15 ELECTRIFIED TRACK

Track provided with an overhead catenary or a conductor rail to permit electric traction. The following types of electric current are in use:

- AC 25 000 Volts, 50 Hz  
15 000 Volts, 16 2/3 Hz
- DC 3 000 Volts  
1 500 Volts  
750 Volts  
660 Volts  
630 Volts.



**A.I-15.1 ELECTRIFIED LINE**

An electrified line with a least one track electrified.

**A.I-16 RAIL TRACK GAUGE**

Track gauge: The smallest distance between a pair of rails measured between the inside surfaces of the rail heads.

*It is distinguished between broad/large (more than 1,435 mm), standard (1,435 mm) and narrow (less than 1,435 mm) gauge railway track.*

**A.I-17 RAIL LOADING GAUGE**

The profile through which a railway vehicle and its loads must pass, taking into account tunnels and track side obstacles.

**A.II TRANSPORT EQUIPMENT (VEHICLES)****A.II-01 RAILWAY VEHICLE**

Mobile equipment running exclusively on rails, moving either under its own power (tractive vehicles) or hauled by another vehicle (coaches, railcar trailers, vans and wagons).

*The following vehicles are included in the statistics for a railway enterprise:*

- *All railway vehicles belonging to the railway enterprise and hired by it and actually at its disposal, including those under or waiting for repair, or stored in working or non-working order, and foreign vehicles at the disposal of the enterprise and vehicles of the enterprise temporarily abroad and engaged in the normal course of running.*
- *Private owners' wagon, i.e. those not belonging to the railway enterprise but authorized to be operated by it under specified conditions, together with wagons hired out by the railway enterprise to third parties and being operated as private owners' wagons.*

*Statistics for a railway enterprise exclude vehicles not at its disposal, i.e.*

- *Foreign vehicles or vehicles not belonging to the railway enterprise circulating on the railway network.*
- *Vehicles which are on hire to, or otherwise at the disposal of, other railway bodies.*
- *Vehicles reserved exclusively for service transport condemned or intended for sale or, breaking-up.*

**A.II-02 HIGH-SPEED RAILWAY VEHICLE**

A railway vehicle designed to operate at a speed of at least 250 km/h on dedicated high-speed lines.

**A.II-03 CONVENTIONAL HIGH-SPEED RAILWAY VEHICLE**

Any railway vehicle not specially designed to run on dedicated or upgraded high-speed lines but still being able to reach a maximum operating speed of approximately 200 km/h.

**A.II-04 TRAINSET**

Operationally indivisible composition of railcar(s) and railcar trailer(s) or locomotive(s) and passenger railway vehicle(s).



**A.II-05 MULTIPLE-UNIT**

Composition of railcar(s) and railcar trailer(s) or locomotive(s) and passenger railway vehicle(s), which when coupled to another multiple unit can be controlled by a single driver.

**A.II-06 TRACTIVE VEHICLE**

A vehicle equipped with prime mover and motor, or with motor only, intended either for hauling other vehicles (a 'locomotive') or for hauling other vehicles and/or for the carriage of passengers and/or goods (a 'railcar').

**A.II-07 LOCOMOTIVE**

A tractive vehicle used for hauling railway vehicles but not intended to carry a payload and has the ability to be uncoupled in normal operation.

Types of locomotives:

- Electric locomotive:

Locomotive with one or more electric motors, deriving current primarily from overhead wires or conductor rails or from accumulators carried on the locomotive.

*A locomotive so equipped which also has an engine (diesel or other) to supply current to the electric motor when it cannot be obtained from an overhead wire or from a conductor rail is classed as an electric locomotive.*

- Diesel locomotive:

Locomotive, the main source of power of which is a diesel engine, irrespective of the type of transmission installed.

*However, electro-diesel locomotives which are equipped to derive power from an overhead wire or from a conductor rail but are also equipped with a diesel engine (bi-mode-locomotives) are classed as electric locomotives.*

*Diesel-electric locomotives which are propelled by electric motors and derive energy from a diesel generator are classed as diesel locomotives.*

- Steam locomotive:

Locomotive, whether cylinder or turbine driven, in which the source of power is steam irrespective of the type of fuel used.

**A.II-08 SHUNTER**

A traction unit designed for use only on shunting yards, stations and depots.

*Sometimes also referred to as switcher.*





#### **A.II-09 RAILCAR**

Tractive railway vehicle with motor constructed for the conveyance of passengers or goods by rail.

*The definition of the various categories of locomotives (electric, diesel) applies, similarly to railcar categories.*

*A block composed of railcars and railcar trailers can be referred to as:*

- 'Multiple unit' if it is modular;
- 'Trainset' if it is fixed.

*In tractive vehicle statistics, each railcar in an indivisible set is counted separately; in statistics of passenger vehicles and goods vehicles, each body fitted to carry passengers or goods (tractive and non-tractive) is counted as one unit. Independent of drivers' compartments installed or not, any unit with tractive power must be considered as a tractive vehicle. When two railcar units have a common tractive bogie, both units are considered as a tractive vehicle.*

#### **A.II-10 PASSENGER RAILWAY VEHICLE**

Railway vehicle for the conveyance of passengers, even if it comprises one or more compartments with spaces specially reserved for luggage, parcels, mail, etc.

These vehicles include special vehicles such as sleeping cars, saloon cars, dining cars, ambulance cars and vans carrying accompanied road passenger vehicles. Each separate vehicle of an indivisible set for the conveyance of passengers is counted as a passenger railway vehicle. Included are railcars if they are designed for passenger transport.

#### **A.II-11 METRO VEHICLE**

Electric railway vehicle designed for use on a metroline.

*Usually drawing power from a third rail.*

#### **A.II-12 TRAM (STREETCAR)**

Passenger or freight road vehicle designed to seat more than nine persons (including the driver) or to transport freight, which is rail borne and connected to electric conductors or powered by diesel engine. The tramway is generally integrated into the urban road system.

*Also mentioned under definition B.II-18.*

#### **A.II-13 TRAM-TRAIN**

Passenger vehicle designed for combined use on both a light-rail infrastructure and a heavy-rail infrastructure.

#### **A.II-14 LIGHT RAIL VEHICLE**

Rail vehicle designed for use on a light rail line.

#### **A.II-15 RAILCAR TRAILER**

Non-tractive passenger railway vehicle coupled to one or more railcars.

*Vehicles for the transport of goods, even when pulled by a railcar, are referred to as wagons.*



### A.II-16 RAIL COACH

Passenger railway vehicle other than a railcar or a railcar trailer.



### A.II-17 PASSENGER CARRYING CAPACITY: SEATS AND BERTHS

The number of seats and/or berths available in a passenger vehicle when performing the service for which it is intended.

*Seats in dining coaches and buffet compartment places are excluded.*

### A.II-18 PASSENGER CARRYING CAPACITY: STANDING PLACES

The number of authorised standing places available in a passenger vehicle when performing the service for which it is intended.

### A.II-19 RAIL VAN

Non-tractive railway vehicle forming part of a passenger or goods train and used by the train crew as well as for the conveyance of luggage, parcels, bicycles, accompanied road passenger vehicles etc.

*Vehicles possessing one or more passenger compartments are not counted as vans but as passenger railway vehicles. Mail vans are included under vans when they do not have a passenger compartment.*

*Sometimes also referred to as baggage car.*



### A.II-20 FREIGHT WAGON OR WAGON

Railway vehicle normally intended for the transport of goods.

*Sometimes also referred to as freight car.*



**A.II-21 RAILWAY ENTERPRISE-OWNED WAGON**

Any wagon belonging to a railway enterprise.

*Excluded are privately-owned wagons.*

*Sometimes also referred to as railroad car.*

**A.II-22 PRIVATELY-OWNED WAGON**

Wagon not belonging to a railway enterprise, but at its disposal and authorised to run for it under specified conditions, or wagon hired out by a railway enterprise to third parties.

*Sometimes also referred to as private car.*

**A.II-23 COVERED WAGON**

Wagon characterised by its closed construction with a roof and fully enclosed sides, capable of being locked and/or sealed.

*Wagons with an opening roof as well as those insulated, heated and refrigerated are included.*

*Sometimes also referred to as enclosed car.*

**A.II-24 INSULATED WAGON**

Covered wagon the body of which is built with insulating walls, doors, floor and roof, to limit heat exchange between the interior of the wagon and the outside so that the overall coefficient of heat transfer (K coefficient), allows the equipment to be assigned to one or other of the following two categories:

- IN = Normally insulated: characterised by a K coefficient equal to or less than 0.7 W/m<sup>2</sup>°C.
- IR = Heavily insulated: characterised by a K coefficient equal to or less than 0.4 W/m<sup>2</sup>°C.

Wagon for the perishable freights (meat, fish, oil, vegetables, fruit etc.). There are mechanically refrigerated wagons (mechanical refrigeration and electric heating) and refrigerated wagons (water ice refrigerating or salt ice and heating by temporary ovens) depending on refrigeration method and heating method.

*Sometimes also referred to as insulated car.*

**A.II-24.1 REFRIGERATED WAGON (REEFER)**

Insulated wagon using a source of cooling. Such sources include:

- Natural ice, with or without the addition of salt.
- Eutectic plates; dry ice, with or without sublimation control.
- Liquefied gases, with or without evaporation control, other than a mechanical or 'absorption' unit.

*Such a wagon is capable, with a mean outside temperature of + 30°C, of lowering the temperature inside the empty body to, and thereafter maintaining it, with the aid of appropriate refrigerants and fittings:*

- At + 7°C maximum in the case of class A
- At -10°C maximum in the case of class B
- At -20°C maximum in the case of class C
- At 0°C maximum in the case of class D

**A.II-24.2 MECHANICALLY REFRIGERATED WAGON**

Insulated wagon either fitted with its own refrigerating device, or serviced jointly with other such units by an external refrigerating system. Such refrigerating devices include:

- Mechanical compressors;
- "Absorption" units.

*A mechanically refrigerated wagon should be capable, with a mean outside temperature of + 30°C, of lowering the temperature inside the empty body to, and thereafter maintaining it continuously at levels in conformity with the standards defined below:*

- Class A. The internal wagon temperature should be maintained between +12°C and 0°C inclusive
- Class B. The internal wagon temperature should be maintained between +12°C and -10°C inclusive
- Class C. The internal wagon temperature should be maintained between +12°C and -20°C inclusive

*Sometimes also referred to as mechanical refrigerator car.*

**A.II-24.3 HEATED WAGON**

Insulated wagon fitted with a heater.

- Class A. Heated equipment for use when the mean outside temperature is  $-10^{\circ}\text{C}$
- Class B. Heated equipment for use when the mean outside temperature is  $-20^{\circ}\text{C}$

**A.II-25 HIGH SIDED WAGON**

Wagon with no roof and with rigid sides higher than 60 cm.

*Sometimes also referred to as high-sided gondola car.*

**A.II-26 FLAT WAGON**

Wagon without roof or sides, or wagon without roof but with sides not higher than 60 cm, or swing-bolster wagon, of ordinary or special type.

*Sometimes also referred to as flat car.*

**A.II-27 TANK WAGON**

Wagon designed for the bulk transport of liquids or gases.

*Sometimes also referred to as tank car.*

**A.II-28 SILO WAGON**

Wagons for the transport in bulk of powdered products such as cement, flour, plaster, etc.

**A.II-29 WAGON FOR INTERMODAL TRANSPORT**

See G.II-12.

*Sometimes also referred to as intermodal car.*

**A.II-30 WAGON CARRYING CAPACITY**

The carrying capacity of wagon is the maximum authorised weight it can carry.

**A.II-31 AGE OF RAILWAY VEHICLE**

Years since first registration of a railway vehicle, irrespective of the country of registration.

**A.II-32 MAGLEV**

Magnetic Levitation train that uses magnets that control the train's stability and speed for propulsion.



## A.III ENTERPRISES, INVESTMENT AND MAINTENANCE

### A.III-01 RAILWAY ENTERPRISE

Any private or public enterprise acting mainly as a railway transport operator, an infrastructure manager or as an integrated company.

*An enterprise whose main business is not related to railways should be included if it has a railway market share that is not marginal. Only the activities related to railways should be reported.*

### A.III-02 RAILWAY TRANSPORT OPERATOR/RAILWAY UNDERTAKING

A licensed public or private transport operator which provides services for the transport of goods and/or passengers by rail.

*Included are all transport operators that dispose of/provide traction. Excluded are railway transport operators which operate entirely or mainly within industrial and similar installations, including harbours, and railways transport operators which mainly provide local tourist services, such as preserved historical steam railways.*

*Sometimes also referred to as railroad.*

### A.III-03 RAIL INFRASTRUCTURE MANAGER

Any firm or body responsible, in particular, for establishing, managing and maintaining railway infrastructure, including traffic management and control-command and signalling.

*Sometimes also referred to as operator.*

### A.III-04 INTEGRATED COMPANY

Railway transport operator also being an infrastructure manager.

### A.III-05 FARE AND FREIGHT TRANSPORT REVENUE

The total fees collected from the provision of rail transportation services during the reporting period; it excludes other income such as revenue from catering, station services and on-board services.

### A.III-06 INVESTMENT EXPENDITURE ON RAILWAYS INFRASTRUCTURE

Capital expenditure on new railway infrastructure or extension of existing railways, including reconstruction, renewal (major substitution work on the existing infrastructure which does not change its overall performance) and upgrades (major modification work improving the original performance or capacity of the infrastructure).

*Infrastructure includes land, permanent way constructions, buildings, bridges and tunnels, as well as immovable fixtures, fittings and installations connected with them (signalisation, telecommunications, catenaries, electricity sub-stations, etc.) as opposed to rolling stock.*

### A.III-07 INVESTMENT EXPENDITURE ON ROLLING STOCK

Capital expenditure to purchase railway vehicles or to upgrade existing ones.

### A.III-08 MAINTENANCE EXPENDITURE ON RAILWAYS INFRASTRUCTURE

Non-capital expenditure to maintain the original condition and capacity of the existing railway infrastructure.

### A.III-09 MAINTENANCE EXPENDITURE ON ROLLING STOCK

Non-capital expenditure to maintain railway vehicles in working order without improving either their performance or their capacity.



### **A.III-10 RAILWAYS CAPITAL STOCK**

An estimated monetary value reflecting the current stock of physical railways transport infrastructure assets.

*For statistical purposes it is recommended to use the net capital value which takes into account depreciation.*

*There are various methods such as "the replacement cost method" or the "Perpetual Inventory Method (PIM)" that provide the net value of the assets.*

## **A.IV TRAFFIC**

### **A.IV-01 RAILWAY TRAFFIC**

Any movement of a railway vehicle on lines operated.

*When a railway vehicle is being carried on another vehicle only the movement of the carrying vehicle (active mode) is considered.*

### **A.IV-02 RAILWAY TRAFFIC ON NATIONAL TERRITORY**

Any movement of railway vehicles on lines operated within a national territory irrespective of the country in which these vehicles are registered.

### **A.IV-03 SHUNTING**

Operation of moving a rail vehicle or set of rail vehicles inside a railway station or other railway installations (depot, workshop, marshalling yard, etc.).

### **A.IV-04 RAILWAY VEHICLE JOURNEY**

Any movement of a railway vehicle from a specified point of origin to a specified point of destination.

*A journey can be divided into a number of sections or stages.*

### **A.IV-05 TRAIN**

One or more railway vehicles hauled by one or more locomotives or railcars, or one railcar travelling alone, running under a given number or specific designation from an initial fixed point to a terminal fixed point, including a light engine, i.e. a locomotive travelling on its own.

### **A.IV-06 TYPES OF TRAIN**

The main categories being considered are:

- a) Freight (Goods) train: Train for the carriage of goods composed of one or more wagons and, possibly, vans moving either empty or under load.
- b) Passenger train: Train for the carriage of passengers composed of one or more passenger railway vehicles and, possibly, vans moving either empty or under load.
- c) Mixed train: Train composed of passenger railway vehicles and of wagons.
- d) Other trains: Trains moving solely for the requirements of the railway enterprise, which involve no payments to third parties.

*Sub-categories of passenger trains include:*

- *Touristic trains: Train for the carriage of passengers not intended for practical transportation but mainly as a tour or an activity to do for touristic, entertainment, and/or educational purposes including heritage trains.*
- *Heritage trains: Designed to be as museums or attractions for touristic, entertainment and/or educational purposes.*



**A.IV-07 TRAIN-KILOMETRE**

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

*The distance to be considered is the distance actually travelled.*

**A.IV-08 TRACTIVE VEHICLE-KILOMETRE**

Unit of measurement representing any movement of a tractive vehicle over a distance of one kilometre.

*Tractive vehicles running light (without hauling a load) are included. Shunting movements are excluded.*

**A.IV-09 HAULED VEHICLE-KILOMETRE**

Unit of measurement representing any movement of a hauled vehicle over one kilometre.

*Railcars movements are included. Shunting movements are excluded.*

**A.IV-10 TONNE-KILOMETRE OFFERED**

Unit of measurement representing the movement of one tonne of capacity available in a wagon when performing services for which it is primarily intended over one kilometre.

*The distance to be considered is that actually travelled. Shunting and other similar movements are excluded.*

**A.IV-11 WAGON-KILOMETRE**

Unit of measurement representing any movement of a wagon loaded or empty over a distance of one kilometre.

*The distance to be considered is that actually travelled (each country counts the km performed on its territory). Shunting and other similar movements are excluded. All wagon journeys are included irrespective of the ownership of the wagon.*

**A.IV-12 SEAT-KILOMETRE OFFERED**

Unit of measurement representing the movement of one seat available in a passenger railway vehicle when performing the services for which it is primarily intended over one kilometre.

*The distance to be considered is that actually travelled. Shunting and other similar movements are excluded.*

**A.IV-13 GROSS-GROSS TONNE-KILOMETRE HAULED**

Unit of measurement representing the movement over a distance of one kilometre of one tonne of railway vehicle where the weight of tractive vehicle is included.

*Included are the weights of: tractive unit, hauled railway vehicle and its load. Passengers and their luggage are excluded. Shunting and other similar movements are excluded.*

**A.IV-14 GROSS TONNE-KILOMETRE HAULED**

Unit of measurement representing the movement over a distance of one kilometre of one tonne of hauled vehicles (and railcars) and contents.

*The weight of railcars is included, whereas the weight of locomotives is excluded. Passengers and their luggage are excluded. Shunting and other similar movements are excluded.*



## A.V TRANSPORT MEASUREMENT

### A.V-01 RAILWAY TRANSPORT

Any movement of goods and/or passengers using a railway vehicle on a given railway network.

*When a railway vehicle is being carried on another rail vehicle only the movement of the carrying vehicle (active mode) is being considered.*

### A.V-02 NATIONAL RAILWAY TRANSPORT

Railway transport between two places (a place of loading/embarkation and a place of unloading/disembarkation) located in the same country.

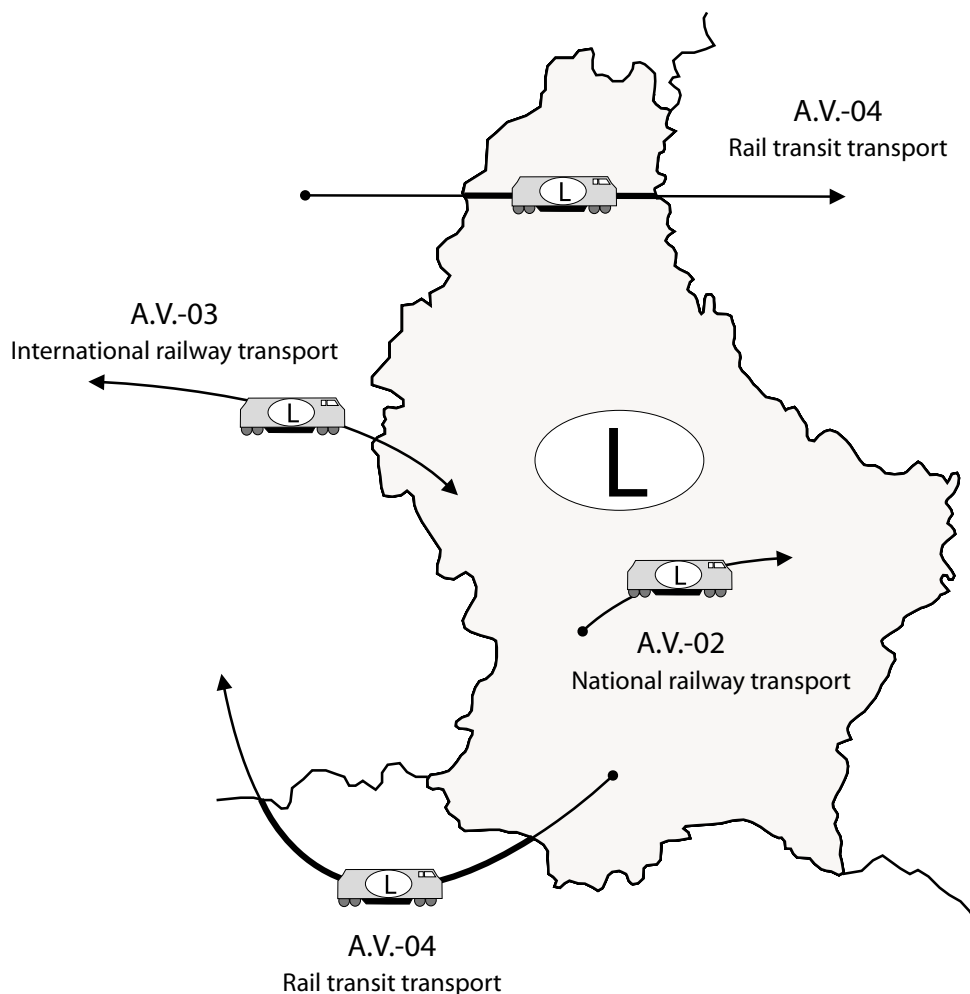
*It may involve transit through a second country.*

*Sometimes referred to as domestic railway transport.*

### A.V-03 INTERNATIONAL RAILWAY TRANSPORT

Railway transport between a place (of loading/embarkation or of unloading/disembarkation) in one country and a place (of loading/embarkation or of unloading/disembarkation) in another country.

*It may involve transit through one or more additional countries. To avoid double counting, each country only counts the pkm or tkm performed on its territory. The number of passengers or the weight of the freight transported is counted in each country.*





#### **A.V-04 RAIL TRANSIT**

Railway transport through a country between two places (a place of loading/embarkation and a place of unloading/disembarkation) outside that country.

Operations involving 'Change of Gauge' between two different track gauges in a country are considered as transit and not as unloading and loading.

*Transport operations involving loading/embarkation or unloading/disembarkation of a railway vehicle at the frontier of that country from/onto another mode of transport, for example transition between Railway transport and Maritime transport in ports, are not considered as transit.*

#### **A.V-05 RAIL PASSENGER**

Any person, excluding members of the train crew, who makes a journey by rail.

*Passengers making a journey solely by railway-operated ferry or bus services are excluded.*

*Passengers for whose transportation a rail enterprise does not receive commercial remuneration are included as well.*

*Stowaways or unauthorized users on freight trains and train surfers on passenger trains are excluded.*

#### **A.V-06 RAIL PASSENGER-KILOMETRE (PKM)**

Unit of measurement representing the transport of one rail passenger by rail over a distance of one kilometre.

*The distance to be taken into consideration should be the distance actually travelled by the passenger on the network. To avoid double counting each country should count only the pkm performed on its territory. If this is not available, then the distance charged or estimated should be used.*

#### **A.V-07 RAIL PASSENGER EMBARKED**

Passenger who boards a railway vehicle to be conveyed by it.

*A passenger transfer from one railway vehicle directly to another one, regardless of the railway transport operator, shall not be regarded as disembarkation/embarkation. Whenever during the transfer another mode of transport is used, this is to be regarded as disembarkation from a railway vehicle followed by a subsequent embarkation on a railway vehicle.*

#### **A.V-08 RAIL PASSENGER DISEMBARKED**

A passenger alighting from a railway vehicle after having been conveyed by it.

*A passenger transfer from one railway vehicle directly to another one, regardless of the railway transport operator, shall not be regarded as disembarkation/embarkation. Whenever during the transfer another mode of transport is used, this is to be regarded as disembarkation from a railway vehicle followed by a subsequent embarkation on a railway vehicle.*

#### **A.V-09 RAIL PASSENGER JOURNEY**

The combination between the place of embarkation and the place of disembarkation of the passengers conveyed by rail whichever itinerary is followed on the railway network.

#### **A.V-10 PLACE OF EMBARKATION**

The place in which a railway passenger boards the railway vehicle to be conveyed by it.

*A passenger transfer from one railway vehicle directly to another one, regardless of the railway transport operator, is not regarded as disembarkation/embarkation. Whenever during the transfer another mode of transport is used, this is to be regarded as disembarkation from a railway vehicle followed by a subsequent embarkation on a railway vehicle.*

### **A.V-11 PLACE OF DISEMBARKATION**

The place in which a railway passenger leaves the railway vehicle after being conveyed by it.

*A passenger transfer from one railway vehicle directly to another one, regardless of the railway transport operator, is not regarded as disembarkation/embarkation. Whenever during the transfer another mode of transport is used, this is to be regarded as disembarkation from a railway vehicle followed by a subsequent embarkation on a railway vehicle.*

### **A.V-12 CONSIGNMENT**

Collection of goods transported under cover of the same transport document in accordance with regulations or tariffs in force where they exist.

### **A.V-13 TYPES OF CONSIGNMENT**

The main categories are:

- a) Full train load: Any consignment comprising a train with one or several wagon loads transported together for one consignor with no change in train composition from a single point of loading to a single point of unloading.

*Sometimes also referred to as Unit train.*

- b) Full wagon load: Any consignment of goods requiring the exclusive use of a wagon throughout its journey whether the full wagon loading capacity is utilised or not; wagons in a full train load are excluded.

*Sometimes also referred to as carload.*

- c) Smalls/small load: Any consignment other than full train loads or full wagon loads.

*Sometimes also referred to as LCL (Less than carload).*

### **A.V-14 GOODS CARRIED BY RAIL**

Any goods moved by rail vehicles.

*This includes all packaging and equipment, such as intermodal transport units (ITU) and pallets as well as road goods vehicles carried by rail.*

*Sometimes also referred to as rail freight.*

### **A.V-15 GROSS-GROSS WEIGHT OF GOODS**

The total weight of the goods carried, all packaging and the tare weight of the transport unit (e.g. containers, swap bodies and pallets for containing goods as well as road goods vehicles carrying goods and transported by rail).

*This is the weight to be used in the compilation of rail transport statistics.*

### **A.V-16 GROSS WEIGHT OF GOODS**

The total weight of goods carried, including packaging but excluding the tare weight of the transport unit (e.g. containers, swap bodies and pallets for containing goods as well as road goods vehicles carrying goods).

### **A.V-17 TARE WEIGHT**

The weight of a transport unit (e.g. containers, swap bodies and pallets for containing goods as well as road goods vehicles carrying goods and transported by rail) before any cargo is loaded.

### **A.V-18 TONNE-KILOMETRE (TKM)**

Unit of measurement of goods transport which represents the transport of one tonne of goods over a distance of one kilometre.

*The distance to be covered is the distance actually travelled on the considered network. To avoid double counting each country should count only the tkm performed on its territory. If it is not available, then the distance charged or estimated should be taken into account.*



### **A.V-19 CATEGORIES OF GOODS CARRIED BY RAIL**

Goods in transport may be classified according to type.

*Examples of classification schemes are NST 2007 (Standard Goods Nomenclature for Transport Statistics) that replaces the CSTE nomenclature (Commodity Classification for Transport Statistics in Europe – UNECE) and the NST/R nomenclature (Standard Goods Nomenclature for Transport Statistics/ revised – Eurostat).*

### **A.V-20 TYPES OF CARGO CARRIED**

Goods in transport may be classified according to the UNECE – Codes for types of cargo, packages and packaging materials, Recommendation 21, Geneva March 1986. The cargo classes are:

- Liquid bulk;
- Solid bulk;
- Large freight container;
- Other freight container;
- Palletised goods;
- Pre-slung goods;
- Mobile, self-propelled units;
- Other mobile units;
- Other cargo types.

### **A.V-21 TEU-KILOMETRE**

Unit of measurement representing the movement of one TEU over one kilometre.

### **A.V-22 DANGEROUS GOODS**

The classes of dangerous goods carried by rail are those defined by the UN Recommendations on the Transport of Dangerous Goods:

- a) Class 1: Explosives
- b) Class 2: Gases
- c) Class 3: Flammable liquids
- d) Class 4: Flammable solids; substances liable to spontaneous combustion; substances which, on contact with water, emit flammable gases
- e) Class 5: Oxidising substances and organic peroxides
- f) Class 6: Toxic and infectious substances
- g) Class 7: Radioactive material
- h) Class 8: Corrosive substances
- i) Class 9: Miscellaneous dangerous substances and articles, including environmentally hazardous substances

### **A.V-23 GOODS LOADED**

Goods placed on a railway vehicle and dispatched by rail.

*Unlike in road and inland waterway transport, transshipments from one railway vehicle directly to another and change of tractive vehicle are not regarded as unloading/loading. However, if the goods are unloaded from a railway vehicle, loaded on another mode of transport and, again loaded on another railway vehicle, this is considered as unloading from the first railway vehicle followed by loading on the second railway vehicle.*

### **A.V-24 GOODS UNLOADED**

Goods taken off a railway vehicle after transport by rail.

*Unlike in road and inland waterway transport, transshipments from one railway vehicle directly to another and change of tractive vehicle are not regarded as unloading/loading. However, if the goods are unloaded from a railway vehicle, loaded on another mode of transport and, again loaded on another railway vehicle, this is considered as unloading from the first railway vehicle followed by loading on the second railway vehicle.*

**A.V-25 INTERNATIONAL GOODS TRANSPORT BY RAIL – LOADED (OUTGOING)**

Goods carried by rail between a place of loading (on a railway vehicle) located in the declaring country and a place of unloading from a railway vehicle in another country.

*Goods in transit throughout are not included. Wagons loaded on a railway network and carried by ferry to a foreign network are included.*

**A.V-26 INTERNATIONAL GOODS TRANSPORT BY RAIL – UNLOADED (INCOMING)**

Goods carried by rail between a place of loading (on a railway vehicle) located in a foreign country and a place of unloading from a railway vehicle in the declaring country.

*Goods in transit throughout are not included. Wagons loaded on a foreign railway network and carried by ferry to the reporting network are included.*

**A.V-27 GOODS IN TRANSIT BY RAIL THROUGHOUT**

Goods carried by rail through the reporting country between two places (place of loading/unloading) outside the declaring country.

*Wagons entering and/or leaving the reporting network by ferry are included.*

**A.V-28 GOODS RAIL TRANSPORT LINK**

The combination of the place of loading and the place of unloading of the goods transported by rail whichever itinerary is followed.

*Places are defined by using international classification systems such as NUTS (Nomenclature of Territorial Units for Statistics – Eurostat).*

**A.V-29 PLACE OF LOADING**

The place taken into account is the place in which the goods are loaded on a railway vehicle to be transported by it.

*Unlike in road and inland waterway transport, transshipments from one railway vehicle directly to another and change of tractive vehicle are not regarded as unloading/loading. However, if the goods are unloaded from a railway vehicle, loaded on another mode of transport and, again loaded on another railway vehicle, this is considered as unloading from the first railway vehicle followed by loading on the second railway vehicle.*

**A.V-30 PLACE OF UNLOADING**

The place taken into account is the place in which the goods are unloaded from a railway vehicle after being transported by it.

*Unlike in road and inland waterway transport, transshipments from one railway vehicle directly to another and change of tractive vehicle are not regarded as unloading/loading. However, if the goods are unloaded from a railway vehicle, loaded on another mode of transport and, again loaded on another railway vehicle, this is considered as unloading from the first railway vehicle followed by loading on the second railway vehicle.*

## A.VI ACCIDENTS

### A.VI-01 ACCIDENT

An unwanted or unintended sudden event or a specific chain of such events (occurring during train operation) which has harmful consequences.

### A.VI-02 INCIDENT

Any occurrence, other than an accident, highlighting a potential safety issues in railway operations.

*Sometimes also referred to as accident precursor, or near-miss.*

### A.VI-03 SIGNIFICANT ACCIDENT

Any accident involving at least one rail vehicle in motion, resulting in at least one killed or seriously injured person, or in significant damage to stock, track, other installations or environment, or extensive disruptions to traffic. Accidents in workshops, warehouses and depots are excluded.

*This definition is used by the UIC (Union Internationale des Chemins de Fer).*

### A.VI-04 SIGNIFICANT DAMAGE TO STOCK, TRACK, OTHER INSTALLATIONS OR ENVIRONMENT

Damage that exceeds an internationally agreed threshold.

*The threshold for significant damage, adopted by the UIC, was set at EUR 150 000 in 2007.*

### A.VI-05 EXTENSIVE DISRUPTIONS TO TRAFFIC

Extensive disruption to traffic occurs when train services on at least one main railway line are suspended for more than six hours.

### A.VI-06 INJURY ACCIDENT

Any accident involving at least one rail vehicle in motion, resulting in at least one killed or injured person. Accidents in workshops, warehouses and depots are excluded.

*This definition includes accidents with slightly injured persons and is similar to that used in road accident statistics.*

### A.VI-07 SERIOUS INJURY ACCIDENT

Any accident involving at least one rail vehicle in motion, resulting in at least one killed or seriously injured person. Accidents in workshops, warehouses and depots are excluded.

*This definition is normally used by the UIC for railway accidents and excludes the accidents with slightly injured persons. Figures collected under this definition cannot be compared directly to the number of road accidents which includes accidents with slightly injured persons.*

### A.VI-08 CASUALTY

Any person killed or injured as a result of an injury accident, excluding attempted suicides.

### A.VI-09 PERSON KILLED

Any person dying immediately or within 30 days as a result of an injury accident, excluding suicides.

*It includes passengers, employees and other specified or unspecified persons involved in a rail injury accident.*

*A killed person is excluded if the competent authority declares the cause of death to be suicide, i.e. a deliberate act to injure oneself resulting in death. For countries that do not apply the threshold of 30 days, conversion coefficients are estimated so that comparisons on the basis of the 30 day-definition can be made.*

**A.VI-10 PERSON INJURED**

Any person who as result of an accident was not killed immediately or not dying within 30 days, but sustained an injury, normally needing medical treatment, excluding attempted suicides.

*Injuries include cases such as, but not limited to, a cut, fracture, sprain, or amputation.*

*Persons with lesser wounds, such as minor cuts and bruises are not normally recorded as injured.*

*An injured person is excluded if the competent authority declares the cause of the injury to be attempted suicide by that person, i.e. a deliberate act to injure oneself resulting in injury, but not in death.*

**A.VI-11 PERSON SERIOUSLY INJURED**

Any person injured who was hospitalised for more than 24 hours as a result of an accident, excluding attempted suicides.

**A.VI-12 PERSON SLIGHTLY INJURED**

Any person injured normally needing medical treatment, excluding attempted suicides, not classified as seriously injured.

*Persons with lesser wounds, such as minor cuts and bruises are not normally recorded as injured.*

**A.VI-13 COLLISION**

- Collision of two or more rail vehicles

Any (front to front, front to end or a side) impact between a part of a train and a part of another train or rail vehicle, or with shunting rolling stock.

- Collision of rail vehicle with obstacle within the clearance gauge

An impact between a part of a train and objects fixed or temporarily present on or near the track (except at level crossings if lost by a crossing vehicle or user), including impacts with overhead contact lines.

**A.VI-14 DERAILMENT**

Any case in which at least one wheel of a train leaves the rails.

*Derailments as a result of collisions are excluded. These are classified as collisions.*

**A.VI-15 LEVEL CROSSING ACCIDENTS**

Any accident at level crossings involving at least one railway vehicle and one or more crossing vehicles, other users of the road such as pedestrians or other objects temporarily present at or near the track.

*Sometimes also referred to as grade crossing accident.*

**A.VI-16 ACCIDENTS TO PERSONS CAUSED BY ROLLING STOCK IN MOTION**

Accidents to one or more persons that are either hit by a railway vehicle or part of it or hit by an object attached to or that has become detached from the vehicle. Persons that fall from railway vehicles are included, as well as persons that fall or are hit by loose objects when travelling on-board vehicles.

**A.VI-17 FIRES IN ROLLING STOCK**

Fires and explosions that occur in railway vehicles (including their load) when they are running between the departure station and the destination, including when stopped at the departure station, the destination station or intermediate stops, as well as during re-marshalling operations.



#### **A.VI-18 CATEGORY OF PERSON IN RAILWAY ACCIDENT STATISTICS**

- Rail passenger: Any person, excluding members of the train crew, who makes a trip by rail. For accident statistics, passengers trying to embark/disembark onto/from a moving train are included.
- Employees or contractor: Any person whose employment is in connection with a railway and is at work on duty at the time of the accident. It includes the crew of the train and persons handling rolling stock and infrastructure installations.
- Level crossing user: Persons using a level crossing to cross the railway line by any mean of transportation or by foot.
- Trespasser (Unauthorised persons on railway premises): Any persons present in railway premises where such presence is forbidden, with the exception of level crossing users.
- Others:
  - Other person at platform: means any person at a railway platform who is not defined as “passenger”, “employee or contractor”, “level crossing user”, “other person not at a platform” or “trespasser”.
  - Other person not at platform: means any person not at a railway platform who is not defined as “passenger”, “employee or contractor”, “level crossing user”, “other person at a platform” or “trespasser”.

#### **A.VI-19 ACCIDENT INVOLVING THE TRANSPORT OF DANGEROUS GOODS**

Any accident or incident that is subject to reporting in accordance with the Regulation concerning the International Carriage of Dangerous Goods by Rail.

#### **A.VI-20 SUICIDE**

Act to deliberately injure oneself resulting in death, as recorded and classified by the competent national authority.

#### **A.VI-21 ATTEMPTED SUICIDE**

Act to deliberately injure oneself resulting in serious injury, but not in death, as recorded and classified by the competent national authority.



# B

## Road transport







## B. Road transport

### B.I INFRASTRUCTURE

#### B.I-01 ROAD

Line of communication (travelled way) open to public traffic, primarily for the use of road motor vehicles, using a stabilized base other than rails or air strips.

*Included are paved roads and other roads with a stabilized base, e.g. gravel roads. Roads also cover streets, bridges, tunnels, supporting structures, junctions, crossings and interchanges. Toll roads are also included. Excluded are dedicated cycle lanes.*

#### B.I-02 PAVED ROAD

Road surfaced with crushed stone (macadam) with hydrocarbon binder or bituminized agents, with concrete or with cobblestone.



#### B.I-03 UNPAVED ROAD

Road with a stabilized base not surfaced with crushed stone, hydrocarbon binder or bituminized agents, concrete or cobblestone.



#### B.I-04 ROAD NETWORK

All roads in a given area.

The road network may be classified according to the surface, e.g.:

- a) Paved roads;
- b) Unpaved roads.

#### B.I-05 CATEGORY OF ROAD

Roads are categorised according to three internationally comparable types:

- a) Motorway;
- b) Road inside a built-up area;
- c) Road outside a built-up area (express roads, 2+1 roads and others).

**B.I-06 MOTORWAY / FREEWAY**

Road, specially designed and built for motor traffic, which does not serve properties bordering on it, and which:

- a) Is provided, except at special points or temporarily, with separate carriageways for traffic in two directions, separated from each other, either by a dividing strip not intended for traffic, or exceptionally by other means;
- b) Has no crossings at the same level with any road, railway or tramway track, or footpath;
- c) Is especially sign-posted as a motorway and is reserved for specific categories of road motor vehicles.



*Entry and exit lanes of motorways are included irrespective of the location of the sign-posts.*

*Urban motorways are also included.*

**B.I-07 EXPRESS ROAD**

Road specially built for motor traffic, which does not serve adjacent properties, and:

- a) Is accessible only from interchanges or controlled junctions;
- b) Is specially sign-posted as an express road and reserved for specific categories of road motor vehicles;
- c) On which stopping and parking on the running carriageway are prohibited.

*Entry and exit lanes are included irrespective of the location of the sign-posts.*

*Urban express roads are also included.*

**B.I-08 2+1 ROAD**

A type of road, consisting of two lanes in one direction and one lane in the other, typically alternating every few kilometres to allow periodic overtaking in both directions.

*Can be equipped with a median barrier and may or may not be classified as an express road.*

**B.I-09 ROAD INSIDE A BUILT-UP AREA**

Road within the boundaries of a built-up area, with entries and exits sign-posted as such.

*Excluded are motorways, express roads and other roads of higher speed traversing the built-up area, if not sign-posted as built-up roads. Streets are included.*

**B.I-10 ROAD OUTSIDE A BUILT-UP AREA**

Road outside the boundaries of a built-up area, which is an area with entries and exits sign-posted as such.

*Motorways are excluded.*



### B.I-11 E ROAD

The international “E” network consists of a system of reference roads as laid down in the European Agreement on Main International Arteries, Geneva, 15 November 1975 and its amendments.

*Reference roads and intermediate roads (Class-A roads) have two-digit numbers; branch, link and connecting roads (Class-B roads) have three-digit numbers.*

### B.I-12 CARRIAGEWAY

Part of the road intended mainly for the movement of road vehicles; the parts of the road which form a shoulder for the lower or upper layers of the road surface are not part of the roadway, nor are those parts of the road intended for the parking of vehicles even if, in case of danger, they may occasionally be used for the passage of motor vehicles.



### B.I-13 LANE

One of the longitudinal strips into which a carriageway is divisible, whether or not defined by longitudinal road markings, which is wide enough for one moving line of motor vehicles other than motor cycles.



### B.I-14 BUS LANE

Part of a carriageway designated for buses and distinguished from the rest of the carriageway by longitudinal road markings.

*Taxis and, in some cases, cars occupied by several passengers or low emission cars may also be allowed to use a bus lane. In some cases other vehicles may be allowed.*



### B.I-15 TRAMLINE

Line of communication made up by a pair of rails designed for use by trams (street-cars).

*This includes both tramlines laid down on the road used by other road motor vehicles as well as tramlines running separately from the road.*

**B.I-16 (BI)CYCLE LANE**

Part of a carriageway designated for use by cyclists and distinguished from the rest of the carriageway by longitudinal road markings.

*Cycle lanes can be distinguished between advisory and mandatory, on whether or not other motor vehicles are allowed to enter the lane.*

*Some cycle lanes allow cyclists to ride against the flow of one-way streets (contra-flow cycling).*

*Certain types of mopeds may also be allowed to use a cycle lane. Some lanes can be available for both buses and cyclists (shared bus cycle lanes).*

**B.I-17 (BI)CYCLE TRACK**

Independent road or part of a road designated for use by cyclists and sign-posted as such. A cycle track is separated from other roads or other parts of the same road by structural means.

*Certain types of Mopeds may also be allowed to use the cycle track.*

**B.I-18 LENGTH OF ROAD**

The length of the road is the distance between its start and end point.

*If one of the directions of the carriageway is longer than the other then the length is calculated as the sum of half of the distances of each direction of the carriageway from first entry point to last exit point.*

**B.II TRANSPORT EQUIPMENT (VEHICLES)****B.II-01 ROAD VEHICLE**

A vehicle running on wheels and intended for use on roads.

**B.II-02 STOCK OF ROAD VEHICLES**

Number of road vehicles registered at a given date in a country and licensed to use roads open to public traffic.

*This includes road vehicles exempted from annual taxes or license fees; it also includes imported second-hand vehicles and other road vehicles according to national practices. The statistics should exclude military vehicles.*

**B.II-03 NATIONAL ROAD VEHICLE**

A road vehicle registered in the reporting country and bearing registration plates of that country or having been separately registered (trams, trolleybuses, etc.).

*Where registration of a road vehicle does not apply in a specific country, a national road vehicle is a vehicle owned or leased by a person or company tax resident in that country.*

**B.II-04 FOREIGN ROAD VEHICLE**

A road vehicle registered in a country other than the reporting country and bearing registration plates of that foreign country.

**B.II-05 ROAD MOTOR VEHICLE**

A road vehicle fitted with an engine whence it derives its sole means of propulsion, which is normally used for carrying persons or goods by road, or for hauling, on the road, vehicles used for the carriage of persons or goods.

**B.II-06 PASSENGER ROAD VEHICLE**

A road vehicle designed, exclusively or primarily, to carry one or more persons.

*Vehicles designed for the transport of both passengers and goods should be classified either among the passenger road vehicles or among the goods road vehicles, depending on their primary purpose, as determined either by their technical characteristics or by their category for tax purposes.*

**B.II-07 (BI)CYCLE**

A road vehicle which has two or more wheels and generally propelled by the muscular energy of the persons on that vehicle, in particular by means of a pedal system, lever or handle (e.g. bicycles, tricycles, quadricycles and invalid carriages).

*Included are cycles with supportive power unit (e.g. E-bikes, pedelecs).*

**B.II-08 PASSENGER ROAD MOTOR VEHICLE**

A road motor vehicle, exclusively designed or primarily, to carry one or more persons.

Motor vehicles cover:

- a) Motorcycles;
- b) Mopeds;
- c) Passenger cars;
- d) Buses, coaches and minibuses;
- e) Tram.

*Excluded are light goods road vehicles, cf. definition B.II-21.*

**B.II-09 MOPED**

Two, three or four-wheeled road motor vehicle which is fitted with an engine having a cylinder capacity of less than 50cc and a maximum authorized design speed in accordance with national regulations. Where limitations concerning the engine displacement are not applicable a restriction in terms of motor power may be in force. Refers to categories L<sub>1</sub> and L<sub>2</sub> of the UN Consolidated Resolution on the Construction of Vehicles (R.E.3).

*Registered and non-registered mopeds in use are included, whether or not they have a number plate. Some countries do not register all mopeds.*



**B.II-10 MOTORCYCLE**

Two-, three- or four-wheeled road motor vehicle not exceeding 400 kg of unladen weight. All such vehicles with a cylinder capacity of 50 cc or over are included, as are those under 50 cc which do not meet the definition of moped. Refers to categories L<sub>3</sub>, L<sub>4</sub>, L<sub>5</sub>, L<sub>6</sub> and L<sub>7</sub> of the UN Consolidated Resolution on the Construction of Vehicles (R.E.3).





**B.II-11 PASSENGER CAR**

Road motor vehicle, other than a moped or a motor cycle intended for the carriage of passengers and designed to seat no more than nine persons (including the driver). Refers to category M<sub>1</sub> of the UN Consolidated Resolution on the Construction of Vehicles (R.E.3).

Included are:

- a) Passenger cars;
- b) Vans designed and used primarily for transport of passengers;
- c) Taxis;
- d) Hire cars;
- e) Ambulances;
- f) Motor homes;
- g) Special passenger cars (police cars, firefighter's cars).

Excluded are light goods road vehicles, cf. definition B.II-21, as well as motor-coaches and buses, cf. definitions B.II-14 and B.II-15, and mini-buses/mini-coaches, cf. definitions B.II-16.

“Passenger car” includes microcars (needing no permit or having the same requirements as mopeds to be driven), taxis and passenger hire cars, provided that they have fewer than ten seats.

**B.II-12 TAXI**

Licensed passenger car for hire with driver without predetermined routes.

The method of hire is normally:

- a) Flagging down on the street;
- b) Picking up at a designated taxi rank;
- c) Telephoning or using other electronic means for collection.

**B.II-13 CARAVAN**

Road vehicle designed as living accommodation for haulage by a motor vehicle.

A caravan is mainly intended for recreational purposes. It is not used for carriage of goods or passengers. Excluded are tent trailers with a built-in tent: they are considered as a trailer for the transport of goods.

**B.II-14 BUS**

Passenger road motor vehicle designed to carry more than 24 persons (including the driver), and with provision to carry seated as well as standing passengers. Refers to class I and class II of categories  $M_2$  and  $M_3$  of the UN Consolidated Resolution on the Construction of Vehicles (R.E.3).

*The vehicles may be constructed with areas for standing passengers, to allow frequent passenger movement, or designed to allow the carriage of standing passengers in the gangway.*

*Excludes trolleybuses.*

**B.II-15 MOTOR COACH**

Passenger road motor vehicle designed to seat 24 or more persons (including the driver) and constructed exclusively for the carriage of seated passengers. Refers to class III of categories  $M_2$  and  $M_3$  of the UN Consolidated Resolution on the Construction of Vehicles (R.E.3).

*Excludes trolleybuses.*

**B.II-16 MINI-BUS/MINI-COACH**

Passenger road motor vehicle designed to carry 10-23 seated or standing persons (including the driver). Refers to class A and class B of categories  $M_2$  and  $M_3$  of the UN Consolidated Resolution on the Construction of Vehicles (R.E.3).

*The vehicles may be constructed exclusively to carry seated passengers or to carry both seated and standing passengers.*

*Excludes trolleybuses.*

**B.II-17 TROLLEYBUS**

Passenger road vehicle designed to seat more than nine persons (including the driver), which is connected to electric conductors and which is not rail-borne.

*This term covers vehicles that may be used either as trolleybuses or as buses, if they have a motor independent of the main electric power supply.*





### **B.II-18 TRAM (STREET-CAR, ALSO A.II-11)**

Passenger or freight road vehicle designed to seat more than nine persons (including the driver) or to transport freight, which is rail borne and connected to electric conductors or powered by diesel engine. The tramway is generally integrated into the urban road system.

### **B.II-19 PASSENGER CARRYING CAPACITY OF MOTOR COACHES, BUSES AND TROLLEYBUSES**

Number of seats/berths and standing places, including the driver's, available in the vehicle when it is performing the service for which it is primarily intended.

*In case of doubt, the highest number of seats/berths available should be taken into account.*

### **B.II-20 GOODS ROAD VEHICLE**

Road vehicle designed, exclusively or primarily, to carry goods. Includes categories N and O of the UN Consolidated Resolution on the Construction of Vehicles (R.E. 3).

*Included are:*

- a) *Light goods road vehicles with a gross vehicle weight of not more than 3 500 kg, designed exclusively or primarily, to carry goods or to be used by craftsmen, e.g. vans, pick-ups, and two- or three-wheeled vehicles;*
- b) *Heavy goods road vehicles with a gross vehicle weight above 3 500 kg, designed, exclusively or primarily, to carry goods;*
- c) *Road tractors;*
- d) *Trailers and semi-trailers;*
- e) *Agricultural tractors permitted to use roads open to public traffic.*

### **B.II-21 LIGHT GOODS ROAD VEHICLE**

Goods road vehicle with a gross vehicle weight of not more than 3 500 kg, designed, exclusively or primarily, to carry goods. Includes category N<sub>1</sub> of the UN Consolidated Resolution on the Construction of Vehicles (R.E.3).

*Included are vans designed for and used primarily for transport of goods, pick-ups, small lorries, and two- or three-wheeled vehicles with a gross vehicle weight of not more than 3 500 kg.*

### **B.II-22 HEAVY GOODS ROAD VEHICLE**

Goods road vehicle with a gross vehicle weight above 3 500 kg, designed, exclusively or primarily, to carry goods. Refers to categories N<sub>2</sub> and N<sub>3</sub> of the UN Consolidated Resolution on the Construction of Vehicles (R.E.3).

### **B.II-23 TYPES OF BODY OF GOODS ROAD VEHICLE**

Classification of goods road vehicles by types of their superstructures.

The following classification of types of bodies of goods road vehicles is considered:

- a) Ordinary open box:
  - With cover;
  - Flat.
- b) Tipper.
- c) Tanker:
  - Solid bulk;
  - Liquid bulk.
- d) Temperature controlled box.
- e) Other closed box.
- f) Skeletal container and swap-body transporter.
- g) Livestock transporter.
- h) Others.

**B.II-24 GOODS ROAD MOTOR VEHICLE**

Any single road motor vehicle designed to carry goods (e.g. a lorry), or any coupled combination of road vehicles designed to carry goods (i.e. lorry with trailer(s), or road tractor with or without semi-trailer and with or without trailer).

**B.II.25 LORRY/TRUCK**

Rigid road motor vehicle designed, exclusively or primarily, to carry goods.

**B.II-26 ROAD TRACTOR (SEMI-TRAILER TRACTOR)**

Road motor vehicle designed, exclusively or primarily, to haul other road vehicles which are not power-driven (mainly semi-trailers).

*Agricultural tractors are excluded.*

**B.II-27 AGRICULTURAL TRACTOR**

Motor vehicle designed exclusively or primarily for agricultural purposes whether or not permitted to use roads opened to public traffic.

**B.II-28 TRAILER**

Goods road vehicle designed to be hauled by a road motor vehicle. With semi-trailers (see B.II-30), refers to category O of the UN Consolidated Resolution on the Construction of Vehicles (R.E.3).

*This category excludes agricultural trailers and caravans.*

**B.II-29 AGRICULTURAL TRAILER**

Trailer designed exclusively or primarily for agricultural purposes and to be hauled by an agricultural tractor, whether or not permitted to use roads opened to public traffic.

**B.II-30 SEMI-TRAILER**

Goods road vehicle with no front axle designed in such way that part of the vehicle and a substantial part of its loaded weight rests on a road tractor. With trailers (see B.II-28), refers to category O of the UN Consolidated Resolution on the Construction of Vehicles (R.E.3).

**B.II.31 ARTICULATED VEHICLE**

Road tractor coupled to a semi-trailer.

**B.II-32 ROAD TRAIN**

Goods road motor vehicle coupled to a trailer.

*Articulated vehicles with a further trailer attached are included.*

**B.II-33 SPECIAL PURPOSE ROAD MOTOR VEHICLE**

Road motor vehicle designed for purposes other than the carriage of passengers or goods. Can be a vehicle of categories M, N or O of the UN Consolidated Resolution on the Construction of Vehicles (R.E.3).

*This category includes:*

- a) Fire brigade vehicles;
- b) Mobile cranes;
- c) Self-propelled rollers;
- d) Bulldozers with metallic wheels or track;
- e) Vehicles for recording film, radio and TV broadcasting;
- f) Mobile library vehicles;
- g) Towing vehicles for vehicles in need of repair;
- h) Other special purpose road motor vehicles.

**B.II-34 AUTOMATED VEHICLES (SAE J3016™ LEVELS)**

Road vehicles designed to use real-time traffic information, to be connected and to cooperate with each other, with transport infrastructure and vulnerable road users and to progressively take over driving tasks, in order to improve road safety, traffic efficiency and comfort. Automated vehicles are aimed to be fully integrated in existing fleets, use existing road networks and seamlessly work together with public transport systems.

*Automated vehicles can be classified on the basis of SAE J3016™ levels:*

*Level 0 – No Automation: The full-time performance by the human driver of all aspects of the dynamic driving task, even when enhanced by warning or intervention systems.*

*Level 1 – Driver Assistance: The driving mode-specific execution by a driver assistance system of either steering or acceleration/deceleration using information about the driving environment and with the expectation that the human driver performs all remaining aspects of the dynamic driving task.*

*Level 2 – Partial Automation: The driving mode-specific execution by one or more driver assistance systems of both steering and acceleration/deceleration using information about the driving environment and with the expectation that the human driver performs all remaining aspects of the dynamic driving task.*

*Level 3 – Conditional Automation: The driving mode-specific performance by an Automated Driving System of all aspects of the dynamic driving task with the expectation that the human driver will respond appropriately to a request to intervene.*

*Level 4 – High Automation: The driving mode-specific performance by an Automated Driving System of all aspects of the dynamic driving task, even if a human driver does not respond appropriately to a request to intervene.*

*Level 5 – Full Automation: The full-time performance by an Automated Driving System of all aspects of the dynamic driving task under all roadway and environmental conditions that can be managed by a human driver.*

**B.II-35 LOAD CAPACITY**

Maximum weight of goods declared permissible by the competent authority of the country of registration of the vehicle.

*When the goods road vehicle is a road train made up of a lorry with trailer, the load capacity of the road train is the sum of the load capacities of the lorry and the trailer.*

**B.II-36 LOAD VOLUME**

Maximum volume available in the vehicle (e.g. measured in cubic metres) for the carriage of goods.

**B.II-37 FLOOR AREA WITHIN VEHICLE BODY**

Maximum floor area within the vehicle body (e.g. measured in square metres) available for the carriage of goods.

**B.II-38 GROSS VEHICLE WEIGHT (LEGALLY PERMISSIBLE MAXIMUM WEIGHT)**

Total of the weight of the vehicle (or combination of vehicles) including its load when stationary and ready for the road declared permissible by the competent authority of the country of registration.

*This includes the weight of the driver and the maximum number of persons permitted to be carried.*

**B.II-39 AGE OF ROAD VEHICLE**

Length of time after the first registration of the road vehicle, irrespective of the registering country.

**B.II-40 CYLINDER CAPACITY (ENGINE DISPLACEMENT)**

The cylinder capacity of the engine as certified by the competent authority of the country of registration.

### B.II-41 UNLADEN VEHICLE WEIGHT

Weight of vehicle (or combination of vehicles) excluding its load when stationary and ready for the road, as determined by the competent authority of the country of registration.

*The unladen weight may include driver and fuel dependent on national practice.*

### B.II-42 MOTOR ENERGY

The principal type of motor energy used by the vehicle as certified by the competent authority of the country of registration.

The following categories of road motor vehicles are included:

- a) Petrol vehicle: road motor vehicle using petrol for propulsion containing up to 10 per cent Bioethanol (like E<sub>5</sub> up to E<sub>10</sub>).
- b) Hybrid petrol-electric vehicle: Road motor vehicle using petrol for propulsion, with in addition one or more electric motors for propulsion, where the electric motor(s) are powered from a traction battery which is charged by a generator driven by the petrol engine. Plug-in hybrid petrol-electric vehicles are not included.
- c) Plug-in hybrid petrol-electric vehicle: hybrid petrol-electric vehicle where the traction battery can also be charged from an external electricity source (such as an electric socket). Hybrid petrol-electric vehicles are not included.
- d) Diesel vehicle: road motor vehicle using diesel for propulsion containing up to 7 per cent Biodiesel (like B<sub>2</sub>, B<sub>5</sub>, B<sub>7</sub>).
- e) Hybrid diesel-electric vehicle: road motor vehicle using diesel for propulsion, with in addition one or more electric motors for propulsion, where the electric motor(s) are powered from a traction battery which is charged by a generator driven by the diesel engine. Plug-in hybrid diesel-electric vehicles are not included.
- f) Plug-in Hybrid diesel-electric vehicle: hybrid diesel-electric vehicle where the traction battery can also be charged from an external electricity source (such as an electric socket). Hybrid diesel-electric vehicles are not included.
- g) Battery only electric vehicle: road motor vehicle using batteries to feed an electric motor for propulsion.
- h) Natural gas vehicle: road motor vehicle using natural gas for propulsion, either Compressed Natural Gas (CNG) or Liquefied Natural Gas (LNG).
- i) Liquefied Petroleum Gas vehicle: road motor vehicle using Liquefied Petroleum Gas (LPG) for propulsion.
- j) Hydrogen vehicle: Road motor vehicle using hydrogen for propulsion. Fuel cell vehicles are included.
- k) Biofuel vehicle: road motor vehicle using bioethanol or biodiesel for propulsions.
- l) Bioethanol vehicle: road motor vehicle using bioethanol of more than 10 per cent for propulsions. Vehicles using up to 10 per cent are to be defined as petrol vehicles.
- m) Biodiesel vehicle: road motor vehicle using biodiesel of more than 7 per cent for propulsions. Vehicles using up to 7 per cent are to be defined as diesel vehicles.
- n) Bi-fuel vehicle: road motor vehicle with a single engine using either diesel or petrol and one of the following: CNG, LNG, LPG or hydrogen for propulsions.

*For hybrid or dual-fuelled vehicles adapted for using more than one type of motor energy (e.g. LPG and petrol, or electricity and diesel, etc.), the principal type of motor energy should be an alternative fuel.*

### B.II-43 ALTERNATIVE FUEL

A type of motor energy other than the conventional fuels, petrol and diesel.

*Alternative fuels include electricity, LPG, natural gas (LNG or CNG), alcohols, mixtures of alcohols with other fuels, hydrogen, biofuels (such as biodiesel), etc. (This list is not exhaustive.) Alternative fuels do not include unleaded petrol, reformulated petrol or city (low-sulphur) diesel.*

**B.II-44 DATE OF FIRST REGISTRATION OF MOTOR VEHICLE**

The date of first registration of a motor vehicle is the first-time registration of the vehicle as new in a motor vehicle register, irrespective of the nationality of the register.

*The dating of the registration is the date on which the registration was recorded at the motor vehicle registration office. The registration of an imported second-hand vehicle is not a first-time registration but should be regarded as a re-registration.*

**B.III ENTERPRISES, INVESTMENT AND MAINTENANCE****B.III-01 TRANSPORT FOR HIRE OR REWARD**

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

**B.III-02 TRANSPORT ON OWN ACCOUNT**

Transport which is not for hire or reward.

*Such transport is the movement by an enterprise of its own staff or freight without any associated financial transaction. Although individual persons may undertake such transport, it is not included here.*

**B.III-03 ROAD TRANSPORT ENTERPRISE**

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

*In terms of activity classifications the following classes are involved:*

- a) ISIC/Rev.4: Division 49, Group 492–Other land transport
  - Class 4921–Urban or suburban passenger land transport
  - Class 4922–Other passenger land transport
  - Class 4923–Freight transport by road
- b) NACE/Rev.2: Division 49, Group 49.3–Other passenger land transport
  - Class 49.31–Urban, suburban or metropolitan area passenger land transport
  - Class 49.32–Taxi operation
  - Class 49.39–Other passenger land transport
- c) NACE/Rev.2: Division 49, Group 49.4–Freight transport by road
  - Class 49.41–Freight transport by road
  - Class 49.42 – Removal services.

*Even those enterprises without salaried employees are taken into account. Only units which actually carry out an activity during the reference period should be considered. "Dormant" units or those not yet having begun their activity are excluded.*

**B.III-04 ROAD PASSENGER TRANSPORT ENTERPRISE**

Road transport enterprise offering and performing services in the transport of one or more persons (passengers), not including the driver, and whose main activity in the field of road transport, according to value-added, is road passenger transport.

**B.III-05 ROAD GOODS TRANSPORT ENTERPRISE**

Road transport enterprise offering and performing services in the transport of goods, whose main activity in the field of road transport, according to value-added, is road goods transport.



**B.III-06 URBAN ROAD PASSENGER ENTERPRISE**

Road passenger transport enterprise performing urban, metropolitan or similar scheduled or non-scheduled transport services within the boundaries of one or more built-up areas and whose main activity in the field of road passenger transport, according to value-added, is urban road passenger transport.

**B.III-07 PUBLIC ROAD TRANSPORT ENTERPRISE**

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

**B.III-08 INVESTMENT EXPENDITURE ON ROADS INFRASTRUCTURE**

Capital expenditure on new road infrastructure or extension of existing roads, including reconstruction, renewal (major substitution work on the existing infrastructure which does not change its overall performance) and upgrades (major modification work improving the original performance or capacity of the infrastructure).

*Infrastructure includes land, permanent way constructions, buildings, bridges and tunnels, as well as immovable fixtures, fittings and installations connected with them (signalisation, telecommunications, toll collection installations, etc.) as opposed to road vehicles.*

**B.III-09 INVESTMENT EXPENDITURE ON ROAD VEHICLES**

Capital expenditure to purchase road vehicles or to upgrade existing ones.

**B.III-10 MAINTENANCE EXPENDITURE ON ROADS INFRASTRUCTURE**

Non-capital expenditure to maintain the condition and capacity of the existing road infrastructure.

*This includes surface maintenance, patching and running repairs (work relating to roughness of carriageway's wearing course, roadsides, etc.).*

**B.III-11 MAINTENANCE EXPENDITURE ON ROAD VEHICLES**

Non-capital expenditure to maintain road vehicles in working order without improving either their performance or their capacity.

**B.III-12 ROADS CAPITAL STOCK**

An estimated monetary value reflecting the current stock of physical road transport infrastructure assets.

*For statistical purposes it is recommended to use the net capital value which takes into account depreciation. There are various methods such as "the replacement cost method" or the "Perpetual Inventory Method (PIM)" that provide the net value of the assets.*

**B.IV TRAFFIC****B.IV-01 ROAD TRAFFIC**

Any movement of a road vehicle on a given road network.

*When a road vehicle is being carried on another vehicle, only the movement of the carrying vehicle (active mode) is considered.*

**B.IV-02 ROAD TRAFFIC ON NATIONAL TERRITORY**

Any movement of road vehicles within a national territory irrespective of the country in which these vehicles are registered.

**B.IV-03 TRAFFIC BY EMPTY ROAD VEHICLES**

Any movement of a road vehicle for which the gross-gross weight of goods carried including that of equipment such as containers, swap bodies and pallets is nil. Any movement of motor-coaches, buses, trolleybuses and trams without any passengers.

*The movement of a road vehicle carrying empty equipment such as containers, swap bodies and pallets is not considered as an empty journey.*

**B.IV-04 URBAN ROAD TRAFFIC**

Traffic carried out in an urban area by road vehicles.

*Proportions of a through journey involving a relatively short passage over urban roads are not counted as urban traffic.*

**B.IV-05 ROAD TRAFFIC INSIDE BUILT-UP AREAS**

Traffic on roads inside built-up areas.

**B.IV-06 ROAD VEHICLE JOURNEY**

A movement of a road vehicle from a specified point of origin to a specified point of destination.

*A journey can be divided into a number of sections or stages.*

*For goods road vehicles, journeys can be unloaded (there are no goods in the lorry, the trailer or the semi-trailer) or loaded. The loaded distance of the goods road vehicle journey is the distance between the first place of loading and the last place of unloading (where the goods road vehicle is completely emptied).*

**B.IV-07 BASIC TRANSPORT OPERATIONS (BTO)**

The transport of one type of goods (defined by reference to a particular nomenclature level) between its place of loading and its place of unloading.

**B.IV-08 PASSENGER ROAD VEHICLE JOURNEY OFFERED**

Unit of measurement representing the number of movements of hired passenger road vehicles available from specified points of origin to specified places of disembarkation.

**B.IV-09 SEAT-KILOMETRE OFFERED**

Unit of measurement representing the movement of one seat available in a hired passenger road vehicle when performing the services for which it is primarily intended over one kilometre.

**B.IV-10 VEHICLE-KILOMETRE**

Unit of measurement representing the movement of a road vehicle over one kilometre.

*The distance to be considered is the distance actually run. It includes movements of empty road motor vehicles. Units made up of a tractor and a semi-trailer or a lorry and a trailer are counted as one vehicle.*

**B.IV-11 ENTRY OF A ROAD VEHICLE INTO A COUNTRY**

Any loaded or empty road motor vehicle which entered a country by road.

*If a road motor vehicle is entering the country by another mode of transport, only the active mode is considered to have entered that country.*

**B.IV-12 EXIT OF A ROAD VEHICLE FROM A COUNTRY**

Any loaded or empty road motor vehicle which leaves a country by road.

*If a road motor vehicle is leaving the country by another mode of transport, only the active mode is considered as leaving that country.*

**B.IV-13 TRANSIT OF A ROAD VEHICLE**

Any loaded or empty road motor vehicle, which enters and leaves the country at different points by whatever means of transport, provided the total journey within the country is by road and that there is no loading or unloading in the country.

*Road motor vehicles loaded/unloaded at the frontier of that country onto/from another mode of transport are included.*

**B.IV-14 SCHEDULED BUS AND COACH TRANSPORT**

Hired passenger road vehicle activities scheduled and performed according to a published timetable, or so regular and frequent as to constitute a recognizably systematic series.

*Transport may be provided by public or private enterprises.*

**B.IV-15 OCCASIONAL BUS AND COACH TRANSPORT**

Hired passenger road vehicle activities not covered by scheduled transport.

*This refers to coach tourism, including long distance and short distance, urban and interurban activities.*

**B.IV-16 URBAN TRANSPORT**

Transport inside an urban area (a city centre and its commuting zones).

*See J.III-01 for definition of Urban area.*

**B.IV-17 ANNUAL AVERAGE DAILY TRAFFIC (AADT)**

The total number of road motor vehicles passing a point of a road, in both directions, over a year, divided by 365.

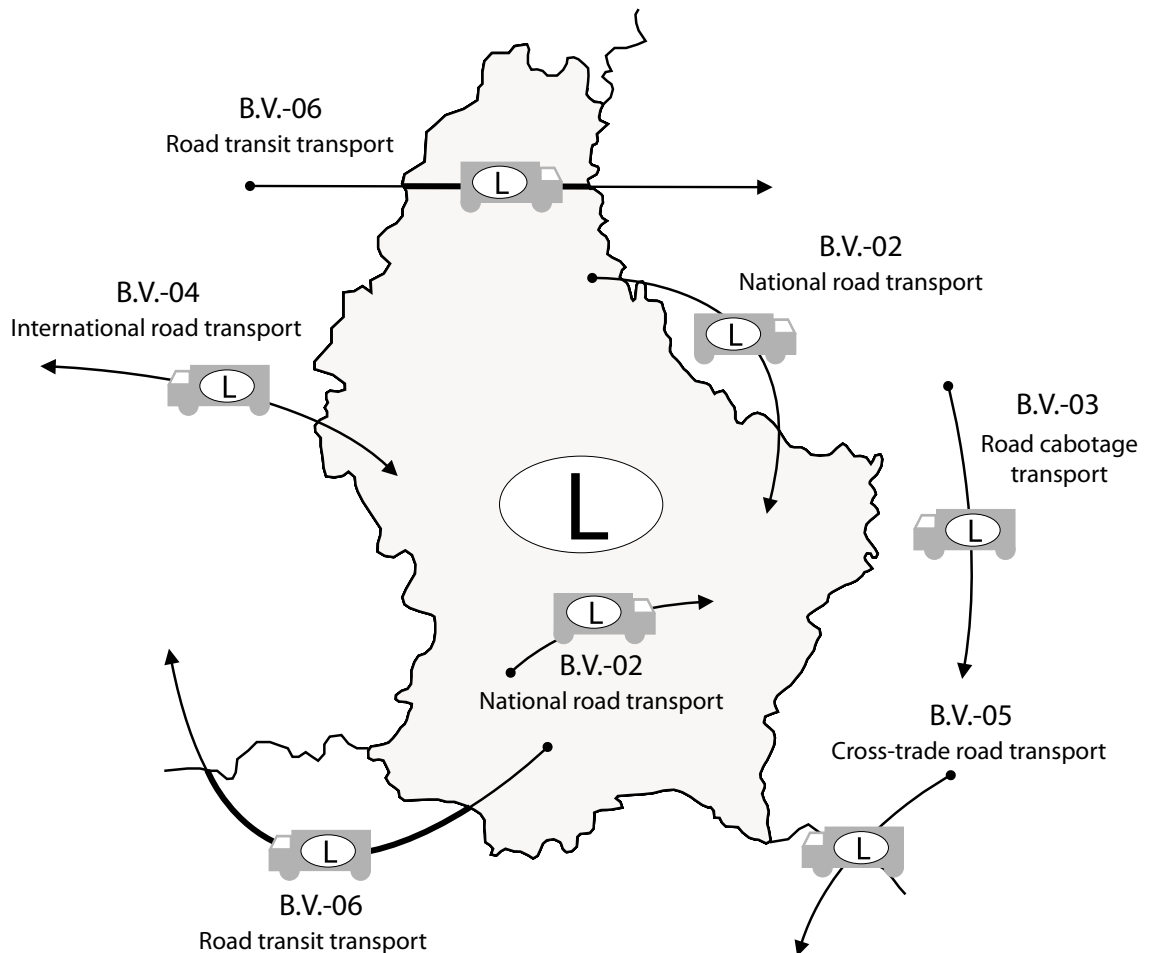
*Other types of traffic volume indicator may also be distinguished depending on analytical need. For example, annual average weekday daily traffic, annual average weekend daily traffic, peak-hour traffic, night traffic, and holiday traffic.*

## B.V TRANSPORT MEASUREMENT

### B.V-01 ROAD TRANSPORT

Any movements of goods and/or passengers using a road vehicle on a given road network.

*When a road vehicle is being carried on another vehicle, only the movement of the carrying vehicle (active mode) is considered.*



### B.V-02 NATIONAL ROAD TRANSPORT

Road transport between two places (a place of loading/embarkation and a place of unloading/ disembarkation) located in the same country irrespective of the country in which the road motor vehicle is registered. It may involve transit through a second country.

*Uncoupling of a trailer/semi-trailer from a road motor vehicle and coupling of the trailer/semi-trailer to another road motor vehicle is considered as unloading and loading of the goods in the trailer/semi-trailer.*

### B.V-03 ROAD CABOTAGE TRANSPORT

Road transport within a country other than the registration country, performed by a road motor vehicle registered in the reporting country.

**B.V-04 INTERNATIONAL ROAD TRANSPORT**

Road transport between a place of loading/embarkation or unloading/disembarkation in the declaring country and a place of loading/embarkation or unloading/disembarkation in another country.

*Such transport may involve transit through one or more additional countries.*

**B.V-05 CROSS-TRADE ROAD TRANSPORT**

Road transport performed by a road motor vehicle registered in one country between a place of loading/embarkation in a second country and a place of unloading/disembarkation in a third country.

*Such transport may involve transit through one or more additional countries.*

**B.V-06 ROAD TRANSIT TRANSPORT**

Road transport through a country between two places (a place of loading and a place of unloading) both located in another country or in other countries provided that the total journey within the country is by road and that there is no loading and unloading in that country.

*Road motor vehicles loaded/unloaded at the frontier of that country onto/from another mode of transport are included.*

**B.V-07 URBAN ROAD TRANSPORT**

Transport carried out on urban roads or tramways.

*Only transport mainly or solely performed on urban roads is considered to be urban transport.*

**B.V-08 ROAD PASSENGER**

Any person who makes a journey by a road vehicle. Drivers of passenger cars, excluding taxi drivers, are counted as passengers. Service staff assigned to buses, motor coaches, trolleybuses, trams and goods road vehicles are not included as passengers.

**B.V-09 ROAD PASSENGER-KILOMETRE**

Unit of measurement representing the transport of one passenger by road over one kilometre.

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

**B.V-10 ROAD PASSENGER TRIP**

The combination between the place of embarkation and the place of disembarkation of passengers conveyed by a road vehicle.

*A passenger transfer from one vehicle directly to another one of the same kind, regardless of the undertaking, shall not be regarded as disembarkation / embarkation. Whenever during the transfer another mode of transport is used, this is to be regarded as disembarkation from a vehicle followed by a subsequent embarkation on another vehicle.*

**B.V-11 PUBLIC ROAD TRANSPORT**

Public road transport covers passenger transport by bus or tram in scheduled service, whether operated by a public or private enterprise.

**B.V-12 ROAD PASSENGER TRIP ON PUBLIC ROAD TRANSPORT**

The combination between the place of embarkation and the place of disembarkation of passengers conveyed by bus or tram.

*A passenger transfer from one vehicle directly to another one of the same kind, regardless of the undertaking, shall not be regarded as disembarkation/embarkation. Whenever during the transfer another mode of transport is used, this is to be regarded as disembarkation from a vehicle followed by a subsequent embarkation on another vehicle.*

**B.V-13 ROAD PASSENGER EMBARKED ON A PUBLIC TRANSPORT ROAD VEHICLE**

Passenger who boards a road vehicle to be conveyed by it.

*A passenger transfer from one vehicle directly to another one of the same kind, regardless of the undertaking, shall not be regarded as disembarkation/embarkation. Whenever during the transfer another mode of transport is used, this is to be regarded as disembarkation from a vehicle followed by a subsequent embarkation on another vehicle.*

**B.V-14 ROAD PASSENGER DISEMBARKED FROM A PUBLIC TRANSPORT ROAD VEHICLE**

A passenger alighting from a road vehicle after having been conveyed by it.

*A passenger transfer from one vehicle directly to another one of the same kind, regardless of the undertaking, shall not be regarded as disembarkation/embarkation. Whenever during the transfer another mode of transport is used, this is to be regarded as disembarkation from a vehicle followed by a subsequent embarkation on another vehicle.*

**B.V-15 ROAD PASSENGER TRANSPORT LINK**

The combination of the place of embarkation and the place of disembarkation of the passengers conveyed by road whichever itinerary is followed.

*Places are defined by using international classification systems such as NUTS (Nomenclature of Territorial Units for Statistics–Eurostat).*

**B.V-16 PLACE OF EMBARKATION**

The place taken into account is the place where the passenger boarded a road vehicle to be conveyed by it.

*A passenger transfer from one vehicle directly to another one of the same kind, regardless of the undertaking, shall if possible not be regarded as disembarkation/embarkation. Whenever during the transfer another mode of transport is used, this is to be regarded as disembarkation from a vehicle followed by a subsequent embarkation on another vehicle.*

**B.V-17 PLACE OF DISEMBARKATION**

The place taken into account is the place where the passenger alighted from a road vehicle after having been conveyed by it.

*A passenger transfer from one vehicle directly to another one of the same kind, regardless of the undertaking, shall if possible not be regarded as disembarkation/embarkation. Whenever during the transfer another mode of transport is used, this is to be regarded as disembarkation from a vehicle followed by a subsequent embarkation on another vehicle.*

**B.V-18 GOODS CARRIED BY ROAD**

Any goods moved by road goods vehicles.

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

**B.V-19 GROSS-GROSS WEIGHT OF GOODS**

The total weight of the goods carried, all packaging and the tare weight of the transport unit (e.g. containers, swap bodies and pallets for containing goods).

**B.V-20 GROSS WEIGHT OF GOODS**

The total weight of goods carried, including packaging but excluding the tare weight of the transport unit (e.g. containers, swap bodies and pallets for containing goods).

**B.V-21 TARE WEIGHT**

The weight of a transport unit (e.g. containers, swap-bodies and pallets for containing goods) before any cargo is loaded.

**B.V-22 TONNE-KILOMETRE BY ROAD**

Unit of measurement of goods transport which represents the transport of one tonne by road over one kilometre.

*The distance to be taken into consideration is the distance actually run.*

**B.V-23 TEU-KILOMETRE BY ROAD**

Unit of measurement of container transport which represents the transport of one TEU by road over one kilometre.

*The distance to be taken into consideration is the distance actually run.*

**B.V-24 TYPES OF GOODS CARRIED**

Goods in transport may be classified according to type.

*Examples of classification schemes are NST 2007 (Standard Goods Nomenclature for Transport Statistics) that replaces the CSTE nomenclature (Commodity Classification for Transport Statistics in Europe–UNECE) and the NST/R nomenclature (Standard Goods Nomenclature for Transport Statistics/ revised–Eurostat).*

**B.V-25 TYPES OF CARGO CARRIED**

Goods in transport may be classified according to the UNECE – Codes for types of cargo, packages and packaging materials, Recommendation 21, Geneva March 1986. The cargo classes are:

- Liquid bulk;
- Solid bulk;
- Large freight container;
- Other freight container;
- Palletised goods;
- Pre-slung goods;
- Mobile, self-propelled units;
- Other mobile units;
- Other cargo types.

**B.V-26 DANGEROUS GOODS**

The classes of dangerous goods carried by road are those defined by the UN Recommendations on the Transport of Dangerous Goods:

- Class 1: Explosives;
- Class 2: Gases;
- Class 3: Flammable liquids;
- Class 4: Flammable solids; substances liable to spontaneous combustion; substances which, on contact with water, emit flammable gases;
- Class 5: Oxidizing substances and organic peroxides;
- Class 6: Toxic and infectious substances;
- Class 7: Radioactive material;
- Class 8: Corrosive substances;
- Class 9: Miscellaneous dangerous substances and articles, including environmentally hazardous substances.

**B.V-27 GOODS LOADED**

Goods placed on a road vehicle and dispatched by road.

*Transshipment from one goods road vehicle to another or change of the road tractor are regarded as loading after unloading.*

**B.V-28 GOODS UNLOADED**

Goods taken off a road vehicle after transport by road.

*Transshipment from one goods road vehicle to another or change of the road tractor are regarded as unloading before reloading.*

**B.V-29 GOODS HAVING LEFT THE COUNTRY BY ROAD (OTHER THAN GOODS IN TRANSIT BY ROAD THROUGHOUT)**

Goods which having been loaded on a road vehicle in the country, left the country by road and were unloaded in another country.

**B.V-30 GOODS HAVING ENTERED THE COUNTRY BY ROAD (OTHER THAN GOODS IN TRANSIT BY ROAD THROUGHOUT)**

Goods which, having been loaded on a road vehicle in another country, entered the country by road and were unloaded there.

**B.V-31 GOODS IN TRANSIT BY ROAD THROUGHOUT**

Goods which entered the country by road and left the country by road at a point different from the point of entry, after having been carried across the country in the same goods road motor vehicle.

*Transshipment from one goods road vehicle to another or change of the road tractor are regarded as loading/ unloading.*

**B.V-32 GOODS ROAD TRANSPORT LINK**

The combination of the place of loading and the place of unloading of the goods transported by road whichever itinerary is followed.

*Places are defined by using international classification systems such as NUTS (Nomenclature of Territorial Units for Statistics–Eurostat).*

**B.V-33 PLACE OF LOADING**

The place taken into account for loading is the place where the goods were loaded on a goods road motor vehicle or where the road tractor has been changed.

**B.V-34 PLACE OF UNLOADING**

The place taken into account is the place where the goods were unloaded from a goods road motor vehicle or where the road tractor has been changed.

**B.VI ACCIDENTS****B.VI-01 INJURY ACCIDENT**

Any accident involving at least one road vehicle in motion on a public road or private road to which the public has right of access, resulting in at least one injured or killed person.

*A suicide or an attempted suicide is not an accident but an incident caused by a deliberate act to injure oneself fatally. However, if a suicide or an attempted suicide causes injury to another road user, then the incident is regarded as an injury accident.*

*Included are: collisions between road vehicles; between road vehicles and pedestrians; between road vehicles and animals or fixed obstacles and with one road vehicle alone. Included are collisions between road and rail vehicles. Multi-vehicle collisions are counted as only one accident provided that any successive collisions happen within a very short time period. Injury accidents exclude accidents incurring only material damage.*

*Excluded are terrorist acts.*



**B.VI-02 FATAL ACCIDENT**

Any injury accident resulting in a person killed.

**B.VI-03 NON-FATAL ACCIDENT**

Any injury accident other than a fatal accident.

**B.VI-04 CASUALTY**

Any person killed or injured as a result of an injury accident.

**B.VI-05 PERSON KILLED**

Any person killed immediately or dying within 30 days as a result of an injury accident, excluding suicides.

*A killed person is excluded if the competent authority declares the cause of death to be suicide, i.e. a deliberate act to injure oneself resulting in death. For countries that do not apply the threshold of 30 days, conversion coefficients are estimated so that comparisons on the basis of the 30 day-definition can be made.*

**B.VI-06 PERSON INJURED**

Any person who as result of an accident was not killed immediately or not dying within 30 days, but sustained an injury, normally needing medical treatment, excluding attempted suicides.

*Persons with lesser wounds, such as minor cuts and bruises are not normally recorded as injured.*

*An injured person is excluded if the competent authority declares the cause of the injury to be attempted suicide by that person, i.e. a deliberate act to injure oneself resulting in injury, but not in death.*

**B.VI-07 PERSON SERIOUSLY INJURED**

Any person injured who was hospitalised for a period of more than 24 hours.

**B.VI-08 PERSON SLIGHTLY INJURED**

Any person injured excluding persons killed or seriously injured.

*Persons with lesser wounds, such as minor cuts and bruises are not normally recorded as injured.*

**B.VI-09 MAXIMUM ABBREVIATED INJURY SCALE (MAIS)**

The Maximum Abbreviated Injury Scale is a medical classification on the severity of injuries.

MAIS 1-2 is regarded as slight injuries and 3-6 as serious injuries.

*Other classifications can be used if they can be transcoded to MAIS.*

**B.VI-10 DRIVER INVOLVED IN AN INJURY ACCIDENT**

Any person involved in an injury accident who was driving a road vehicle at the time of the accident.

**B.VI-11 PASSENGER INVOLVED IN AN INJURY ACCIDENT**

Any person involved in an injury accident, other than a driver, who was in or on a road vehicle, or in the process of getting in or out of a road vehicle.

**B.VI-12 PEDESTRIAN INVOLVED IN AN INJURY ACCIDENT**

Any person involved in an injury accident other than a passenger or driver as defined above.

*Included are occupants or persons pushing or pulling a child's carriage, an invalid chair, or any other small vehicle without an engine. Also included are persons pushing a cycle, moped, roller-skating, skateboarding, skiing or using similar devices.*

**B.VI-13 ACCIDENT BETWEEN ROAD VEHICLE AND PEDESTRIAN**

Any injury accident involving one or more road vehicle and one or more pedestrian.

*Included are accidents irrespective of whether a pedestrian was involved in the first or a later phase of the accident and whether a pedestrian was injured or killed on or off the road.*

**B.VI-14 SINGLE-VEHICLE ROAD ACCIDENT**

Any injury accident in which only one road vehicle is involved.

*Included are accidents of vehicles trying to avoid collision and veering off the road, or accidents caused by collision with obstruction or animals on the road. Excluded are collisions with pedestrians and parked vehicles.*

**B.VI-15 MULTI-VEHICLE ROAD ACCIDENT**

Any injury accident involving two or more road vehicles.

The following types of injury accidents involving two or more road vehicles are:

- a) Rear-end collision: collision with another vehicle using the same lane of a carriageway and moving in the same direction, slowing or temporarily halted.

*Excluded are collisions with parked vehicles.*

- b) Head-on collision: collision with another vehicle using the same lane of a carriageway and moving in the opposite direction, slowing or temporarily halted.

*Excluded are collisions with parked vehicles.*

- c) Collision due to crossing or turning: collision with another vehicle moving in a lateral direction due to crossing, leaving or entering a road.

*Excluded are collisions with vehicles halted and waiting to turn which should be classified under (a) or (b).*

- d) Other collisions, including collisions with parked vehicles: collision occurring when driving side by side, overtaking or when changing lanes; or collision with a vehicle which has parked or stopped at the edge of a carriageway, on shoulders, marked parking spaces, footpaths or parking sites, etc.

*Included in B.VI-15 (d) are all collisions not covered by (a), (b) and (c). The constituent element for classification of accidents between vehicles is the first collision on the carriageway, or the first mechanical impact on the vehicle.*

**B.VI-16 ACCIDENT WITH DRIVERS REPORTED UNDER THE INFLUENCE OF ALCOHOL, DRUGS OR MEDICATION**

Any injury accident where at least one driver is reported to be under the influence of alcohol, drugs or medication impairing driving ability, according to national regulations.

**B.VI-17 SUICIDE**

An act to deliberately injure oneself resulting in death, as recorded and classified by the competent national authority.

Designation of individual suicide must be determined by a coroner, public police officer or other public authority.

*Attempted suicide as an act of deliberately injuring oneself (not leading to the death) is excluded.*

*Only the death of the individual(s) who committed suicide is to be reported as suicide. Therefore, a fatality caused to a person by another person who committed suicide or who attempted to commit suicide is not to be reported as a suicide.*

**B.VI-18 ATTEMPTED SUICIDE (SEE A.VI-21)**

Act to deliberately injure oneself resulting in serious injury, but not in death, as recorded and classified by the competent national authority.

C

# Inland waterway transport







## C. Inland waterway transport

### C.I INFRASTRUCTURE

#### C.I-01 WATERWAY

River, canal, lake or other stretch of water which by natural or man-made features is suitable for navigation.

*Waterways of a maritime character (waterways designated by the declaring country as suitable for navigation primarily by sea-river vessels) are included. Waterways also include river estuaries; the boundary being that point nearest the sea where the width of the river is both less than 3 km at low water and less than 5 km at high water.*

#### C.I-02 NAVIGABLE INLAND WATERWAY

A stretch of water, not part of the sea, which by natural or man-made features is suitable for navigation, primarily by inland waterway vessels. This term covers navigable rivers, lakes, canals and estuaries.

*The length of rivers and canals is measured in mid-channel. The length of lakes and lagoons is measured along the shortest navigable route between the most distant points to and from which transport operations are performed. A waterway forming a common frontier between two countries is reported by both.*

#### C.I-03 NAVIGABLE RIVER

Natural waterway open for navigation, irrespective of whether it has been improved for that purpose.

#### C.I-04 NAVIGABLE LAKE

Natural expanse of water open for navigation.

*Lagoons (brackish water area separated from the sea by a coastal bank) are included.*

#### C.I-05 NAVIGABLE CANAL

Waterway built primarily for navigation.

#### C.I-06 NAVIGABLE INLAND WATERWAY NETWORK

All navigable inland waterways open for public navigation in a given area.



### **C.I-07 CATEGORIES OF NAVIGABLE INLAND WATERWAYS**

Taking into account the 1992 UNECE/ECMT Classification of European Inland Waterways, canals, navigable rivers and lakes the different categories are defined as follows:

By horizontal dimensions of vessels and pushed convoys:

Class	(length/beam)
I to III	Up to 80/9 m.
IV	80-85/9.50 m.
V a	95-110/11.40 m.
V b	172-185/11.40 m.
VI a	95-110/22.80 m.
VI b	185-195/22.80 m.
VI c	270-280/22.80 or 195-200/33-34.20 m.
VII	285/33-34.20 m and over.

*In some cases the 'carrying capacity of vessels' may be used to classify the navigable inland waterways.*

### **C.I-08 INLAND WATERWAY PORT (ALSO E.I-05)**

An area of land and water made up of such infrastructure and equipment so as to permit, principally, the reception of waterborne vessels, their loading and unloading, the storage of goods, the receipt and delivery of those goods and the embarkation and disembarkation of passengers, crew and other persons and any other infrastructure necessary for transport operators within the port area.

### **C.I-09 INLAND WATERWAY STATISTICAL PORT (ALSO E.I-06)**

A statistical port consists of one or more ports, normally controlled by a single port authority or Harbour Master's Office, able to record ship and cargo movements.

### **C.I-10 UN/LOCODE (ALSO E.I-08)**

5 character code where the first two characters are the ISO 3166-1 alpha 2 country codes which can be followed by a blank and 3-character code for the place name (see Recommendation 16 from the UNECE), together with Eurostat supplied codes for ports not yet included in the UN system.

### **C.I-11 PORT QUAY LENGTHS**

Total quay length in metres.

### **C.I-12 RO-RO BERTH (ALSO E.I-14)**

A location at which a Ro-Ro vessel can berth and load and unload motor vehicles and other mobile Ro-Ro units via ramps from ship to shore and vice versa.



**C.I-13 PORT CRANES BY LIFTING CAPACITY (ALSO E.I-15)**

Number of cranes available in ports by lifting capacity.

*Possible classes of lifting capacity are as follows:*

- a) 10 tonnes or less;
- b) Greater than 10 tonnes and up to 20 tonnes;
- c) Greater than 20 tonnes and up to 40 tonnes;
- d) Greater than 40 tonnes.

**C.I-14 PORT CRANES BY TYPE (ALSO E.I-16)**

Number of cranes available in ports by type:

- a) Mobile container cranes;
- b) Other container cranes;
- c) Other crane.

**C.I-15 CONNECTIONS TO OTHER MODES OF TRANSPORT**

Availability and distance from ports to connections to other modes of transport in km:

- a) Maritime shipping;
- b) Passenger rail connection;
- c) Freight rail connection;
- d) Motorway access;
- e) Airport.

**C.I-16 MOORING/LANDING PLACE**

A place solely for vessels to embark or disembark passengers, not part of an inland port.

**C.I-17 LOCK**

An enclosure in an inland waterway with gates at each end to enable the water level to be raised or lowered to allow vessels to pass through. Lift locks are included.

*Lift lock is a machine for transporting vessels between water at two different elevations.*

**C.I-18 PASSENGER PORT**

A port with facilities to embark and disembark passengers. Such ports may also provide services such as water and electricity supply, clearance of waste etc.

**C.I-19 TRANSPORT PASSENGER STOP**

A place for passenger transport vessels to moor to embark and/or disembark passengers using the transport network.



## C.II TRANSPORT EQUIPMENT (VESSELS)

### C.II-01 INLAND WATERWAYS VESSEL

A floating craft designed for the carriage of goods, public transport of passengers or specially fitted out for a specific commercial duty which navigates predominantly in navigable inland waterways or in waters within, or closely adjacent to sheltered waters or areas where port regulations apply.

*Vessels under repair are included. Vessels suitable for inland navigation but which are authorised to navigate at sea (mixed seagoing and inland waterway vessels) are included. This category excludes: harbour craft, seaport lighters and seaport tugs, ferries, fishery vessels, dredgers, vessels performing hydraulic work and vessels used exclusively for storage, floating workshops, houseboats and pleasure craft.*

### C.II-02 NATIONAL INLAND WATERWAYS VESSEL

Inland waterway transport (IWT) vessel which is registered at a given date in the declaring country.

*Where registration of IWT vessels does not apply in a specific country, a national IWT vessel is a vessel owned by a company tax resident in that country.*

### C.II-03 FOREIGN INLAND WATERWAYS VESSEL

IWT vessel which is registered at a given date in a country other than the declaring country.

### C.II-04 FLUVIO-MARITIME (SEA-RIVER) VESSEL

Any IWT vessel designed and authorised to operate also as a sea going vessel.

### C.II-05 INLAND WATERWAYS FREIGHT VESSEL

Vessel with a carrying capacity of not less than 20 tonnes designed for the carriage of freight by navigable inland waterways.

### C.II-06 INLAND WATERWAYS CONTAINER VESSEL

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

### C.II-07 INLAND WATERWAYS PASSENGER VESSEL

Vessel designed specifically to carry more than 12 fare-paying passengers by navigable inland waterways.

### C.II-08 INLAND WATERWAYS RIVER CRUISE VESSEL

An inland waterways passenger vessel travelling primarily on rivers and intended to provide passengers with a full tourist experience. All passengers have cabins for overnight stay. Facilities for entertainment aboard are included. Vessels operating ferry services are excluded. In addition, cargo-carrying vessels able to carry a very limited number of passengers with their own cabins are also excluded. River cruise vessels stop at multiple ports along their way and may also operate on lakes and canals in the course of their cruises.

### C.II-09 INLAND WATERWAYS DAY TRIP VESSEL

An inland waterways passenger vessel designed to provide passengers with a short excursion for touristic purposes. Such excursions cover periods up to one day, shorter part-day trips, sightseeing trips and moonlight cruises. The vessel is not equipped with cabins for all the passengers. Catering may be provided. For moonlight cruises, the boats may spend a night out of port, however passengers are not provided with cabins.



**C.II-10 INLAND WATERWAYS FERRY**

An inland waterways passenger vessel designed to transport passengers across or along waterways.

There are two main types:

- Cross waterway ferry—Transport for passengers and possibly vehicles between two ports on either side of a waterway.
- Along waterway ferry—Transport for passengers and possibly vehicles to a range of ports along a waterway.

**C.II-11 URBAN INLAND WATERWAY TRANSPORT VESSEL**

An inland waterways transport vessel operating an urban inland waterway transport service.

**C.II-12 WATER BUS**

An inland waterways ferry designed to transport passengers only on a public scheduled service.

*In North America may be referred to as a water taxi.*

**C.II-13 WATER TAXI**

An inland waterways passenger vessel with limited passenger capacity operating on demand public passenger transport within and around an urban or similar area.

*The passenger carrying capacity of a water taxi will rarely exceed 20 persons.*

**C.II-14 INLAND WATERWAY FLEET**

Number of IWT vessels registered at a given date in a country and authorised to use inland waterways.

*Changes in the fleet refer to changes, in total or within a vessel type, in the inland waterway fleet of the reporting country, resulting from new construction, modification in type or capacity, purchases or sales abroad, scrapping, casualties, or transfers to or from the maritime register.*

**C.II-15 SELF-PROPELLED VESSEL**

Any powered inland waterways freight vessel, other than self-propelled tanker barges.

*Towed barges, pushed barges and pushed-towed barges which have an auxiliary engine only must be regarded as towed barges, pushed barges or pushed-towed barges as the case may be. The fact that a self-propelled barge can be used for towing does not change its nature.*

**C.II-16 SELF-PROPELLED TANKER**

A self-propelled vessel intended for the bulk transport of liquids or gases in fixed tanks.

*Tankers for the transport in bulk of powdered products such as cement, flour, plaster, etc., are to be excluded and are to be counted among self-propelled pushers.*

**C.II-17 SELF-PROPELLED PUSHER**

Self-propelled vessel designed or fitted to push pushed or pushed-towed barges.

*A self-propelled pusher can carry goods.*

**C.II-18 TOWED (DUMB) BARGE**

Inland waterway freight vessel designed to be towed which does not have its own means of mechanical propulsion.

*The fact that a dumb barge is fitted with an auxiliary engine does not change its nature.*



**C.II-19 PUSHED-TOWED BARGE**

An inland waterways freight vessel which is designed to be either pushed or towed and does not have its own means of mechanical propulsion.

*The fact that a pushed-towed barge is fitted with an auxiliary engine does not change its nature.*

**C.II-20 TOWED (DUMB) TANKER BARGE**

Dumb barge for the bulk transport of liquids or gases.

*Tankers for the transport in bulk of powdered products such as cement, flour, plaster, etc., are to be excluded and are to be counted among towed (dumb) barges.*

*The fact that a dumb barge may be fitted with an auxiliary engine does not change its nature.*

**C.II-21 PUSHED-TOWED TANKER BARGE**

Pushed-towed barge for the bulk transport of liquids or gases.

*Tankers for the transport in bulk of powdered products such as cement, flour, plaster etc., are to be excluded and are to be counted among pushed-towed barges.*

**C.II-22 OTHER CARGO CARRYING VESSEL**

Any other inland waterways freight vessel intended for carrying any cargo not covered in the previous categories.

**C.II-23 RIVER TUG**

Powered vessel developing not less than 37 kW and designed for the manoeuvring of vessels and barges and the towing of dumb barges and rafts, but not for the carriage of cargo.

*Also known as a tugboat.*

*Port and sea tugs are excluded.*

**C.II-24 RIVER PUSHER TUG**

Powered vessel developing not less than 37 kW and designed or fitted for pushing barges but not for the carriage of cargo.

*Also known as a towboat or pushboat.*

*Port and sea tugs are excluded.*

**C.II-25 CARRYING CAPACITY OF AN IWT FREIGHT VESSEL**

Maximum authorised weight of goods, expressed in tonnes, which a vessel may carry.

**C.II-26 CAPACITY OF AN IWT PASSENGER VESSEL**

Maximum authorised number of passengers that a vessel may carry.

**C.II-27 POWER (KW)**

Mechanical force developed by the motive power installation in a vessel.

*This power should be measured in effective kilowatts (power transmitted to the propeller): 1 kW=1.36 h.p.; 1 h.p. = 0.735 kW.*

**C.II-28 YEAR OF CONSTRUCTION OF VESSEL**

Year of original construction of the hull.



## C.III ENTERPRISES, INVESTMENT AND MAINTENANCE

### C.III-01 INLAND WATERWAYS TRANSPORT (IWT) ENTERPRISE

Enterprise carrying out in one or more places activities for the production of IWT services using IWT vessels and whose main activities according to the value added is inland waterway transport and services allied to inland waterway transport.

*In terms of activity classifications the following classes are involved:*

- ISIC/Rev.4: Class 50.2 – Inland water transport
- NACE/Rev.2: Class 50.3 – Inland passenger water transport  
Class 50.4 – Inland freight water transport

### C.III-02 PUBLIC INLAND WATERWAYS ENTERPRISE

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

### C.III-03 INLAND WATERWAYS PORT ENTERPRISE

An enterprise carrying out in one or more places the provision of inland waterway port services and the main activity of which according to value added is the provision of inland waterway port services. Pleasure port enterprises are excluded.

*In terms of activity classifications, the following classes are involved:*

- ISIC/Rev.4: Class 52.22 – Service activities incidental to water transportation  
Class 52.24 – Cargo handling
- NACE/Rev.2: Class 52.22 – Service activities incidental to water transportation  
Class 52.24 – Cargo handling

*Note: ISIC 9329 and NACE 93.29 include pleasure port activities.*

### C.III-04 PUBLIC INLAND WATERWAYS PORT ENTERPRISE

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

### C.III-05 INVESTMENT EXPENDITURE ON IWT INFRASTRUCTURE

Capital expenditure on new inland waterways infrastructure or extension of existing inland waterways, including reconstruction, renewal (major substitution work on the existing infrastructure which does not change its overall performance) and upgrades (major modification work improving the original performance or capacity of the infrastructure) renewal and upgrades or major repairs (repairs improving the original performance or capacity of the infrastructure).

*Infrastructure includes land, channels and permanent way constructions, buildings, navigation locks, mooring equipment, toll collection installations, as well as immovable fixtures, fittings and installations connected with them (signalisation, telecommunications, etc.) as opposed to IWT vessels.*

### C.III-06 INVESTMENT EXPENDITURE ON IWT VESSELS

Capital expenditure to purchase IWT vessels or to upgrade existing ones.

### C.III-07 MAINTENANCE EXPENDITURE ON IWT INFRASTRUCTURE

Non-capital expenditure to maintain the original condition and capacity of the existing IWT infrastructure.



### **C.III-08 MAINTENANCE EXPENDITURE ON IWT VESSELS**

Non-capital expenditure to maintain IWT vessels in working order without improving either their performance or their capacity.

### **C.III-09 IWT CAPITAL STOCK**

An estimated monetary value reflecting the current stock of physical IWT infrastructure assets.

*For statistical purposes it is recommended to use the net capital value which takes into account depreciation.*

*There are various methods such as "the replacement cost method" or the "Perpetual Inventory Method (PIM)" that provide the net value of the assets.*

## **C.IV TRAFFIC**

### **C.IV-01 INLAND WATERWAY TRAFFIC**

Any movement of an IWT vessel on a given IWT network.

*When a vessel is being carried on another vehicle, only the movement of the carrying vehicle (active mode) is taken into account.*

### **C.IV-02 INLAND WATERWAY TRAFFIC ON NATIONAL TERRITORY**

Any movement of an IWT vessel within a national territory irrespective of the country in which the vessel is registered.

### **C.IV-03 UNLADEN INLAND WATERWAY TRAFFIC**

Any movement of an IWT freight vessel for which the gross-gross weight of goods carried, including that of equipment such as containers, swap bodies and pallets, is nil; as well as any movement of an IWT passenger vessel without passengers.

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

### **C.IV-04 INLAND WATERWAY FERRY SERVICE**

A ferry service is a regular short service between two ports or mooring/landing places, with or without intermediate calls. These operate either:

- (i) according to a published timetable; or
- (ii) with crossings so regular or frequent that they constitute a recognisably systematic series.

### **C.IV-05 URBAN INLAND WATERWAY TRANSPORT SERVICE**

A scheduled inland waterways public transport service for commuter and other local traffic within an urban area, operating throughout the year.

*Services ensuring the connectivity between settlements relatively close to each other in a defined geographical area by inland waterways are also included in this definition, e.g. the services in the Danube Delta.*

*For urban areas, operations within the urban area limits are included while for interurban services the boundary would need to be determined on a case to case basis.*

### **C.IV-06 INLAND WATERWAY JOURNEY**

Any movement of an IWT vessel from a specified point of origin to a specified point of destination.

*Journey can be divided in a number of stages or sections.*



#### C.IV-07 VESSEL-KILOMETRE

Unit of measurement representing the movement of an IWT vessel over one kilometre.

The distance taken into account is the distance actually run. Movements of unladen vessels are included. In a convoy, each unit is counted as a vessel.

#### C.IV-08 INLAND WATERWAY CONVOY

One or more non-powered IWT vessels which are towed or pushed by one or more powered IWT vessels, including side-by-side formations.



#### C.IV-09 TONNE-KILOMETRE OFFERED

Unit of measurement representing the movement of one tonne of capacity available in an IWT freight vessel when performing the services for which it is primarily intended over one kilometre.

*The distance to be considered is the distance actually run.*

#### C.IV-10 SEAT-KILOMETRE OFFERED

Unit of measurement representing the movement over one kilometre of one seat available in an IWT passenger vessel when performing the services for which it is primarily intended over one kilometre.

*The distance to be considered is the distance actually run.*

#### C.IV-11 ENTRY OF AN IWT VESSEL

Any laden or unladen IWT vessel which entered the country by inland waterway.

*If an IWT vessel is entering the country by another mode of transport, only the active mode is considered to have entered that country.*

#### C.IV-12 EXIT OF AN IWT VESSEL

Any laden or unladen IWT vessel which left the country by inland waterway.

*If an IWT vessel is leaving the country by another mode of transport, only the active mode is considered as leaving that country.*

#### C.IV-13 TRANSIT OF AN IWT VESSEL

Any loaded or empty IWT vessel, which enters and leaves the country at different points by whatever means of transport, provided the total journey within the country is by inland waterways and that there is no loading or unloading in the country.

*IWT vessels loaded/unloaded at the frontier of that country onto/from another mode of transport are included.*



## C.V TRANSPORT MEASUREMENT

### C.V-01 INLAND WATERWAY TRANSPORT (IWT)

Any movement of goods and/or passengers using IWT vessels which is undertaken wholly or partly on navigable inland waterways.

*Bunkers and stores supplied to vessels in port are excluded. When an IWT vessel is being carried on another vehicle, only the movement of the carrying vehicle (active mode) is taken into account.*

### C.V-02 NATIONAL INLAND WATERWAY TRANSPORT

Any movement of goods and/or passengers using an Inland Waterways Transport (IWT) vessel between two places (a place of loading/embarkation and a place of unloading/disembarkation) within a national territory irrespective of the country in which the IWT vessel is registered. It may involve transit through a second country, although for this country this transport has to be reported as transit.

### C.V-03 INLAND MOVEMENT

Any movement of goods and/or passengers to and from inland ports connected by water routes which may be made navigable by one or more lock structures.

### C.V-04 INLAND WATERWAY CABOTAGE TRANSPORT

National IWT performed by an IWT vessel registered in another country.

### C.V-05 INTERNATIONAL INLAND WATERWAY TRANSPORT

Inland waterway transport between two places (a place of loading/embarkation and a place of unloading/disembarkation) located in two different countries. It may involve transit through one or more additional countries. For the latter countries this transport has to be reported as transit.

### C.V-06 CROSS-TRADE INLAND WATERWAY TRANSPORT

Inland waterway transport conducted by an enterprise of one country between a place of loading/embarkation in a second country and a place of unloading/disembarkation in a third country.

*Such transport may involve transit through one or more additional country or countries.*

### C.V-07 SEA-RIVER TRANSPORT (SEE E.V-02)

A transport operation partly by inland waterways and partly by sea, without transshipment. It can be operated by inland waterway vessel or seagoing ships.

*Any inland waterway vessel undertaking such transport will need to have the appropriate authorisation permitting it to operate at sea.*

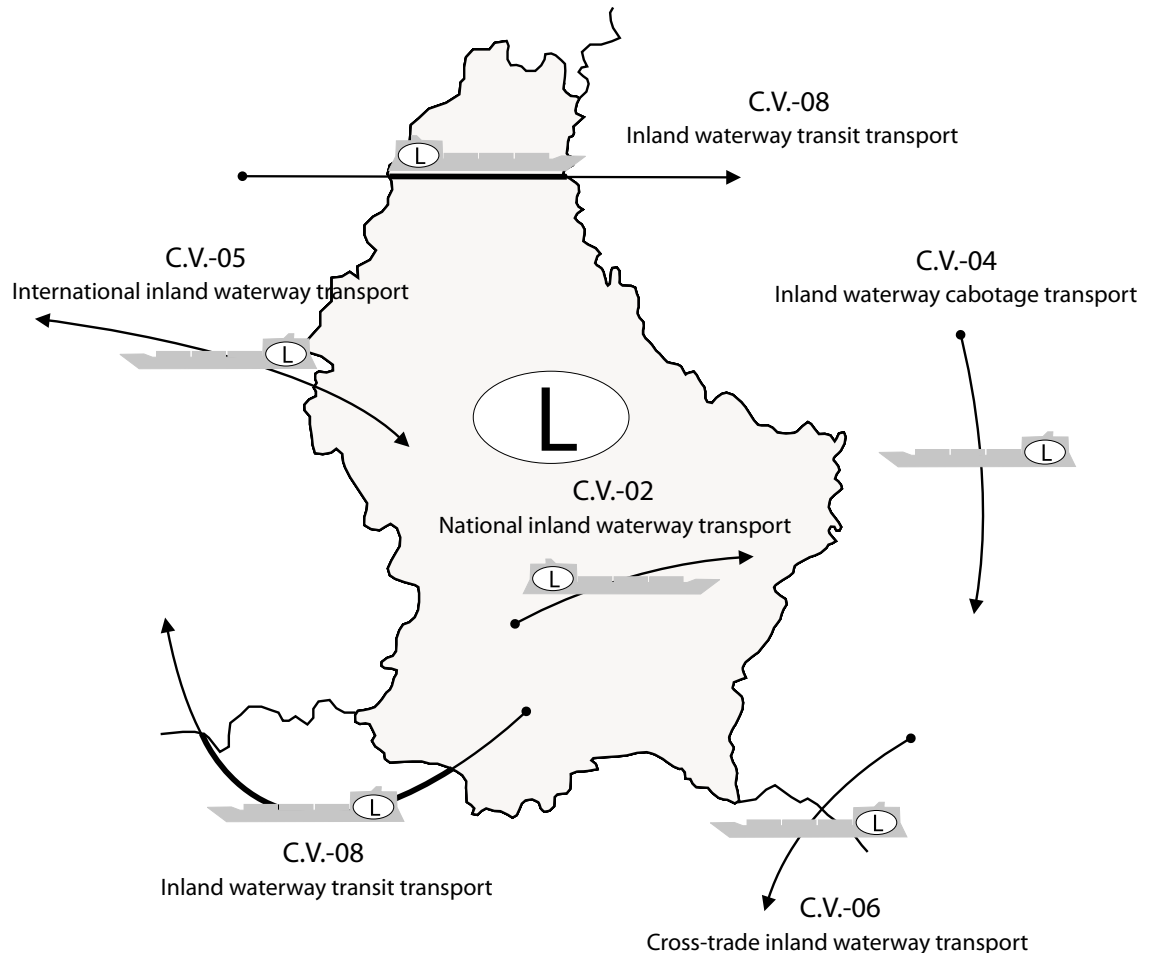
*Also known as fluvio-maritime transport in the Maritime chapter.*



### C.V.08 INLAND WATERWAY TRANSIT TRANSPORT

Inland waterway transport through a country between two places (a place of loading/embarkation and a place of unloading/disembarkation) both located in another country or in other countries provided that the total journey within the country is by inland waterways and that there is no loading/embarkation and unloading/disembarkation operation in the transit country.

*IWT vessels loaded/unloaded at the frontier of that country onto/from another mode of transport are included.*



### C.V-09 URBAN INLAND WATERWAY TRANSPORT

Transport carried out on inland waterways located within the boundaries of an urban area.

*Only transport carried out mainly or solely on inland waterways located within the boundaries of a built-up area is regarded as urban transport.*

### C.V-10 INLAND WATERWAYS PASSENGER

Any person who makes a journey on board of an IWT vessel. Service staff assigned to IWT vessels are not regarded as passengers.

### C.V-11 PASSENGER-KILOMETRE BY INLAND WATERWAYS

Unit of measurement representing the transport of one passenger by inland waterways over one kilometre.

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



**C.V-12 INLAND WATERWAY PASSENGER EMBARKED**

Passenger who boards an IWT vessel to be conveyed by it.

*A transfer from one IWT vessel to another is regarded as embarkation after disembarkation.*

**C.V-13 INLAND WATERWAY PASSENGER DISEMBARKED**

A passenger disembarking from an IWT vessel after having been conveyed by it.

*A transfer from one IWT vessel to another is regarded as disembarkation before re-embarkation.*

**C.V-14 INLAND WATERWAY PASSENGER TRANSPORT LINK**

The combination of the place of embarkation and the place of disembarkation of the passenger conveyed by inland waterways whichever itinerary is followed.

*Places are defined by using international classification systems such as NUTS (Nomenclature of Territorial Units for Statistics – Eurostat).*

**C.V-15 PLACE OF EMBARKATION**

The place taken into account is the place where the passenger boarded an IWT vessel to be conveyed by it.

*A transfer from one IWT vessel to another is regarded as embarkation after disembarkation.*

**C.V-16 PLACE OF DISEMBARKATION**

The place taken into account is the place where the passenger disembarked from an IWT vessel after having been conveyed by it.

*A transfer from one IWT vessel to another is regarded as disembarkation before re-embarkation.*

**C.V-17 CRUISE PASSENGER EXCURSION**

A short visit by a cruise passenger to a tourist attraction associated with a port/landing place while retaining a cabin on board.

**C.V-18 INLAND WATERWAYS RIVER CRUISE**

An inland waterways journey predominantly on an inland waterways cruise vessel taken for pleasure and usually calling in at several places. The duration of a cruise is longer than one day.

**C.V-19 PORT OF EMBARKATION**

The port where passengers are embarked on a vessel.

**C.V-20 PORT OF DISEMBARKATION**

The port where passengers are disembarked from a vessel.

**C.V-21 GOODS CARRIED BY INLAND WATERWAYS**

Any goods moved by IWT freight vessel.

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



**C.V-22 GROSS-GROSS WEIGHT OF GOODS**

The total weight of the goods carried, all packaging and the tare weight of the transport units (e.g. containers, swap bodies and pallets for containing goods as well as goods road vehicles carried on the vessel).

**C.V-23 GROSS WEIGHT OF GOODS**

The total weight of goods carried, including packaging but excluding the tare weight of transport units (e.g. containers, swap bodies and pallets for containing goods as well as goods road vehicles carried on the vessel).

**C.V-24 TARE WEIGHT**

The weight of a transport unit (e.g. containers, swap bodies and pallets for containing goods as well as road goods vehicles carried on the vessel) before any cargo is loaded.

**C.V-25 TONNE-KILOMETRE BY INLAND WATERWAYS**

Unit of measurement of goods transport which represents the transport of one tonne by inland waterways over one kilometre.

*The distance taken into account is the distance actually travelled in the declaring country.*

**C.V-26 TEU-KM BY INLAND WATERWAYS**

Unit for measuring the goods transport by containers equivalent to one TEU transported over a distance of one kilometre.

For the purpose of reporting the TEU-km performance only the distance travelled on navigable inland waterways performed in the declaring country has to be taken into account.

**C.V-27 TYPES OF GOODS CARRIED BY INLAND WATERWAYS**

Goods in transport may be classified according to type.

*Examples of classification schemes are NST 2007 (Standard Goods Nomenclature for Transport Statistics) that replaces the CSTE nomenclature (Commodity Classification for Transport Statistics in Europe – UNECE) and the NST/R nomenclature (Standard Goods Nomenclature for Transport Statistics/revised – Eurostat).*

**C.V-28 DANGEROUS GOODS**

The classes of dangerous goods carried by Inland Waterways are those defined by the UN Recommendations on the Transport of Dangerous Goods:

- Class 1: Explosives;
- Class 2: Gases;
- Class 3: Flammable liquids;
- Class 4: Flammable solids; substances liable to spontaneous combustion; substances which, on contact with water, emit flammable gases;
- Class 5: Oxidising substances and organic peroxides;
- Class 6: Toxic and infectious substances;
- Class 7: Radioactive material;
- Class 8: Corrosive substances;
- Class 9: Miscellaneous dangerous substances and articles, including environmentally hazardous substances.



**C.V-29 GOODS LOADED**

Goods placed on an IWT vessel and dispatched by inland waterways.

*Transshipment from one IWT vessel to another is regarded as loading after unloading. The same applies to changes of pusher tugs or tugs.*

**C.V-30 GOODS UNLOADED**

Goods taken off an IWT vessel after transport by inland waterways.

*Transshipment from one IWT vessel to another is regarded as unloading before reloading. The same applies to changes of pusher tugs and tugs.*

**C.V-31 GOODS IWT LINK**

The combination of the place of loading and the place of unloading of the goods transported by inland waterways whichever itinerary is followed.

*Places are defined by using international classification systems such as NUTS (Nomenclature of Territorial Units for Statistics – Eurostat).*

**C.V-32 PLACE OF LOADING**

The place taken into account is the place where the goods were loaded on an IWT freight vessel or where pusher tugs and tugs have been changed.

**C.V-33 PLACE OF UNLOADING**

The place taken into account is the place where the goods were unloaded from an IWT freight vessel or where pusher tugs and tugs have been changed.

**C.V-34 COUNTRY / REGION OF LOADING / EMBARKATION**

The country or region of ports where transported goods are loaded or passengers embark on a vessel.

**C.V-35 COUNTRY / REGION OF UNLOADING / DISEMBARKATION**

The country or region of ports where transported goods are unloaded or passengers disembark from a vessel.

## C.VI ACCIDENTS

**C.VI-01 ACCIDENT**

Unwanted or unintended sudden event or a specific chain of such events which have harmful consequences.

**C.VI-02 INLAND WATERWAYS TRANSPORT ACCIDENT**

An event that has resulted in any of the following:

1. The death of, or serious injury to, a person that is caused by, or in connection with, the operations of an IWT vessel; or
2. The loss of a person from an IWT vessel that is caused by, or in connection with, the operations of an IWT vessel; or
3. The loss, presumed loss or abandonment of an IWT vessel; or
4. Material damage to an IWT vessel; or
5. The stranding or disabling of an IWT vessel, or the involvement of an IWT vessel in a collision; or
6. Material damage to the inland waterways infrastructures external to a vessel; that could seriously endanger the safety of the vessel or another vessel or an individual; or
7. Damage to the environment brought about by the damage of an IWT vessel or IWT vessels being caused by, or in connection with, the operations of an IWT vessel or IWT vessels.

Any accident in connection with the normal operation of the vessel, including when it is in port or at anchor is covered.

*Terrorist, other criminal acts and acts of war are excluded. By definition suicides are excluded as they are a deliberate act. Illness not related to operation of the ship is excluded.*

**C.VI-03 INJURY ACCIDENT**

Any accident involving at least one IWT vessel in motion on an inland waterway and resulting in at least one injured or killed person.

*A vessel is deemed to be in motion once the last link to the shore or the anchorage is cast off. The vessel ceases to be in motion once the first link to the shore or anchorage is established.*

*A suicide or an attempted suicide is a deliberate act to injure oneself fatally and therefore not considered as an accident. However, if a suicide or an attempted suicide causes injury to another person on an IWT vessel, then this is regarded as an injury accident.*

*Injury accident excludes accidents incurring only material damage.*

**C.VI-04 FATAL ACCIDENT**

Any injury accident resulting in a person killed.

**C.VI-05 NON-FATAL ACCIDENT**

Any injury accident other than a fatal accident.

**C.VI-06 PERSON KILLED**

Any person killed immediately or dying within 30 days as a result of an injury accident, excluding suicides.

*A killed person is excluded if the competent authority declares the cause of death to be suicide, i.e. a deliberate act to injure oneself resulting in death.*

*For countries that do not apply the threshold of 30 days, conversion coefficients are estimated so that comparisons on the basis of the 30 day-definition can be made.*

**C.VI-07 PERSON INJURED**

Any person who as result of an injury accident was not killed immediately or not dying within 30 days, but sustained an injury, normally needing medical treatment, excluding attempted suicides.

*Persons with lesser wounds, such as minor cuts and bruises are not normally recorded as injured.*

*An injured person is excluded if the competent authority declares the cause of the injury to be attempted suicide, i.e. a deliberate act to injure oneself resulting in injury, but not in death.*

**C.VI-08 SERIOUS INJURY**

An injury which is sustained by a person in a casualty resulting in incapacitation for more than 72 hours commencing within seven days from the date of injury.

**C.VI-09 PERSON SERIOUSLY INJURED**

Any person injured who was hospitalised for a period of more than 24 hours.

**C.VI-10 PERSON SLIGHTLY INJURED**

Any person injured excluding persons seriously injured.

*Persons with lesser wounds, such as minor cuts and bruises are not normally recorded as injured.*



### **C.VI-11 INLAND WATERWAY CASUALTY**

An event that has resulted in any of the following:

- a) The death of, or serious injury to, a person that is caused by, or in connection with, the operations of a IWT vessel;
- b) The loss of a person from a IWT vessel that is caused by, or in connection with, the operations of a IWT vessel;
- c) The loss, presumed loss or abandonment of a IWT vessel;
- d) Material damage to a IWT vessel;
- e) The stranding or disabling of a IWT vessel, or the involvement of a IWT vessel in a collision;
- f) Material damage being caused by, or in connection with, the operation of a IWT vessel;
- g) Damage to the environment brought about by the damage of an IWT vessel or IWT vessels being caused by, or in connection with, the operations of an IWT vessel or IWT vessels.

### **C.VI-12 VERY SERIOUS CASUALTY**

A casualty to an IWT vessel which involves the total loss of the IWT vessel, loss of life or severe pollution.

### **C.VI-13 SERIOUS CASUALTY**

A casualty which does not qualify as a very serious casualty and which involves:

- A fire, explosion, grounding, contact, heavy weather damage, ice damage, hull cracking or suspected hull defect, etc., resulting in:
- Structural damage rendering the IWT vessel not navigable, such as penetration of the hull underwater, immobilisation of main engines, extensive accommodation damage etc.; or
- Pollution (regardless of quantity); and/or
- A breakdown necessitating towage or assistance from the bank.

### **C.VI-14 INLAND WATERWAY INCIDENT**

An occurrence or event being caused by, or in connection with, the operations of a IWT vessel by which the IWT vessel or any person is imperilled, or as a result of which serious damage to the IWT vessel or structure or the environment might be caused.

### **C.VI-15 CAUSES OF AN INLAND WATERWAYS ACCIDENT**

Actions, omissions, events, existing or pre-existing conditions or a combination thereof, which led to an IWT casualty or incident.

# D

## Pipeline transport







## D. Pipeline transport

### D.I/II INFRASTRUCTURE/TRANSPORT EQUIPMENT

#### D.I/II-01 PIPELINE

A closed conduit, with pumps, valves and control devices, for conveying fluids, gases, or finely divided solids by pumping or compression.

*Only units which actually carry out an activity during the reference period should be considered. 'Dormant' units or those not yet having begun their activity are excluded.*

#### D.I/II-02 PIPELINE FACILITY

New and existing piping, rights-of-way, and any equipment, facility, or building used in the transportation of gas, hazardous liquids, or carbon dioxide, or in the treatment of gas during the course of transportation.

#### D.I/II-03 PIPELINE NETWORK

All pipelines in a given area.

*Pipelines on the national territory include pipelines on the seabed of the country.*

#### D.I/II-04 OIL PIPELINE

All parts of a pipeline facility through which oil or petroleum products move including, but not limited to, line pipe, valves, and other appurtenances connected to line pipe, pumping units, fabricated assemblies associated with pumping units, metering and delivery stations and fabricated assemblies therein, and breakout tanks.

#### D.I/II-05 GAS PIPELINE

All parts of the pipe conduit, completed with such equipment as valves, compressor stations, communications systems, and meters for transporting natural and/or supplemental gas from one point to another, usually from a point in or beyond the producing field or processing plant to another pipeline or to points of utilisation.

## D.I/II-06 TYPES OF OIL AND GAS PIPELINES

In general, pipelines can be classified in three main categories depending on their main purpose. The categories are as follows:

### 1. Gathering pipelines

Group of smaller interconnected pipelines forming complex networks with the main purpose of bringing crude oil or natural gas from several nearby wells to a treatment plant or processing facility.

*In this group, pipelines are usually short (several hundred metres), and with small diameters. Also sub-sea pipelines for collecting product from deep water production platforms are considered gathering systems.*

### 2. Transportation pipelines (trunk pipelines)

Mainly long pipes with large diameters, moving products (oil, gas, refined products) between cities, countries and even continents. These transportation networks include several compressor stations in gas lines or pump stations for crude and multi-product pipelines.

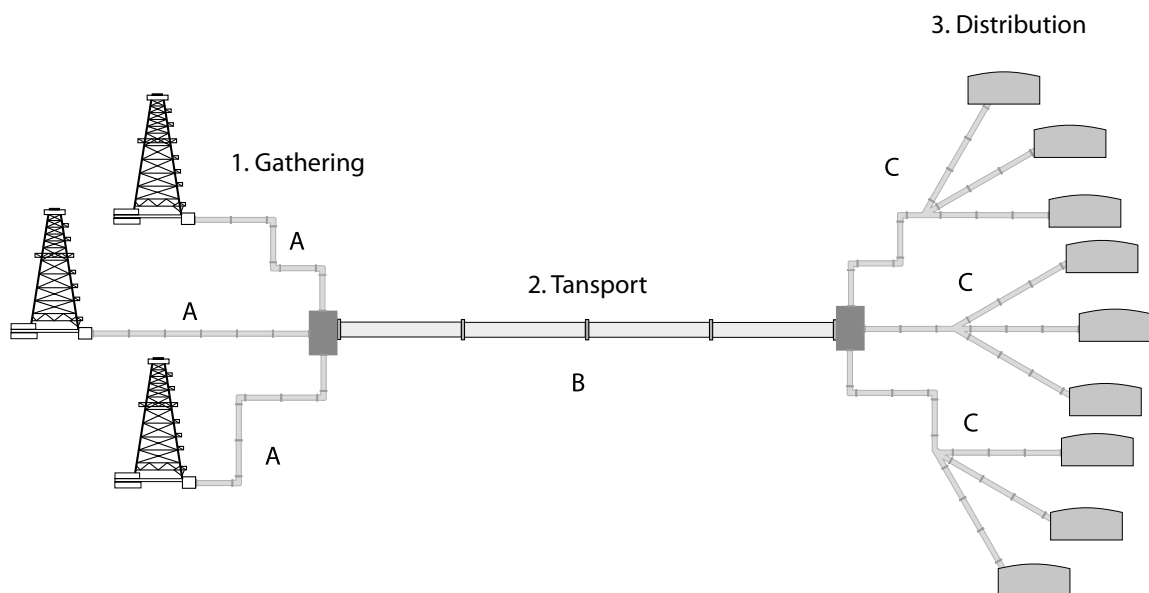
*Branch lines, where they satisfy the requirements for transportation pipelines, are included as well as pipelines between the land and drilling platforms at sea. Excluded are pipelines whose total length is less than 50 kilometres or whose inside diameter is less than 15 centimetres and pipelines used only for military purposes or located entirely within the site boundaries of an industrial operation, as well as pipelines that are entirely off-shore (i.e. located solely out in the open sea). International pipelines whose total length is 50 kilometres or more are included even if the section in the declaring country is less than 50 kilometres long. Pipelines consisting of two (or more) parallel pipelines are to be counted twice (or more).*

### 3. Distribution pipelines

Composed of several interconnected pipelines with small diameters, used to take the products to the final consumer.

*Refers primarily to feeder lines to distribute gas to homes and businesses downstream, or pipelines at terminals to distribute final products to tanks and storage facilities are included in this group.*

D.I/II-06 Types of oil and gas pipelines







## D.III ENTERPRISES, INVESTMENT AND MAINTENANCE

### D.III-01 PIPELINE TRANSPORT ENTERPRISE

Enterprise formed to carry out in one or more places activities for the provision of transport services through oil or gas pipelines and whose main activity according to the value added is the transportation of goods through oil or gas pipelines.

*In terms of activity classifications the following classes are involved:*

- ISIC/Rev.4: Class 4930—Transport via pipelines
- NACE/Rev.2: Class 49.50—Transport via pipelines.

### D.III-02 PUBLIC PIPELINE TRANSPORT ENTERPRISE

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

### D.III-03 INVESTMENT EXPENDITURE ON PIPELINE INFRASTRUCTURE

Capital expenditure on new pipeline infrastructure or extension of existing pipelines, including reconstruction, renewal (major substitution work on the existing infrastructure which does not change its overall performance) and upgrades (major modification work improving the original performance or capacity of the infrastructure).

*Infrastructure includes land, pipeline constructions, buildings, pumping and compression facilities as well as immovable fixtures, fittings and installations connected with them (safety systems, telecommunications, etc.)*

### D.III-04 MAINTENANCE EXPENDITURE ON PIPELINE INFRASTRUCTURE

Non-capital expenditure to maintain the original condition and capacity of the existing pipeline infrastructure.

### D.III-05 PIPELINE CAPITAL STOCK

An estimated monetary value reflecting the current stock of physical pipeline transport assets.

*For statistical purposes it is recommended to use the net capital value which takes into account depreciation. There are various methods such as "the replacement cost method" or the "Perpetual Inventory Method (PIM)" that provide the net value of the assets.*

## D.IV/V TRAFFIC/TRANSPORT MEASUREMENT

### D.IV/V-01 PIPELINE TRANSPORT

Any movement of crude or refined liquid petroleum products or gases in a given pipeline network.

### D.IV/V-02 NATIONAL OIL PIPELINE TRANSPORT

Oil pipeline transport between two places (a pumping-in place and a pumping-out place) located in the same country or in the part of the seabed that is allocated to it. It may involve transit through other countries.

### D.IV/V-03 NATIONAL GAS PIPELINE TRANSPORT

Gas pipeline transport between two places (an initial compression facility and a decompressing facility) located in the same country or in the part of the seabed that is allocated to it. It may involve transit through other countries.

### D.IV/V-04 INTERNATIONAL OIL PIPELINE TRANSPORT

Oil pipeline transport between two places (a pumping-in place and a pumping-out place) located in two different countries or on those parts of the seabed allocated to them. It may involve transit through one or more additional countries.

**D.IV/V-05 INTERNATIONAL GAS PIPELINE TRANSPORT**

Gas pipeline transport between two places (an initial compression facility and a decompression facility) located in two different countries or on those parts of the seabed allocated to them. It may involve transit through one or more additional countries.

**D.IV/V-06 TRANSPORT CAPACITY OF A PIPELINE**

Maximum tonnage of the product that the pipeline is able to move during a given period.

*In the case of multi-product pipelines, either the average density of the products or the density of the product that is predominantly moved through the pipeline shall be used to convert the capacity – which is usually measured in barrels or in cubic meters per given period – into tonnes.*

**D.IV/V-07 GOODS TRANSPORTED BY PIPELINE**

Any gas, natural or manufactured, liquefied or in the gaseous state (SITC division 34), crude oil (SITC class 333) or refined petroleum product (SITC class 334) moved by pipelines.

**D.IV/V-08 CRUDE OIL**

A mixture of hydrocarbons that exists in the liquid phase in natural underground reservoirs and remains liquid at atmospheric pressure after passing through surface separating facilities.

**D.IV/V-09 REFINED PETROLEUM PRODUCTS**

Refined petroleum products include but are not limited to gasoline, kerosene, distillates (including No. 2 fuel oil), liquefied petroleum gas, asphalt, lubricating oils, diesel fuels, and residual fuels.

**D.IV/V-10 NATURAL GAS**

Natural gas consists mainly of methane occurring naturally in underground deposits, associated with crude oil or gas recovered from coal mines (colliery gas). To facilitate its transportation, natural gas may be converted to liquid form by reducing its temperature to  $-160^{\circ}\text{C}$  under atmospheric pressure. It then becomes liquefied natural gas (LNG).

*The density of LNG is between 0.44 and 0.47 tonnes per cubic metre, depending on its composition.*

**D.IV/V-11 LIQUEFIED PETROLEUM GAS (LPG)**

Petroleum gas consists of propane and butane and is usually derived from natural gas and crude oil refining. Petroleum gas can be liquefied under low pressure (5-10 atmospheres) and then become LPG.

*In locations where there is no natural gas and the gasoline consumption is low, naphtha is converted to LPG by catalytic reforming.*

**D.IV/V-12 TONNE-KILOMETRE BY PIPELINE**

Unit of measurement of transport which represents the transport of one tonne of goods by pipeline over one kilometre.

*The distance taken into account is the distance actually run.*

**D.IV/V-13 GOODS HAVING LEFT THE COUNTRY BY PIPELINE (OTHER THAN GOODS IN TRANSIT BY PIPELINE THROUGHOUT)**

Goods which, having been loaded into a pipeline by pumping or compression in one country or that part of the seabed allocated to it, left the country by pipeline and were delivered to another country.

**D.IV/V-14 GOODS HAVING ENTERED THE COUNTRY BY PIPELINE (OTHER THAN GOODS IN TRANSIT BY PIPELINE THROUGHOUT)**

Goods which, having been loaded into a pipeline by pumping or compression in another country or that part of the seabed allocated to it, entered the country by pipeline and were delivered there.

**D.IV/V-15 PIPELINE TRANSIT TRANSPORT**

Goods which entered the country by pipeline and left the country by pipeline at a point different from the point of entry, after having been transported across the country solely by pipeline.

*Goods which entered and/or left the country in question by vessels before loading into by pumping or compression or after delivery from a pipeline at the frontier are included.*

**D.IV/V-16 GOODS PIPELINE TRANSPORT LINK**

The combination of the loading place by pumping or compression and the delivery place of the goods transported by pipeline whichever itinerary is followed.

*Places are defined by using international classification systems such as NUTS (Nomenclature of Territorial Units for Statistics–Eurostat).*

**D.IV/V-17 PLACE OF INITIAL PUMPING-IN OR COMPRESSION STATION**

The place taken into account is the place at which the goods were first pumped-in or first compressed into a pipeline.

**D.IV/V-18 PLACE OF PUMPING-OUT OR DELIVERY STATION**

The place taken into account is the place at which the goods were pumped-out or delivered from a pipeline.



# E

## Maritime transport





## E. Maritime transport

### E.I INFRASTRUCTURE

#### E.I-01 MARITIME COASTAL AREA

A maritime coastal area is normally defined as a contiguous stretch of coastline, together with islands offshore. It is defined either in terms of one or more ranges of ports along the coastline, or in terms of the latitude and longitude of one or more sets of extremities of the coastal area.

*River banks can be included.*

#### E.I-02 TERRITORIAL SEA

A belt of coastal waters extending at most 12 nautical miles (22.2 km; 13.8 mi) from the baseline (usually the mean low-water mark) of a coastal state.

#### E.I-03 INTERNATIONAL WATERS

All parts of the sea that are not included in the territorial sea or in the internal waters of a country and where “no State” may validly purport to subject any part of them to its sovereignty.

#### E.I-04 EXCLUSIVE ECONOMIC ZONE

A sea zone over which a state has special rights regarding the exploration and use of marine resources, including energy production from water and wind. It stretches from the baseline out to 200 nautical miles (nmi) from the coast.

*The difference between the territorial sea and the exclusive economic zone is that the first confers full sovereignty over the waters, whereas the second is merely a “sovereign right” which refers to the coastal state’s rights below the surface of the sea.*

#### E.I-05 PORT (ALSO C.I-08)

An area of land and water made up of such infrastructure and equipment so as to permit, principally, the reception of waterborne vessels, their loading and unloading, the storage of goods, the receipt and delivery of those goods and the embarkation and disembarkation of passengers, crew and other persons and any other infrastructure necessary for transport operators within the port area.

#### E.I-06 STATISTICAL PORT (ALSO C.I-09)

A statistical port consists of one or more ports, normally controlled by a single port authority or Harbour Master’s Office, able to record ship, passenger and cargo movements.

*Not all the ports under the control of a single port authority have to be included in any associated statistical port.*

#### E.I-07 HUB PORT

A port served by deep sea scheduled shipping and by scheduled short sea shipping where transshipment activity takes place.

#### E.I-08 UN/LOCODE (ALSO C.I-10)

5 character code where the first two characters are the ISO 3166-1 alpha 2 country codes which can be followed by a blank and 3-character code for the place name (see Recommendation 16 from the UNECE), together with Eurostat supplied codes for ports not yet included in the UN system.

**E.I-09 PORT ACCESSIBILITY – MARITIME**

Port accessibility is defined by the following characteristics:

- a) Maximum length of vessel which can be accommodated at the port – metres;
- b) Maximum draft of vessel which can be accommodated at the port – metres;
- c) Port approach width and depth above low water- metres;
- d) Entrance channel width and depth above low water – metres;
- e) Tidal window in hours for which vessels of maximum draft can enter and leave port;
- f) Height restrictions above high water – metres (reflecting bridges);
- g) Tidal range – metres.

**E.I-10 PORT LAND SIDE FACILITIES**

- a) Total port land area – m<sup>2</sup>;
- b) Crude oil and petroleum products storage areas – m<sup>2</sup>;
- c) Other bulk storage and stacking areas – m<sup>2</sup>;
- d) Container stacking areas – in m<sup>2</sup> and TEU;
- e) Other areas – m<sup>2</sup>;
- f) Roads – m;
- g) Rail track – m;
- h) Passenger terminals – number and number of vessels accommodated per terminal, terminal capacity.

*The bulk storage and stacking area includes facilities for dry bulks, timber, paper, semi bulks etc. Rail track includes sidings.*

**E.I-11 PORT STORAGE AREAS**

Area in m<sup>2</sup> in ports for storage by type of facility. Height in metres for covered areas.

- a) Open, not securely enclosed;
- b) Open and securely enclosed;
- c) Covered but not enclosed;
- d) Covered, enclosed.

*A securely enclosed area has fences, walls and/or surveillance systems.*

**E.I-12 PORT QUAY LENGTHS BY USE**

- a) Total quay length in metres;
- b) Quay length in metres allocated by use:
  - Multi-service quays;
  - Dedicated quays:
    - Ro-Ro
    - Containers
    - General Cargo
    - Dry Bulk
    - Liquid Bulk
    - Passenger
    - Fishing
  - Other.





### E.I-13 PORT QUAY LENGTHS BY DEPTH OF WATER

Quay lengths in metres available by depth of water for ships moored alongside at low tide.

*Possible depth ranges for collection are as follows:*

- a) Up to 4 metres;
- b) More than 4 and up to 6 metres;
- c) More than 6 and up to 8 metres;
- d) More than 8 and up to 10 metres;
- e) More than 10 and up to 12 metres;
- f) More than 12 and up to 14 metres;
- g) More than 14 metres.

### E.I-14 RO-RO BERTH (ALSO C.I-12)

A location at which a Ro-Ro ship can berth and load and unload motor vehicles and other mobile Ro-Ro units via ramps from ship to shore and vice versa.



### E.I-15 PORT CRANES BY LIFTING CAPACITY (ALSO C.I-13)

Number of cranes available in ports by lifting capacity.

*Possible classes of lifting capacity are as follows:*

- a) 10 tonnes or less;
- b) Greater than 10 tonnes and up to 20 tonnes;
- c) Greater than 20 tonnes and up to 40 tonnes;
- d) Greater than 40 tonnes.

### E.I-16 PORT CRANES BY TYPE (ALSO C.I-14)

Number of cranes available in ports by type:

- a) Mobile container cranes;
- b) Other container cranes;
- c) Other cranes.

### E.I-17 PORT REPAIR FACILITIES

Repair facilities at ports by number and by maximum size of vessel accommodated:

- a) Dry docks;
- b) Floating docks;
- c) Slipways;
- d) Dedicated ship repair quays.

**E.I-18 PORT NAVIGATION AIDS AND SERVICES**

Availability or not of navigation aids and services a) at ports and b) in the approach channels:

- a) Pilotage services;
- b) Lights and lighthouses;
- c) Radar and radio beacons;
- d) Vessel Traffic System (VTS) within port and coastal navigation services around port;
- e) Tugs for in-port manoeuvring – number;
- f) Escort tugs for tankers – number;
- g) Bunkering facilities;
- h) Mooring services.

**E.I-19 PORT HINTERLAND LINKS AND SHORT SEA SHIPPING**

Availability of short sea shipping and availability and distance to hinterland links from nearest port entrance in kms:

- a) Short sea shipping;
- b) Passenger railhead;
- c) Freight railhead;
- d) Motorway access;
- e) Inland waterway connections;
- f) Airport.

**E.II TRANSPORT EQUIPMENT (VESSELS)****E.II-01 SEAGOING VESSEL**

Floating marine structure with one or more surface displacement hulls.

*Hydrofoil, air cushion vehicles (hovercraft), catamarans (high speed craft), oil rigs, light vessels and seagoing barges are included. Vessels under repair are included. Vessels, which navigate exclusively in inland waterways or in waters within, or closely adjacent to, sheltered waters or areas where port regulations apply, are excluded.*

**E.II-02 YEAR OF CONSTRUCTION OF VESSEL**

Year of the completion of construction of a vessel.

**E.II-03 YEAR OF MAJOR CONVERSION**

The year in which a vessel last underwent a major modification or refit affecting its structure.

**E.II-04 DRY CARGO SEAGOING BARGE**

This category includes deck barges, hopper barges, lighter-aboard-ship (LASH)–seabee barges, open dry cargo barges, covered dry cargo barges and other dry cargo barges.

**E.II-05 SHIP (VESSEL)**

Seagoing self-propelled surface-displacement vessel.

*Catamarans (High Speed Craft) are included. Hydrofoil, air cushion vehicles (hovercraft), submersibles and submarines 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.*

## E.II-06 MERCHANT SHIP

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

*Naval ships and ships used by public administration and public services are excluded. Merchant ships are divided into cargo and passenger carrying ships and ships of miscellaneous activities, specially fitted out for a specific duty. Ships of miscellaneous activities include fish catching and processing ships, tugs, dredgers, research/survey ships, and ships used in offshore production and support.*

*While the following specific types are identified, based on the Eurostat classification (ICST-COM) which is harmonised with the UNCTAD International Classification of Ship Types, barges are treated separately and not included in the definition of a Merchant ship:*

### 1. Liquid bulk carrier

This category includes oil tankers, chemical tankers, LNG and LPG tankers, tanker barge, non-inflammable tankers and other tankers. Liquid bulk carriers should be further subdivided into:

- a) Single hulled liquid bulk carriers;
- a) Double hulled liquid bulk carriers.



### 2. Dry bulk carrier

This category includes bulk/oil combination carriers and bulk carriers.



### 3. Container ship

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



#### 4. Specialised carrier

Ship specially designed for the carriage of particular cargoes.

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



#### 5. General cargo non-specialised

Ships designed to carry a wide range of goods.

This category includes reefer, Ro-Ro passenger, Ro-Ro container, other Ro-Ro cargo, combination carrier general cargo/ passenger and combination carrier general cargo/container.

This category should be subdivided into:

- a) High speed general cargo non-specialised meeting the requirements set out in the IMO HSC Code paragraph 1.4.30;
- b) Other general cargo non-specialised.

#### 6. Dry cargo barge

This category includes deck barges, hopper barges, lighter-*aboard-ship* (LASH)-seabee barges, open dry cargo barges, covered dry cargo barges and other dry cargo barges.

#### 7. Passenger ship

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

This category should be subdivided into:

- a) High speed passenger ship specialised meeting the requirements set out in the IMO HSC Code paragraph 1.4.30;
- b) Other passenger ships.

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.*

#### 8. Fishing

This category includes fish catching and fish-processing vessels.

#### 9. Offshore activities

This category includes drilling and exploration vessels and offshore support vessels.

#### 10. Tugs

Ship designed for the towing and/or pushing of ships or other floating structures. Port tugs are included.

#### 11. Miscellaneous

This category includes dredgers, research/survey vessels and other vessels.

**E.II-07 IMO SHIP NUMBER**

A permanent number assigned to each ship for identification purposes. The number will remain unchanged upon transfer of the ship to other flag(s) and will be inserted in the ship's certificates. The IMO ship identification number is made of the three letters "IMO" followed by the seven-digit number assigned to all ships by Lloyd's Register Fairplay when constructed. This is a unique seven-digit number that is assigned to propelled, sea-going merchant ships of 100 GT and above upon keel laying with the exception of the following:

- Vessels solely engaged in fishing;
- Ships without mechanical means of propulsion;
- Pleasure yachts;
- Ships engaged on special service (e.g. lightships, SAR vessels);
- Hopper barges;
- Hydrofoils, air cushion vehicles;
- Floating docks and structures classified in a similar manner;
- Ships of war and troopships;
- Wooden ships.

**E.II-08 CRUISE SHIP**

A passenger ship intended to provide passengers with a full tourist experience. All passengers have cabins. Facilities for entertainment aboard are included.

*Ships operating normal ferry services are excluded, even if some passengers treat the service as a cruise. In addition, cargo carrying vessels able to carry a very limited number of passengers with their own cabins are also excluded. Ships intended solely for day excursions are also excluded.*

**E.II-09 FERRY**

A seagoing vessel operating a ferry service.

*In order to load passengers, railway wagons or cars, the ferry usually has a special gate with strong and tightly closed wings on the stern or bow.*

**E.II.10 NATIONALITY OF REGISTRATION OF SEAGOING VESSEL (FLAG STATE)**

Country and/or territory authorising the registry of a seagoing vessel.

*A seagoing vessel is subject to the maritime regulations in respect of manning scales, safety standards and consular representation abroad of its country and/or territory of registration. Some countries e.g. Norway and Denmark provide 'international' or 'open' registers where the requirements are different from those in the 'national' register.*

**E.II-11 COUNTRY OF PARENT OWNERSHIP**

The country of a parent owned vessel corresponds to the nationality of the company having a controlling interest in the direct owner.

**E.II-12 COUNTRY OF THE BENEFICIAL OWNER**

Where the registered owner of a vessel is a bank or finance company, the country of the 'group beneficial owner' rather than that of the bank or finance company is used. The 'group beneficial owner' is the organisation with the controlling shipping interest in the vessel.

**E.II-13 SEAGOING VESSEL UNDER NATIONAL FLAG**

Seagoing vessel, which is registered in the reporting country.

**E.II-14 SEAGOING VESSEL UNDER FOREIGN FLAG**

Seagoing vessel, which is, registered in a country other than the reporting country.

**E.II-15 MERCHANT FLEET**

Number of merchant ships of gross tonnage over 100, registered at a given date in a country.

*Changes in the fleet refer to changes in total or within a ship type, in the seagoing fleet of the declaring 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.*

**E.II-16 DEADWEIGHT (DWT)**

The deadweight of a ship is the difference in tonnes between the displacement of a ship on summer load-line in water with a specific gravity of 1,025 and the total weight of the ship, i.e. the displacement in tonnes of a ship without cargo, fuel, lubricating oil, ballast water, fresh water and drinking water in the tanks, usable supplies as well as passengers, crew and their possessions.

**E.II-17 GROSS TONNAGE (GT)**

Gross tonnage is a measure of the size of a ship determined in accordance with the provisions of the International Convention on Tonnage Measurement of Ships, 1969. The gross tonnage (GT) is determined by the total volume of all enclosed spaces of the ship in cubic metres multiplied by a logarithmic factor.

Prior to the adoption of the International Convention, the Oslo Convention (1947) was in force, which produced substantially different figures for gross tonnage for some vessels. In some cases, the gross tonnage measure for a vessel is available only on the basis of this earlier convention.

**E.II-18 AUTOMATIC IDENTIFICATION SYSTEM (AIS)**

The AIS is a system to:

- Provide information – including the ship's identity, type, position, course, speed, navigational status and other safety related information – automatically to appropriately equipped shore stations, other ships and aircraft;
- Receive automatically such information from similarly fitted ships;
- Monitor and track ships;
- Exchange data with shore-based facilities.

**E.III ENTERPRISES, INVESTMENT AND MAINTENANCE****E.III-01 TRANSPORT FOR HIRE AND REWARD**

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

**E.III-02 TRANSPORT ON OWN-ACCOUNT**

Transport, which is not for hire or reward.

*Such transport is the movement by an enterprise of its own cargo without any associated financial transaction.*

**E.III-03 SEA TRANSPORT ENTERPRISE (SHIPPING FIRM)**

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

*In terms of activity classifications, the following classes are involved:*

- ISIC Rev.4: Class 501 – Sea and coastal water transport
- NACE/Rev.2: Class 50.1 – Sea and coastal passenger water transport  
Class 50.2 – Sea and coastal freight water transport

*Ship management enterprises which operate merchant ships on behalf of their owners or lease holders are included. Ports and other units providing supporting and auxiliary transport services are excluded. These fall within the scope of E.III-06 (Port enterprise) below.*

**E.III-04 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.

**E.III-05 PORT AUTHORITY**

A port authority ensures the effective, safe, secure and efficient handling of shipping within the port and the offshore approaches to it and may take care of the development, construction, management and operation of the port and its industrial area if any.

**E.III-06 PORT ENTERPRISE**

An enterprise carrying out in one or more places the provision of port services and whose main activity according to value added is port services. Pleasure port enterprises are excluded.

*Port enterprises themselves other than pleasure port enterprises are included. In terms of activity classifications, the following classes are involved:*

- ISIC Rev.4: Class: 5222 – Service activities incidental to water transportation.
- NACE Rev.2: Class 52.22 – Service activities incidental to water transportation.

**E.III-07 PUBLIC PORT ENTERPRISE**

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

**E.III-08 EMPLOYMENT CATEGORY – SEA TRANSPORT ENTERPRISE STAFF**

Employment for a sea transport enterprise is categorised as follows:

- Officers;
- Ratings;
- Cadets and other trainees;
- Other vessel-based staff including restaurant and entertainment staff;
- Shore based staff engaged in management, sales, passenger and cargo handling etc.

**E.III-09 EMPLOYMENT CATEGORY – PORT ENTERPRISE STAFF**

Employment for a port enterprise is categorised as follows:

- Port management and administration staff;
- Pilots and other ship based staff;
- Dock workers;
- Technical and maintenance personnel;
- Other.

**E.III-10 INVESTMENT EXPENDITURE ON PORT INFRASTRUCTURE**

Capital expenditure on new construction (including new maritime ports) or extension of existing maritime port, including reconstruction, renewal (major substitution work on the existing infrastructure which does not change its overall performance) and upgrades (major modification work improving the original performance or capacity of the infrastructure).

*Infrastructure includes land and port approach canals, port facilities machinery and equipment, office and storage buildings, port repair facilities, navigation aids and services, hinterland links, as well as immovable fixtures, fittings and installations connected with them (signalisation, telecommunications, etc.).*

**E.III-11 INVESTMENT EXPENDITURE ON SEA VESSELS**

Capital expenditure to purchase seagoing vessels or to upgrade existing ones.

**E.III-12 MAINTENANCE EXPENDITURE ON PORT INFRASTRUCTURE**

Non-capital expenditure to maintain the original condition and capacity of the existing port infrastructure and related equipment.

**E.III-13 MAINTENANCE EXPENDITURE ON SEA VESSELS**

Non-capital expenditure to maintain seagoing vessels in working order without improving either their performance or their capacity.

**E.III-14 PORTS CAPITAL STOCK**

An estimated monetary value reflecting the current stock of physical maritime port infrastructure assets.

*For statistical purposes it is recommended to use the net capital value which takes into account depreciation. There are various methods such as "the replacement cost method" or the "Perpetual Inventory Method (PIM)" that provide the net value of the assets.*

**E.IV TRAFFIC****E.IV-01 SEA TRAFFIC**

Any movement of a seagoing vessel at sea.

*One port traffic (movements of seagoing vessels to offshore installations, or for dumping at sea, or traffic from the sea bed to ports) is included. Fluvio-maritime movements of seagoing vessels are included. Movements on inland waterways between seaports and inland waterway ports are excluded and are included in inland waterway traffic. Movements of seagoing vessels internally, between different basins or docks of the same port, are excluded.*

**E.IV-02 SCHEDULED SEA TRAFFIC**

Traffic provided by sea vessels scheduled and performed according to a published timetable, or so regular or frequent as to constitute a recognisably systematic series.

**E.IV-03 UNSCHEDULED SEA TRAFFIC**

Sea traffic other than scheduled sea traffic.

**E.IV-04 ISLAND SEA SERVICE**

A sea service between:

- Ports situated on the mainland and on one or more of the islands of one and the same country.
- Ports situated on the islands of one and the same country.



**E.IV-05 MARITIME FERRY SERVICE**

A ferry service is a regular short sea service between two ports, with or without intermediate calls. These operate either:

- (i) according to a published timetable; or
- (ii) with crossings so regular or frequent that they constitute a recognisably systematic series.

**E.IV-06 SEA JOURNEY**

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

*A journey can be divided into a number of stages or sections. One port journeys from a sea port to an offshore installation or a location at sea are included. In the maritime context, sea journeys are also referred to as voyages or sea voyages.*

**E.IV-07 SEA STAGE**

A sea stage is the movement of a vessel direct from one port to another without a port call at an intermediate port.

**E.IV-08 CARGO JOURNEY**

A sea journey involving the movement of cargo, between a place of loading or embarkation and a port of unloading or disembarkation.

*A sea journey may involve calls at a number of ports between the specified point of loading and the specified point of unloading and encompass a number of cargo journeys with the loading and unloading of cargo at a number of ports.*

**E.IV-09 PORT-TO-PORT DISTANCE**

For statistical purposes, the port-to-port distance is the actual distance sailed.

*An estimate of the actual distance can be provided.*

**E.IV-10 VESSEL-KILOMETRE**

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

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

**E.IV-11 PORT CALL BY A MERCHANT SHIP**

A merchant ship makes a port call when it anchors or berths to load and/or unload cargo, to embark and/or disembark passengers or to facilitate excursions by passengers.

*Anchorage, without any cargo or passenger movements, and traversing the port are excluded.*

**E.IV-12 BUNKER CALL**

A cargo and passenger ship makes a bunker call when it anchors or berths in a port to take on bunker oil or supplies.

**E.IV-13 OTHER CALLS**

Calls at a port by a cargo and passenger ship other than port calls or bunker calls.

**E.IV-14 ARRIVAL OF A MERCHANT SHIP**

The arrival of any merchant ship making a port call.

**E.IV-15 DEPARTURE OF A MERCHANT SHIP**

The departure of any merchant ship after making a port call.

**E.IV-16 MERCHANT SHIP LAID UP**

A merchant ship is laid up when it is moored in port because of lack of work.

**E.IV-17 PORT STATE CONTROL**

The inspection in port by the state in which the port is situated of merchant ships to monitor their seaworthiness.

**E.IV-18 DETENTION UNDER PORT STATE CONTROL**

The detention in port under port state control of a merchant ship found to be unseaworthy.

**E.V TRANSPORT MEASUREMENT****E.V-01 SEA TRANSPORT**

Any movement of goods and/or passengers using merchant ships on journeys, 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. While bunkers and stores supplied to vessels in port are excluded, bunker oil shipped to vessels offshore is included.*

*Fluvio-maritime movements of goods by merchant ships are included. Movements of goods on inland waterways vessels between seaports 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.*

**E.V-02 FLUVIO-MARITIME TRANSPORT (SEE C.V-07)**

A transport operation partly by inland waterways and partly by sea, without transshipment. It can be operated by inland waterway vessel or seagoing ships.

*Any inland waterway vessel undertaking such transport will need to have the appropriate authorisation permitting it to operate at sea.*

*Also known as Sea-river transport in Inland waterways transport chapter.*

**E.V-03 COMMERCIAL SEA TRANSPORT**

Sea transport undertaken for commercial purposes either for payment (i.e. hire and reward) or on the enterprise's own account as part of a wider economic activity.

**E.V-04 NATIONAL SEA TRANSPORT**

Sea transport between two ports of a national territory or one port sea transport within national territory.

*In the maritime context, national sea transport is also known as maritime cabotage. National sea transport can be performed by a merchant ship registered in the declaring country or in another country.*

**E.V-05 INTERNATIONAL SEA TRANSPORT**

Sea transport other than national sea transport.

*International one port transport is included.*

**E.V-06 SHORT SEA SHIPPING**

Movement of cargo by sea between ports situated within a relatively narrow geographical area.

*Included in such movements would be ferry and feeder traffic. For Europe, short sea shipping would consist of the movement of cargo by sea between ports situated in Europe as well as between ports in Europe and ports situated in non-European countries having a coastline on the enclosed seas bordering Europe.*

**E.V-07 DEEP SEA SHIPPING**

Transport of cargo by sea other than short sea shipping, involving intercontinental routes and/or crossing oceans.

**E.V-08 UNITISED TRANSPORT**

Unitised transport is the carriage of cargo in intermodal transport units such as containers or mobile (Ro-Ro) units.  
*Transport in swap bodies is included.*

**E.V-09 NON-UNITISED TRANSPORT**

Transport other than unitised transport.  
*Such transport includes liquid and dry bulk transport, forest products and general cargo.*

**E.V-10 TONNE-KILOMETRE**

Unit of measure representing the movement of one tonne of cargo in a merchant ship over one kilometre.  
*Tonne-kilometres performed is calculated as the sum over all journeys of the product of the total number of tonnes of freight load carried and the port-to-port distance for each journey performed.*

**E.V-11 TONNE-KILOMETRE OFFERED**

A tonne-kilometre is offered when one tonne of deadweight tonnage of a merchant ship is sailed over one kilometre. Tonne-kilometres offered are equal to the cargo carrying capacity of the vessel multiplied by the port-to-port distance for all journeys. Transport in barges is included.

**E.V-12 TEU-KILOMETRE**

Unit of measurement representing the movement of one TEU over one kilometre.  
*TEU-kilometres performed is calculated as the sum over all journeys of the product of the total number of TEUs carried and the port-to-port distance for each journey.*

**E.V-13 TEU-KILOMETRE OFFERED**

A TEU-kilometre offered is the movement of one TEU of total TEU capacity in a container ship over one kilometre. TEU-kilometres offered are equal to the TEU carrying capacity of the vessel multiplied by the port-to-port distance for all journeys.  
*The TEU carrying capacity will be the stated capacity recorded in the register of the classification society.*

**E.V-14 SEA PASSENGER**

Any person who makes a sea journey on a merchant ship.  
*Service staff assigned to merchant ships are not regarded as passengers. Non-fare paying crew members travelling but not assigned and infants in arms are excluded.*

**E.V-15 CRUISE PASSENGER**

A sea passenger making a sea journey on a cruise ship.  
*Passengers on day excursions are excluded.*

**E.V-16 SEA PASSENGER JOURNEY**

The movement of a passenger from the port at which the journey begins to the port at which it ends. For some passengers, notably cruise passengers, this can be the same port.  
*The distance to be taken into consideration is the distance actually travelled by the passenger.*

**E.V-17 PASSENGER-KILOMETRE**

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

*Passenger-kilometres are calculated as the sum of the products obtained by multiplying the number of sea passengers carried on each journey performed by the respective port-to-port distance.*

**E.V-18 PASSENGER-KILOMETRE OFFERED**

A passenger-kilometre is offered when one unit of passenger capacity is sailed one kilometre.

*Passenger-kilometres offered are equal to the sum of the products obtained by multiplying the authorised passenger capacity of the vessel and the port-to-port distance for all journeys.*

*The passenger carrying capacity will be the stated capacity recorded in the register of the classification society.*

**E.V-19 PASSENGERS ON BOARD**

The number of passengers on board a merchant ship on arrival at or departure from a port.

**E.V-20 SEA PASSENGER EMBARKED**

Passenger who boards a merchant ship to undertake a sea passenger journey.

*A transfer from one merchant ship to another is regarded as embarkation after disembarkation. Cruise passengers on a cruise passenger excursion are excluded.*

**E.V-21 SEA PASSENGER DISEMBARKED**

A passenger disembarking from a merchant ship at the end of a sea passenger journey.

*A transfer from one merchant ship to another is regarded as disembarkation before re-embarkation. Cruise passengers on a cruise passenger excursion are excluded.*

**E.V-22 CRUISE PASSENGER EXCURSION**

A short visit by a cruise passenger for tourism purposes while retaining a cabin on board.

**E.V-23 SEA PASSENGER TRANSPORT LINK**

Combination of the port of embarkation and the port of disembarkation of the passenger conveyed by sea whatever itinerary is followed.

*These ports are maritime ports (except for fluvio-maritime transport for which they 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).*

*Where the port of embarkation and disembarkation are the same, no sea transport link is implied.*

**E.V-24 PORT OF EMBARKATION**

The port in which a passenger started a journey.

*A transfer from one merchant ship to another is regarded as embarkation after disembarkation. Cruise passengers on a cruise passenger excursion are excluded.*

**E.V-25 PORT OF DISEMBARKATION**

The port in which a passenger ends a journey.

*A transfer from one merchant ship to another is regarded as disembarkation before re-embarkation. Cruise passengers on a cruise passenger excursion are excluded.*

**E.V-26 GOODS CARRIED BY SEA**

Any goods conveyed by merchant ships.

*This includes all packaging and equipment such as containers, swap bodies, pallets or road goods vehicles. 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, returning empty commercial vehicles and trailers, bunkers and stores of vessels, fish carried in fishing vessels and fish-processing ships, goods carried internally between different basins or docks of the same port.*

**E.V-27 GROSS-GROSS WEIGHT OF GOODS**

The total weight of the goods carried, including all packaging, and the tare weight of the transport unit (e.g. containers, swap bodies and pallets containing goods as well as road goods vehicles wagons or barges carried on the vessel).

**E.V-28 GROSS WEIGHT OF GOODS**

The total weight of goods carried, including packaging but excluding the tare weight of transport units (e.g. containers, swap bodies and pallets containing goods as well as road goods vehicles wagons or barges carried on the vessel).

**E.V-29 TARE WEIGHT**

The weight of a transport unit (e.g. containers, swap bodies and pallets containing goods as well as road goods vehicles wagons or barges carried on the vessel) before any cargo is loaded.

**E.V-30 TYPES OF CARGO**

Freight cargo can be classified in terms of both the design of the vessel itself and the handling equipment required at ports and on the vessel. The principal categories are:

- Liquid bulk;
- Dry bulk;
- Containers;
- Roll-on/Roll-off (self-propelled);
- Roll-on/Roll-off (non-self-propelled);
- Other general cargo.

**E.V-31 LO-LO (LIFT-ON LIFT-OFF)**

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

**E.V-32 CONTAINER CARGO**

Container cargo consists of containers with or without freight, which are lifted on or off the vessels, which carry them by sea.

**E.V-33 RO-RO (ROLL-ON ROLL-OFF)**

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

*Loading or unloading live animals on the hoof is included.*

**E.V-34 RO-RO CARGO**

Ro-Ro cargo consists of goods, whether or not in containers, on Ro-Ro units, which are rolled on and off the vessels, which carry them, by sea.

**E.V-35 DANGEROUS GOODS**

The classifications of dangerous goods are those defined by chapter VII of the International Convention for the Safety of Life at Sea (SOLAS, 1974), as amended and as detailed in the International Maritime Dangerous Goods (IMDG) code.

**E.V-36 SHIP TO SHIP TRANSHIPMENT**

The unloading of cargo from one merchant vessel and its loading into another to complete a journey, even where the cargo may have dwell time ashore before its onward journey.

*Transshipment to other modes is excluded. Included are transshipments between deep sea vessels and between deep sea container vessels and a smaller feeder vessel.*

**E.V-37 FEEDER TRANSPORT**

The short sea container transport between a large hub port and another port with the objective of consolidating or redistributing freight to or from a deep sea service in the hub port.

**E.V-38 GOODS LOADED**

Goods placed on a merchant ship for transport by sea.

*Transshipment from one merchant ship 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).*

**E.V-39 GOODS UNLOADED**

Goods taken off a merchant ship.

*Transshipment from one merchant ship to another is regarded as unloading before reloading. 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).*

#### **E.V-40 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).*

#### **E.V-41 PORT OF LOADING**

The port at which a consignment of goods was loaded onto the ship from which it is unloaded at the reporting port.

*Transshipments from one merchant ship to another are regarded as loading after unloading.*

#### **E.V-42 PORT OF UNLOADING**

The port at which a consignment of goods, loaded onto a ship at the reporting port, is to be unloaded from the same ship.

*Transshipments from one merchant ship to another are regarded as unloading before reloading.*

### **E.VI ACCIDENTS**

#### **E.VI-01 MARINE ACCIDENT**

An event, or a sequence of events, that has resulted in any of the following occurring directly in connection with the operation of a ship:

- The death of, or serious injury to, a person;
- The loss of a person from a ship;
- The loss, presumed loss or abandonment of a marine vessel;
- Material damage to a marine vessel;
- The stranding or disabling of a marine vessel, or the involvement of a marine vessel in a collision;
- Material damage to the marine infrastructures external to a vessel; that could seriously endanger the safety of the vessel or another vessel or an individual;
- Severe damage to the environment, or the potential for severe damage to the environment, brought about by the damage of a marine vessel.

Any accident during the normal operation of the vessel, including when it is in port or at anchor is covered.

Terrorist, other criminal acts and acts of war are excluded. By definition suicides are excluded as they are a deliberate act. Illness, not related to operation of the ship are excluded.

*In the maritime sector, the events listed in 1.-7. are also known as "marine casualties". In this context, "casualty" refers to vessel and infrastructure damage as well as personal injury or death.*

#### **E.VI-02 INJURY ACCIDENT**

Any accident involving at least one marine vessel in motion and resulting in at least one injured or killed person.

*A vessel is deemed to be in motion once the last link to the shore or the anchorage is cast off. The vessel ceases to be in motion once the first link to the shore or anchorage is established.*

#### **E.VI-03 FATAL ACCIDENT**

Any injury accident resulting in a person killed.

**E.VI-04 NON-FATAL ACCIDENT**

Any injury accident other than a fatal accident.

**E.VI-05 PERSON KILLED**

Any person killed immediately or dying within 30 days as a result of an injury accident.

*For countries that do not apply the threshold of 30 days, conversion coefficients are estimated so that comparisons on the basis of the 30 day-definition can be made.*

**E.VI-06 PERSON LOST AT SEA**

A person missing at sea, being presumed to have gone overboard.

**E.VI-07 PERSON INJURED**

Any person who as result of an injury accident was not killed but sustained an injury.

**E.VI-08 SERIOUS INJURY**

An injury which is sustained by a person in a casualty resulting in incapacitation for more than 72 hours commencing within seven days from the date of injury.

**E.VI-09 PERSON SERIOUSLY INJURED**

Any person who as result of an injury accident was seriously injured.

**E.VI-10 PERSON SLIGHTLY INJURED**

Any person who as result on an injury accident was not seriously injured.

**E.VI-11 VERY SERIOUS MARINE CASUALTY**

A casualty to a marine vessel which involves the total loss of the marine vessel, loss of life or severe damage to the environment.

**E.VI-12 SERIOUS MARINE CASUALTY**

A casualty which does not qualify as a very serious casualty and which involves a fire, explosion, grounding, contact, heavy weather damage, ice damage, hull cracking or suspected hull defect, etc., resulting in:

- Structural damage rendering the marine vessel not navigable, such as penetration of the hull underwater, immobilization of main engines, extensive accommodation damage etc.; or
- Pollution (regardless of quantity); and/or
- A breakdown necessitating towage or shore assistance.

**E.VI-13 MARINE INCIDENT**

An occurrence or event being caused by, or in connection with, the operations of a marine vessel in motion at sea, other than a marine casualty that endangered, or, if not corrected, would endanger the safety of the vessel, its occupants or any other person or the environment.

**E.VI-14 CAUSES OF A MARINE ACCIDENT**

Actions, omissions, events, existing or pre-existing conditions or a combination thereof, which led to a marine casualty or incident.

**E.VI-15 CATEGORY OF PERSON IN MARINE CASUALTY OR INCIDENT STATISTICS**

- Passenger;
- Crew member;
- Other persons who are neither passengers nor crew members.



**F**

**Air transport**





# F. Air transport

## F.I INFRASTRUCTURE

### F.I-01 AIRPORT

A defined area of land or water (including any buildings, installations and equipment) intended to be used either wholly or in part for the arrival, departure and surface movement of aircraft and open for commercial air transport operations.

*Most airports have a 4-letter ICAO code as listed in the ICAO Document 7910. Most but not all also have codes allocated by IATA. ICAO airport codes may change but not re-used while IATA airport codes may change and may be re-used.*

### F.I-02 INTERNATIONAL AIRPORT

Any airport designated by the competent authorities in the territory of which it is situated as an airport of entry and departure for international air traffic, where the formalities incidental to customs, immigration, public health, agricultural quarantine and similar procedures are carried out, whether such facilities are provided on a full time or part-time basis.

### F.I-03 DOMESTIC AIRPORT

Any airport not designated to handle international traffic.

### F.I-04 AIRPORT TERMINAL

A self-contained facility for handling passengers and/or freight:

- Passenger terminal.

An airport terminal with facilities for the handling of passengers, including passenger check-in, baggage handling, security, immigration passenger boarding and disembarkation.

- Freight terminal.

An airport terminal designed solely to handle freight shipments, including freight acceptance and release, secure storage, security and documentation.

### F.I.05 AIRPORT RUNWAYS

A defined rectangular area on an airport prepared for the landing and take-off of aircraft with the following characteristics:

- Take-off run available.

The length of runway declared available and suitable for the ground run of an aircraft taking off.

- Landing distance available.

The length of runway which is declared available and suitable for the ground run of an aircraft landing.



**F.I-06 AIRPORT TAXIWAYS**

A defined path on an airport established for the taxiing of aircraft and intended to provide a link between one part of the airport and another.

**F.I-07 CHECK-IN FACILITIES**

- Conventional.

A conventional check-in facility where airline staff handle ticket processing, luggage labelling, including fast bag drops, and issue of boarding cards directly.

- Self-service check-in kiosks.

A kiosk providing check-in facilities and offering automatic ticket processing, boarding cards and, in some cases, luggage label printing.

**F.I-08 PASSENGER GATES**

An area of a passenger terminal where passengers gather prior to boarding their Aircraft.

- With jet bridges (jetways, air jetty, skybridges or finger bridges).

A gate with a connection to the aircraft to allow boarding without descending to ground level and using steps to board.

- Other.

Gates other than those with jet bridges.

**F.I-09 AIRPORT CAR PARKING**

Parking facilities provided at the airport.

*For remote parking facilities, only those served by airport buses are considered to be airport car parking.*

**F.I-10 CONNECTIONS TO OTHER MODES OF TRANSPORT**

Facilities provided within the airport for connection to the following modes of surface transport:

- High speed rail.
- Main line rail.
- Metro.
- Inter urban bus services.
- Local bus services.
- Taxi and passenger cars.

## F.II TRANSPORT EQUIPMENT (AIRCRAFT)

### F.II-01 AIRCRAFT

Any machine that can derive support in the atmosphere from the reactions of the air other than the reactions of air against the earth's surface.

*Dirigibles and surface effect vehicles such as hovercraft are excluded. ICAO provides aircraft type designators in ICAO Document 8643. In addition, ICAO and the Commercial Aviation Safety team (CAST) have jointly developed a new taxonomy to correctly identify aircraft. Also IATA assigns codes for aircraft types.*

### F.II-02 AVIATION FLEET

Aircraft registered at a given date in a country.

### F.II-03 OPERATING FLEET

Operating Fleet includes all aircraft in service for commercial purposes (including all aircraft that are temporarily unserviceable due to major accidents, conversions, government action such as grounding by government regulatory agencies).

*Aircraft used solely for training and communications and private flying are not included in the operating fleet.*

### F.II-04 AIRCRAFT BY CONFIGURATION

a) Passenger aircraft.

An aircraft configured for the transport of passengers and their baggage. Any freight, including mail, is generally carried in cargo holds in the belly of the aircraft.

b) Cargo aircraft.

An aircraft configured solely for the carriage of freight and/or mail.

Persons accompanying certain kinds of cargo, such as livestock, may also be carried.

A passenger aircraft with enhanced capabilities for the carriage of freight on the passenger deck.

c) Quick change aircraft.

An aircraft designed to allow a quick change of configuration from passenger to cargo and vice versa.

d) Other.

An aircraft not used for commercial air transport.

### F.II-05 AIRCRAFT BY NOISE CHARACTERISTICS

a) Non-noise certificated aircraft.

Aircraft not certificated against international noise requirements.

b) Chapter II aircraft.

Aircraft meeting the ICAO Chicago Convention Annex 16 Chapter II specifications.

c) Chapter III aircraft.

Aircraft meeting the ICAO Chicago Convention Annex 16 Chapter III specifications.

d) Chapter IV aircraft.

Aircraft meeting the ICAO Chicago Convention Annex 16 Chapter IV specifications.

### F.II-06 AIRCRAFT AGE

Years since first registration of an aircraft.

## F.III ENTERPRISES, INVESTMENT AND MAINTENANCE

### F.III-01 AIRLINE (COMMERCIAL AIR TRANSPORT OPERATOR)

An aviation enterprise operating aircraft for commercial purposes which (i) performs scheduled or non-scheduled air transport services, or both, which are available to the public for carriage of passengers, mail, and /or cargo and (ii) is certified for such purposes by the civil aviation authority of the state in which it is established.

*ICAO provides a 3-letter air transport operator code as listed in ICAO Document 8585 and is required for all airlines operating international routes. A two-character airline designator is assigned by IATA in accordance with the provisions of IATA Resolution 762. The two-three character airline designators are used for reservations, schedules, time tables, telecommunications, ticketing, cargo documentation, legal, tariffs, and/or other commercial/traffic purposes. In terms of activity classifications the following classes are involved:*

- ISIC Rev 4: Division 51 – Air transport
- NACE Rev 2: Division 51 – Air transport

### F.III-02 AIRPORT OPERATOR

An undertaking operating a commercial airport.

*In terms of activity classifications the following classes are involved:*

- ISIC Rev 4: Class 5223 – Service activities incidental to air transport
- NACE Rev 2: Class 52.23 – Service activities incidental to air transport

### F.III-03 AIR TRAFFIC CONTROL PROVIDER

An undertaking providing air traffic control services.

*In terms of activity classifications the following classes are involved:*

- ISIC Rev 4: Class 5223 – Service activities incidental to air transport
- NACE Rev 2: Class 52.23 – Service activities incidental to air transport

### F.III-04 AIRPORT SERVICES PROVIDER

An undertaking providing airport services such as aircraft ground handling, fuelling, maintenance and security, passenger services such as check-in, baggage handling, cargo handling and other services.

*In terms of activity classifications the following classes are involved:*

- ISIC Rev.4: Class 5223 – Service activities incidental to air transport  
Class 5224 – Cargo handling
- NACE Rev.2: Class 52.23 – Service activities incidental to air transport incidental to air transport  
Class 52.24 – Cargo handling

### **F.III-05 TYPES OF EMPLOYMENT**

a) General administration.

Includes central and regional management staff (e.g. finance, legal, personnel etc.) and boards of directors.

The management staff of specialist departments (operations and traffic, aircraft, air traffic control, runway and terminal construction and maintenance, emergency services) are excluded but are taken into account in the statistics specific to each of these services.

b) Operations and traffic.

Cabin and ground crews (excluding flight deck staff) and associated central and regional offices. Includes tourism, advertising and terminal operations.

c) Aircraft.

Flight deck staff, maintenance and inspection staff and associated central and regional offices.

d) Airports.

Air traffic control staff, terminals, runway and other airport facilities construction, maintenance and supervision staff, ground handling staff, emergency services staff.

e) Other operations.

Passenger and freight services, freight shipment services etc.

### **F.III-06 INVESTMENT EXPENDITURE ON AIRPORTS INFRASTRUCTURE**

Capital expenditure on new construction (including new airports) or extension of existing airports infrastructure, including reconstruction, renewal (major substitution work on the existing infrastructure which does not change its overall performance) and upgrades (major modification work improving the original performance or capacity of the infrastructure).

*Infrastructure includes land, airport facilities and associated equipment, office and storage buildings, air navigation systems as well as immovable fixtures, fittings and installations connected with them (signalisation, telecommunications, etc.).*

### **F.III-07 INVESTMENT EXPENDITURE ON AIRCRAFTS**

Capital expenditure to purchase aircrafts or to upgrade existing ones.

### **F.III-08 MAINTENANCE EXPENDITURE ON AIRPORT INFRASTRUCTURE**

Non-capital expenditure to maintain the original airport services and the capacity of the existing infrastructure and related equipment.

### **F.III-09 MAINTENANCE EXPENDITURE ON AIRCRAFTS**

Non-capital expenditure to maintain aircrafts in working order without improving either their performance or their capacity.

### **F.III-10 AIRPORTS CAPITAL STOCK**

An estimated monetary value reflecting the current stock of physical airport infrastructure assets.

*For statistical purposes it is recommended to use the net capital value which takes into account depreciation. There are various methods such as "the replacement cost method" or the "Perpetual Inventory Method (PIM)" that provide the net value of the assets.*

## F.IV TRAFFIC

### F.IV-01 AIRCRAFT MOVEMENT

An aircraft take-off or landing at an airport.

*For airport traffic purposes one arrival and one departure is counted as two movements. Included are all commercial aircraft movements and non-commercial general aviation operations. Excluded are State flights, touch and goes, overshoots and unsuccessful approaches.*

### F.IV-02 COMMERCIAL AIRCRAFT MOVEMENT

An aircraft movement performed for remuneration or for hire.

*Includes commercial air service movements and commercial general aviation operations.*

### F.IV-03 AIRCRAFT DEPARTURE

A take-off of an aircraft.

### F.IV-04 AIRCRAFT ARRIVAL

An aircraft landing.

### F.IV-05 REVENUE STOP

A traffic stop for purpose of taking on and/or taking off revenue load.

### F.IV-06 NON-REVENUE STOP

A stop other than a revenue stop.

*Such stops include stops of positioning flights, State flights, training flights and technical stops.*

### F.IV-07 DIVERSION

An aircraft landing at an airport other than the one in the aircraft's flight plan because of operational or technical difficulties either on the aircraft or at the destination airport.

*Diversions may be caused by passenger misbehaviour, aircraft technical problems, bad weather conditions, accidents or other emergencies at the planned destination airport.*

### F.IV-08 AIRPORT PAIR

An airport pair is defined as two airports between which travel is authorised by a passenger ticket or part of a ticket, or between which freight and mail shipments are made in accordance with a shipment document or part of it (air waybill or mail delivery bill).

### F.IV-09 AIRPORT-TO-AIRPORT DISTANCE

For statistical purposes, airport-to-airport distance means the airport-to-airport great circle distance in kilometres.

*The measurement is based on airport co-ordinates and a great circle calculation formula.*



**F.IV-10 CITY PAIR – ON-FLIGHT ORIGIN/DESTINATION (OFOD)**

Two cities between which travel is authorised by a passenger ticket or part of a ticket (a flight coupon) or between which freight and mail shipments are made in accordance with a shipment document or a part of it (air waybill or mail delivery bill).

*In common usage, city pair is sometimes used interchangeably with airport pair.*

**F.IV-11 FLIGHT STAGE (FS)**

The operation of an aircraft from take-off to its next landing.

*Technical stops are not included.*

**F.IV-12 DOMESTIC FLIGHT STAGE**

Any flight stage flown between points within the domestic boundaries of a State.

*Flight stages between a State and territories belonging to it, as well as any flight stages between such territories should be classified as domestic.*

**F.IV-13 INTERNATIONAL FLIGHT STAGE**

A flight stage where the take-off is in one country and the next landing is in another country.

**F.IV-14 DIRECT FLIGHT**

The operation of an aircraft on one or more flight stages, using a single flight number, assigned by the airline.

**F.IV-15 NON-STOP FLIGHT**

A single flight by an aircraft between two airports with no intermediate stops.

**F.IV-16 DOMESTIC FLIGHT**

A flight having exclusively domestic flight stages, all using the same flight number.

**F.IV-17 INTERNATIONAL FLIGHT**

A flight having one or more international flight stages, where all flight stages use the same flight number.

**F.IV-18 COMMERCIAL AIR FLIGHT**

An air transport flight performed for the public transport of passengers and/or freight and mail, for remuneration and for hire.

**F.IV-19 COMMERCIAL AIR SERVICE**

An air transport flight or series of flights for the public transport of passengers and/or freight and mail, for remuneration or for hire.

*The air service may be either scheduled or non-scheduled.*

**F.IV-20 SCHEDULED AIR SERVICE**

A commercial air service operated according to a published timetable, or with such a regular frequency that it constitutes an easily recognisable systematic series of flights.

*Includes extra section flights occasioned by overflow traffic from scheduled flights.*

**F.IV-21 NON-SCHEDULED AIR SERVICE**

A commercial air service other than scheduled air service.

**F.IV-22 PASSENGER AIR SERVICE**

Scheduled or non-scheduled air service performed by aircraft carrying one or more revenue passengers and any flights listed in published timetables as open to passengers.

*Includes flights carrying both revenue passengers and revenue freight and mail.*

**F.IV-23 ALL-FREIGHT AND MAIL AIR SERVICE**

Scheduled or non-scheduled air service performed by aircraft carrying revenue loads other than revenue passengers, i.e. freight and mail.

*Excludes flights carrying one or more revenue passengers and flights listed in published timetables as open to passengers. Air freight and air mail combined are sometimes referred to as air cargo.*

**F.IV-24 GENERAL AVIATION OPERATIONS – COMMERCIAL**

All commercial civil aviation operations other than scheduled air services and non-scheduled air transport operations for remuneration or hire. The main categories of commercial general aviation are as follows:

- a) Air taxi.
- b) Photographic.
- c) Sightseeing trips.
- d) Advertising.
- e) Agricultural/crop spraying.
- f) Medical/air ambulance trips.
- g) Other commercial.

**F.IV-25 GENERAL AVIATION OPERATIONS – NON-COMMERCIAL**

All non-commercial civil aviation operations other than scheduled air services and non-scheduled air transport operations for remuneration or hire. The main categories of non-commercial general aviation are as follows:

- a) State Flight.

Any flight performed by aircraft for military, customs, police or other law enforcement services of a State. Any flight declared as a 'State flight' by State authorities.

- b) Instructional flying.
- c) Private flying.
- d) Business flying.
- e) Parachute and glider launch flights.
- f) Technical stops.
- g) Test flight.

A non-commercial flight carried out for the purpose of testing the aircraft prior to placing it in operational service.

- h) Positioning flight.

A non-commercial flight carried out to position an aircraft for a scheduled or non-scheduled flight or service.

- i) Other non-commercial.

**F.IV-26 FLIGHT NUMBER (AIRCRAFT)**

A flight number is the primary published flight number assigned by the air transport operator to the flight. Passengers using a flight by an aircraft may be travelling under a range of different flight numbers. Only the active flight number for the flight is in question here.

**F.IV-27 CODE SHARING**

The use of one operator's flight number for services/flights provided by other operators.

*For statistical purposes, the traffic is assigned to the operating carrier, the flight number for which is used by air traffic control.*

**F.IV-28 BLOCK-TO-BLOCK TIME**

The total time measured in hours and minutes measured from the aircraft's initial move from its departure point until its final stop at its arrival point.

**F.IV-29 AIRCRAFT HOURS**

An aircraft hour corresponds to one hour of aircraft operation. Aircraft hours are measured on the basis of block-to-block time.

**F.IV-30 AVERAGE DAILY AIRCRAFT UTILISATION – REVENUE HOURS**

Total revenue hours (scheduled plus charter) flown by aircraft type (block-to-block) during a period divided by the related number of aircraft days available. 'Aircraft days available' shall be the sum of the number of days each aircraft is available for use during the period in question. The following days should be excluded from the days available:

- a) Days between the date of purchase and the date actually placed in service.
- b) Days after its last revenue flight prior to disposal.
- c) Days out of service due to major accidents or conversion.
- d) Days when an aircraft is in the possession of others or not available due to government action such as grounding by government regulatory agencies.

*All other days must be considered as 'days available', including days required for maintenance or overhaul.*

**F.IV-31 AIRCRAFT-KILOMETRES PERFORMED**

Aircraft kilometres equal the sum of the products obtained by multiplying the number of flights performed on each flight stage by the airport-to-airport distance.

**F.IV-32 PASSENGER SEAT AVAILABLE**

Unit of measurement representing the total number of passenger seats available for sale on an aircraft operating a flight stage between a pair of airports.

Includes seats which are already sold on a flight stage i.e. including those occupied by direct transit passengers.

*Excludes seats not actually available for the carriage of passengers because of maximum gross weight limitations.*

**F.IV-33 SEAT-KILOMETRE AVAILABLE**

Unit of measurement representing the movement of seat available in a passenger aircraft when performing the services for which it is primarily intended over one kilometre.

*The distance to be considered is that actually travelled airborne.*

*Movements on the ground are excluded.*

**F.IV-34 TONNE-KILOMETRE AVAILABLE**

Unit of measurement representing the movement of one tonne of payload available in an aircraft when performing services for which it is primarily intended over one kilometre.

*The distance to be considered is that actually travelled.*

**F.V TRANSPORT MEASUREMENT****F.V-01 AIR TRANSPORT**

Any movement of goods and/or passengers on an aircraft movement.

**F.V-02 COMMERCIAL AIR TRANSPORT**

Any movement of goods and/or passengers on a commercial aircraft movement.

**F.V-03 NATIONAL AIR TRANSPORT**

Air transport on a domestic flight.

**F.V-04 INTERNATIONAL AIR TRANSPORT**

Air transport on an international flight.

**F.V-05 ON FLIGHT ORIGIN AND DESTINATION (OFOD)**

Traffic on a commercial air service identified by a unique flight number subdivided by airport pairs in accordance with point of embarkation and point of disembarkation on that flight.

*For passengers, freight or mail, where the airport of embarkation is not known, the aircraft origin should be deemed to be the point of embarkation; similarly if the airport of disembarkation is not known, the aircraft destination should be deemed to be the point of disembarkation.*

**F.V-06 AIR PASSENGER**

Any person, excluding on-duty members of the flight and cabin crews, who makes a journey by air.

*Infants in arms are included.*

**F.V-07 REVENUE AIR PASSENGER**

A commercial passenger for whose transportation an air carrier receives commercial remuneration.

*This definition includes, for example, (i) passengers travelling under publicly available promotional offers (for example 'two-for-one') or loyalty programmes (for redemption of frequent flier points); (ii) passengers travelling as compensation for denied boarding; (iii) passengers travelling under corporate discounts; (iv) passengers travelling under preferential fares (government, seamen, military, youth student etc.).*

*This definition excludes, for example, (i) persons travelling free; (ii) persons travelling at a fare or discount available only to employees of air carriers or their agents or only for the business of the carriers; (iii) infants who do not occupy a seat.*

**F.V-08 NON-REVENUE AIR PASSENGER**

Passengers other than revenue passengers.

**F.V-09 AIR PASSENGERS CARRIED**

All passengers on a particular flight (with one flight number) counted once only and not repeatedly on each individual stage of that flight.

*All revenue and non-revenue passengers whose journey begins or terminates at the reporting airport and transfer passengers joining or leaving the flight at the reporting airport. Excludes direct transit passengers.*

**F.V-10 PASSENGERS ON BOARD**

All passengers whose journey begins or terminates at the reporting airport, including transfer passengers and direct transit passengers.

**F.V-11 PASSENGERS CARRIED**

Includes all passengers whose journey begins or terminates at the reporting airport.

*Excludes direct transit passengers.*

**F.V-12 TERMINATING PASSENGERS**

Passengers starting or ending their trip at the designated airport.

**F.V-13 DIRECT TRANSIT PASSENGERS**

Passengers who, after a short stop, continue their journey on the same aircraft on a flight having the same flight number as the flight on which they arrive. Passengers who change aircraft because of technical problems but continue on a flight with the same flight number are also counted as direct transit passengers.

*On some flights with intermediate stops, the flight number changes at an airport to designate the change between an inbound and outbound flight. Where passengers for an intermediate destination continue their journey on the same aircraft in such circumstances, they should be counted as direct transit passengers.*

**F.V-14 TRANSFER OR INDIRECT TRANSIT PASSENGERS**

Passengers arriving and departing on a different aircraft within 24 hours, or on the same aircraft bearing different flight numbers. They are counted twice: once upon arrival and once on departure.

*On some flights with intermediate stops, the flight number changes at an airport to designate the change between an inbound and outbound flight. Where passengers for an intermediate destination continue their journey on the same aircraft, they should not be counted as transfer or indirect transit passengers at the airport where the flight number is changed.*

**F.V-15 TERMINAL PASSENGERS**

Total of terminating and transfer passengers.

**F.V-16 AIR PASSENGERS ON BOARD**

All passengers on board of the aircraft upon landing at the reporting airport or at taking off from the reporting airport.

*All revenue and non-revenue passengers on board an aircraft during a flight stage. Includes direct transit passengers.*

**F.V-17 PASSENGER-KILOMETRE BY AIR**

A passenger-kilometre is performed when a passenger is carried for one kilometre.

**F.V-18 PASSENGER LOAD FACTOR**

Passenger-kilometres expressed as a percentage of available seat-kilometres.

**F.V-19 PASSENGER-KILOMETRES FLOWN BY FLIGHT STAGE**

The sum of the products obtained by multiplying the number of passengers carried on each flight stage by the airport-to-airport distance.

**F.V-20 PASSENGER-KILOMETRES FLOWN BY ON-FLIGHT ORIGIN / DESTINATION AIRPORTS**

The product of multiplying the number of passengers flown between two airports as initial origin and final destination by the airport-to-airport distance.

**F.V-21 BAGGAGE**

Personal property of passengers and crew loaded or carried on board an aircraft by agreement with the operator.

**F.V-22 FREIGHT**

Any property carried on an aircraft other than mail, stores and baggage.

*For statistical purposes, freight includes express freight and parcels and diplomatic bags but not passenger baggage. All trucking operations using an air waybill should be excluded.*

**F.V-23 GROSS-GROSS WEIGHT OF GOODS**

The total weight of the goods carried, all packaging, and the tare weight of the transport unit (e.g. air container).

**F.V-24 GROSS WEIGHT OF GOODS**

The total weight of the goods carried, including packaging but excluding the tare weight of transport units (e.g. air container).

**F.V-25 TARE WEIGHT**

The weight of a transport unit (e.g. air container) before any cargo is loaded.

**F.V-26 FREIGHT LOADED OR UNLOADED**

Any freight loaded onto or unloaded from an aircraft.

*Direct transit freight is excluded.*

**F.V-27 FREIGHT ON BOARD**

All freight on board an aircraft upon landing at an airport and at take-off from an airport.

*Direct transit freight is included and it is counted at both landing and take-off.*

**F.V-28 FREIGHT TONNE-KILOMETRES PERFORMED BY FLIGHT STAGE**

A Tonne-kilometre is a metric tonne of freight revenue load carried one kilometre. Tonne-kilometres performed is obtained by multiplying the total number of tonnes of freight revenue load carried on the flight stage by the airport-to-airport distance.

**F.V-29 FREIGHT TONNE-KILOMETRES PERFORMED BY ON-FLIGHT ORIGIN / DESTINATION AIRPORTS**

A Tonne-kilometre is a metric tonne of freight revenue load carried one kilometre. Tonne-kilometres performed is obtained by multiplying the total number of tonnes of freight revenue load carried between two airports as initial origin and final destination by airport-to-airport distance.

**F.V-30 MAIL**

Dispatches of correspondence and other objects carried on an aircraft, which have been dispatched by and intended for delivery to postal administrations.

*Express freight and express parcel shipments are excluded.*

**F.V-31 MAIL LOADED AND UNLOADED**

Any mail loaded onto or unloaded from an aircraft.

*Direct transit mail is excluded.*

**F.V-32 MAIL ON BOARD**

All mail on board during each flight stage, including mail loaded and direct transit mail.

**F.V-33 DIPLOMATIC BAG**

A mail pouch used by governments to send official letters and dispatches.

**F.V-34 MAIL TONNE-KILOMETRES PERFORMED BY FLIGHT STAGE**

A Tonne-kilometre is a metric tonne of freight revenue load carried one kilometre. Tonne-kilometres performed is obtained by multiplying the total number of tonnes of mail revenue load carried by the airport-to-airport distance.

**F.V-35 MAIL TONNE-KILOMETRES PERFORMED BY ON-FLIGHT ORIGIN / DESTINATION AIRPORTS**

A Tonne-kilometre is a metric tonne of freight revenue load carried one kilometre. Tonne-kilometres performed is obtained by multiplying the total number of tonnes of mail revenue load carried between two airports as initial origin and final destination by airport-to-airport distance.

**F.V-36 TOTAL FREIGHT /MAIL**

The sum of the total freight and mail, both loaded and unloaded, at the reporting airport. All trucking operations using an air waybill should be excluded.

Freight and mail together are sometimes referred to as cargo.

**F.V-37 CATEGORIES OF GOODS CARRIED BY AIR**

Goods in transport may be classified according to type.

*Examples of classification schemes are NST 2007 (Standard Goods Nomenclature for Transport Statistics) that replaces the CSTE nomenclature (Commodity Classification for Transport Statistics in Europe – UNECE) and the NST/R nomenclature (Standard Goods Nomenclature for Transport Statistics/ revised – Eurostat).*

**F.V-38 DANGEROUS GOODS**

The classes of dangerous goods carried by Air are those defined by the UN Recommendations on the Transport of Dangerous Goods.

- Class 1: Explosives.
- Class 2: Gases.
- Class 3: Flammable liquids.
- Class 4: Flammable solids; substances liable to spontaneous combustion; substances which, on contact with water, emit flammable gases.
- Class 5: Oxidising substances and organic peroxides.
- Class 6: Toxic and infectious substances.
- Class 7: Radioactive material.
- Class 8: Corrosive substances.
- Class 9: Miscellaneous dangerous substances and articles, including environmentally hazardous substances.

**F.V-39 PAYLOAD CARRIED**

The revenue load of passengers, baggage, freight and mail carried in the aircraft as measured in metric tonnes.

**F.V-40 REVENUE TONNE-KILOMETRES PERFORMED**

A tonne-kilometre is a metric tonne of revenue load carried one kilometre. Tonne-kilometres performed equal the sum of the products obtained by multiplying the total number of tonnes of each category of revenue load carried by the airport-to-airport distance.

**F.V-41 WEIGHT LOAD FACTOR**

Total revenue tonne-kilometres performed expressed as a percentage of available tonne-kilometres.



## F.VI ACCIDENTS

### F.VI-01 ACCIDENT

An occurrence associated with the operation of an aircraft which takes place between the time any person boards the aircraft with the intention of flight until such time as all such persons have disembarked, in which one of the following applies:

- a) A person is fatally or seriously injured.

Where this is as a result of being in the aircraft, or direct contact with any part of the aircraft, including parts which have become detached from the aircraft, or direct exposure to jet blast, except when the injuries are from natural causes, self-inflicted or inflicted by other persons, or when the injuries are to stowaways hiding outside the areas normally available to the passengers and crew.

- b) The aircraft sustains damage or structural failure.

Where this adversely affects the structural strength, performance or flight characteristics of the aircraft, and would normally require major repair or replacement of the affected component (except for engine failure or damage, when the damage is limited to the engine, its cowlings or accessories; or for damage limited to propellers, wing tips, antennas, tyres, brakes, fairings, small dents or puncture holes in the aircraft skin).

- c) The aircraft is missing or is completely inaccessible.

*An aircraft is considered to be missing when the official search has been terminated and the wreckage has not been located.*

### F.VI-02 INCIDENT

An occurrence, other than an accident, associated with the operation of an aircraft which affects or could affect the safety of operation.

### F.VI-03 SERIOUS INCIDENT

An incident involving circumstances indicating that an accident nearly occurred.

*The difference between an accident and a serious incident lies only in the result. Examples of serious incidents can be found in the ICAO Accident/Incident Reporting Manual.*

### F.VI-04 FATAL INJURY

An injury resulting in death within 30 days of the date of the accident is classified as a fatal injury.

### F.VI-05 NON-FATAL INJURY

An injury, other than a fatal injury, which is sustained by a person in an accident.

### F.VI-06 SERIOUS INJURY

A non-fatal injury which is sustained by a person in an accident and which:

- a) Requires hospitalisation for more than 48 hours, commencing within seven days from the date the injury was received: or
- b) Results in a fracture of any bone (except simple fractures of fingers, toes, or nose): or
- c) Involves lacerations which cause severe haemorrhage, nerve, muscle or tendon damage: or
- d) Involves injury to any internal organ: or
- e) Involves second or third-degree burns, or any burns affecting more than 5 per cent of the body surface: or
- f) Involves verified exposure to infectious substances or injurious radiation.

**F.VI-07 SLIGHT INJURY**

A non-fatal injury, other than a serious injury, which is sustained by a person in an accident.

**F.VI-08 STATE OF OCCURRENCE**

The country in the national territory of which an accident or incident occurs.

**F.VI-09 STATE OF THE OPERATOR**

The country in which the operator's principal place of business is located or, if there is no such place of business, the operator's permanent residence.

**F.VI-10 STATE OF REGISTRY**

The country on whose register the aircraft is entered.

**F.VI-11 ACCIDENT ON NATIONAL TERRITORY**

An accident on the national territory of a country.

**F.VI-12 AN ACCIDENT ON A NATIONALLY REGISTERED AIRCRAFT**

An accident involving an aircraft on the national aircraft register of a country.

# G

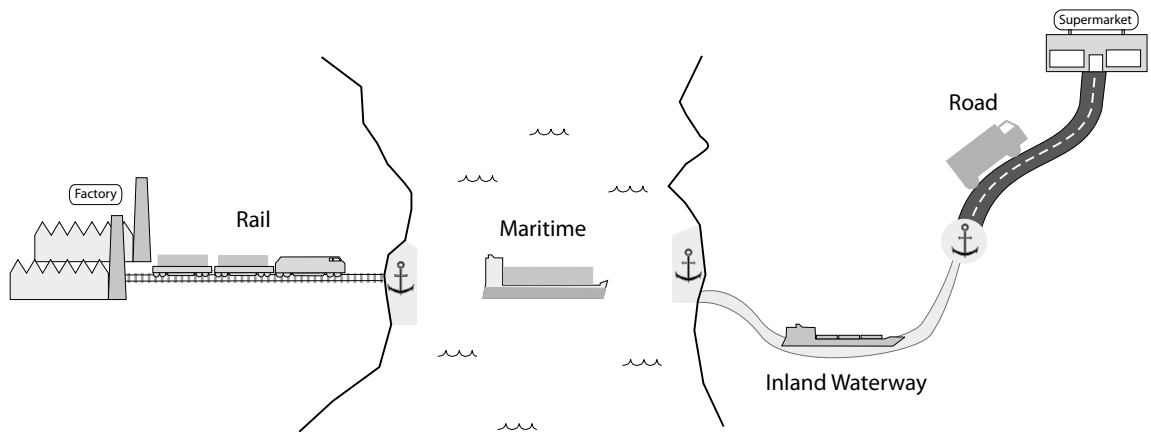
## Intermodal freight transport





## G. Intermodal freight transport

### G.I INTRODUCTION



#### G.I-01 INTERMODAL FREIGHT TRANSPORT

Multimodal transport of goods, in one and the same intermodal transport unit by successive modes of transport without handling of the goods themselves when changing modes.

*The intermodal transport unit can be a container, swap body or a loaded vehicle travelling on another vehicle.*

*The return movement of empty containers/swap bodies and empty goods road vehicles/trailers are not themselves part of intermodal transport since no goods are being moved. Nevertheless, such movements are associated with intermodal transport.*

#### G.I-02 MULTIMODAL FREIGHT TRANSPORT

Transport of goods by at least two different modes of transport.

*Intermodal transport is a particular type of multimodal transport.*

*International multimodal transport is often based on a contract regulating the full multimodal transport.*

#### G.I-03 SIMULTANEOUS USE OF TWO MEANS OF TRANSPORT (ACTIVE MODE)/ (PASSIVE MODE)

Intermodal transport of goods using two modes of transport simultaneously, where one (passive) means of transport is carried on another (active) means of transport which provides traction and consumes energy, e.g. Rail/road transport, sea/road transport and sea/rail transport.

*Piggyback transport is a synonym for rail/road transport.*

**G.I-04 PIGGYBACK TRANSPORT**

Transport of road vehicles by rail.

*The term was originally for transport of semi-trailers by rail but is also now applied to the transport of road vehicles in general.*

**G.I-05 ROLLING HIGHWAY**

Transport of complete road vehicles, using roll-on roll-off techniques, on trains normally comprising low-floor wagons throughout.

*Rolling motorway is a specific type of Piggyback transport.*

*Transport of lorries via Eurotunnel is an example of a rolling road.*

**G.I-06 TRANSPORT OF DRIVER ACCOMPANIED GOODS ROAD MOTOR VEHICLE**

Transport of a complete goods road motor vehicle, accompanied by the driver, by another mode of transport (for example by sea or rail).

**G.I-07 TRANSPORT OF ROAD GOODS ROAD MOTOR VEHICLE, UNACCOMPANIED BY THE DRIVER**

Transport of a goods road motor vehicle or a trailer, by another mode of transport (for example by sea or rail), not accompanied by a driver.

**G.I-08 MODE OF TRANSPORT**

Method of transport used for the carriage of goods and passengers.

*For statistical reporting, the following classification of methods of transport should be used:*

*a) Rail;*

*b) Road;*

*c) Inland Waterways;*

*d) Maritime;*

*e) Pipeline;*

*f) Air;*

*g) Unknown mode of transport.*

*The classification may apply only to the active mode of transport, or to both the active and the passive mode. In the latter case a two-digit code might be used, the first digit indicating the active mode and the second digit the passive mode.*

**G.I-09 TRANSPORT CHAIN**

Sequence of transport modes used to move the goods from their origin to their destination. Along the chain one or more transshipments take place.

*The goods may not necessarily stay in the same loading unit along the full transport chain. Stuffing and stripping of an intermodal transport unit may take place during the journey.*

### G.I-10 INTERMODAL TRANSPORT TERMINAL

A structure equipped for the transshipment and storage of intermodal transport units (ITUs) between at least two transport modes or between two different rail systems, and for temporary storage of freight, such as ports, inland ports, airports and rail-road terminals.

*Intermodal Transport Terminals often perform as hubs in a 'Hub and Spoke' distribution concept which relates to collection through a central point (the hub) and distribution in various directions (the spokes). The hub is a central point for the collection, sorting, transshipment and distribution of goods for a particular region.*



## G.II TRANSPORT EQUIPMENT

### G.II-01 LOADING UNIT

Container, swap body.

*'Flats' (see G.II-09 below used in maritime transport) are included as a special type of container.*

### G.II-02 INTERMODAL TRANSPORT UNIT (ITU)

Container, swap body or semi-trailer/goods road motor vehicle suitable for intermodal transport.

### G.II-03 CONTAINER

Special box designed to carry freight. It is strengthened and stackable, allowing horizontal or vertical transfers. A more formal technical definition of a container is:

Article of transport equipment which is:

- a) Of a permanent character and accordingly strong enough to be suitable for repeated use;
- b) Specially designed to facilitate the carriage of goods, by one or more mode of transport, without intermediate reloading;
- c) Fitted with devices permitting its ready handling, particularly its transfer from one mode of transport to another;
- d) So designed as to be easy to fill and empty;
- e) Stackable; and
- f) Having an internal volume of 1 m<sup>3</sup> or more.

*Swap bodies are excluded.*

*Although without internal volume, and therefore not satisfying criterion (f) above, flats (see G.II-09 below) used in maritime transport should be considered to be a special type of container and therefore are included here.*

### G.II-04 SIZES OF CONTAINERS

The main sizes of containers are:

- a) 20 foot ISO container (length of 20 feet and width of 8 feet);
- b) 40 foot ISO container (length of 40 feet and width of 8 feet);
- c) ISO container over 20 feet and under 40 feet of length;
- d) ISO container over 40 feet long;
- e) Super high cube container (oversize container);
- f) Air container (container conforming to standards laid down for air transportation).

*Containers are normally 8 feet high but other heights also exist. 'High-cube containers' are containers with a height of 9.5 feet. 'Super high cube containers' are containers exceeding the ISO dimensions. They include container lengths of 45 feet, 48 feet and 53 feet.*

*Containers sizes classified under a) to e) are referred to as large containers.*

### G.II-05 TARE WEIGHT OF CONTAINER

The tare weight of a container is included in the total weight of the containerised goods transported, also called the gross-gross weight of goods. The gross weight of containerised goods transported can be calculated from the gross-gross weight by deducting the tare weight of the container and vice versa. If information about the tare weight is missing then the tare weight may be estimated using the averages below.

The tare weight of a container may be estimated as:

- a) 20 Foot ISO container 2.3 tonnes;
- b) 40 Foot ISO container 3.7 tonnes;
- c) ISO container over 20 feet and under 40 feet of length 3.0 tonnes;
- d) ISO container over 40 feet of length 4.7 tonnes.

### G.II-06 TYPES OF CONTAINERS

The main types of containers, as defined by ISO Standards Handbook on Freight Containers are:

- a) General purpose containers.
- b) Specific purpose containers:
  - closed ventilated container
  - open top container
  - platform-based container open sided
  - platform-based container open sided with complete superstructure
  - platform-based container open sided with incomplete superstructure and fixed ends
  - platform-based container open sided with incomplete superstructure and folding ends
  - platform (container)
- c) Specific cargo containers:
  - thermal container
  - insulated container
  - refrigerated container – (expendable refrigerant)
  - mechanically refrigerated container
  - heated container
  - refrigerated and heated container
  - tank container
  - dry bulk container
  - named cargo container (such as automobile, livestock and others); and
  - air mode container.





### G.II-07 TEU (TWENTY-FOOT EQUIVALENT UNIT)

A statistical unit based on a 20 foot long (6.10 m) ISO container to provide a standardised measure of containers of various capacities and for describing the capacity of container ships or terminals.

- One 20 foot ISO container equals 1 TEU.
- One 40 foot ISO container equals 2 TEU.
- One container with a length between 20 and 40 feet equals 1.50 TEU.
- One container with a length of more than 40 feet equals 2.25 TEU.

### G.II-08 SWAP BODY

A freight-carrying unit optimised to road vehicle dimensions and fitted with handling devices for transfer between modes, usually road/rail.

*Such units were not originally designed to be stacked when full or top-lifted. Many units now can be, although not to the same extent as containers. The main feature distinguishing them from containers is that they are optimised to road vehicle dimensions. Such a unit would need UIC approval to be used on rail. Some swap bodies are equipped with folding legs on which the unit stands when not on the vehicle.*



### G.II-09 FLAT

A loadable platform having no superstructure whatsoever but having the same length and width as the base of a container and equipped with top and bottom corner fittings.

*This is an alternative term used for certain types of specific purpose containers – namely platform containers and platform-based containers with incomplete structures.*

### G.II-10 PALLET

Raised platform, intended to facilitate the lifting and stacking of goods.

*While pallets are usually made of wood, they can be made of other materials. They are of standard dimensions, which vary between regions. One common dimension in Europe and Asia is 1 000 mm x 1 200 mm (ISO) and 800 mm x 1 200 mm (CEN).*

### G.II-11 ROLL CAGE, ROLL CONTAINER, ROLL PALLET

Small, un-stackable, normally boxy unit on wheels intended to facilitate the loading and unloading of goods.

### G.II-12 RAIL WAGON FOR INTERMODAL TRANSPORT

Wagon specially built or equipped for the transport of intermodal transport units (ITUs) or other goods road vehicles.

Types of wagons are:

- Pocket wagon: Rail wagon with a recessed pocket to accept the axle/wheel assembly of a semi-trailer.
- Basket wagon: Rail wagon with a demountable sub frame, fitted with devices for vertical handling to allow the loading and unloading of semi-trailers or road motor vehicles.
- Spine wagon: Rail wagon with a central chassis designed to carry a semi-trailer.
- Low-floor wagon: Rail wagon with a low loading platform built to carry, inter alia ITUs.
- Rolling-Road wagon: Rail wagon with low floor throughout which, when coupled together, form a rolling-road.
- Double stack wagon: Rail wagon designed for the transport of containers stacked on top of each other.
- Bimodal semi-trailer: A road semi-trailer that can be converted into a rail wagon by the addition of rail bogies.



### G.II-13 RO-RO UNIT

Wheeled equipment for carrying goods, such as a lorry, trailer or semi-trailer, which can be driven or towed onto a vessel or train.

*Port or vessels' trailers are included in this definition.*

### G.II-14 GANTRY CRANE

An overhead crane comprising a horizontal gantry mounted on legs, which are either fixed, run in fixed tracks or on rubber tyres with relatively limited manoeuvrability. The load can be moved horizontally, vertically and sideways.

*Such cranes normally straddle a road/rail and/or ship/shore interchange.*



**G.II-15 STRADDLE CARRIER**

A rubber-tired overhead lifting vehicle for moving or stacking containers on a level reinforced surface.

**G.II-16 REACH STACKER**

Tractor vehicle with front equipment for lifting, stacking or moving ITUs.

**G.II-17 FORK LIFT TRUCK**

Vehicle equipped with power-driven horizontal forks, which allow it to lift, move or stack pallets, containers or swap bodies. The latter two are usually empty.

**G.II-18 SPREADER**

Adjustable fitting on lifting equipment designed to connect with the upper corner fittings of an ITU.

*Many spreaders have in addition grappler arms that engage the bottom side rails of an ITU.*



# H

## Energy consumption





## H. Energy consumption

The following definitions refer to energy products, as defined in energy statistics that are typically combusted for transport purposes. There are important differences in how transport and energy statistics are produced, and so when combining or comparing data from the two domains, care should be taken. In particular, fundamental differences concern water transport. In transport statistics inland water transport refers to journeys, national or international, on navigable inland waterways that are not part of the sea, whereas in energy statistics domestic navigation is water transport where the origin and destination are in the same country. In terms of transport statistics production, data for transport equipment and traffic are often broken down by type of motor energy. See B.II-42.

### H.I ENERGY UNITS

#### H.I-01 TONNE OF OIL EQUIVALENT (TOE)

A tonne of oil equivalent, abbreviated as TOE, is a normalized unit of energy. By convention it is equivalent to the approximate amount of energy that can be extracted from one tonne of crude oil. It is a standardized unit, assigned a value of 41 868 Gigajoules and may be used to compare the energy content of different sources.

*Other relevant conversion factors are:*

*1 MTOE = 41 868 TJ*

*1 TWh = 85.98 kTOE*

*1 TOE = 11.63 MWh*

#### H.I-02 KILOWATT HOUR (KWH)

The kilowatt hour is a composite unit of energy equivalent to one kilowatt (1 kW) of power sustained for one hour. One watt is equal to 1 J/s. One kilowatt hour is 3.6 megajoules which is the amount of energy converted if work is done at an average rate of one thousand watts for one hour.

### H.II ENERGY SOURCES

#### H.II-01 LIQUEFIED PETROLEUM GASES (LPG)

Liquefied Petroleum Gases (LPG) are light paraffinic hydrocarbons derived from the refinery processes, crude oil stabilisation and natural gas processing plants.

*They consist mainly of propane and butane or a combination of the two. LPG are normally liquefied under pressure for transportation and storage.*

#### H.II-02 MOTOR GASOLINE

Motor gasoline consists of a mixture of light hydrocarbons distilling between 35 °C and 215°C. It is used as a fuel for land-based spark ignition engines.

*Motor gasoline may include additives, oxygenates and octane enhancers, including lead compounds such as TEL and TML. Includes motor gasoline blending components (excluding additives/oxygenates and biogasoline), e.g. alkylates, isomerate, reformate, cracked gasoline destined for use as finished motor gasoline.*

*Often referred to as petrol, particularly in transport statistics.*

#### H.II-03 AVIATION GASOLINE

Aviation gasoline is a motor spirit prepared especially for aviation piston engines, with an octane number suited to the engine, a freezing point of –60°C and a distillation range usually within the limits of 30°C and 180°C.

**H.II-04 KEROSENE TYPE JET FUEL**

Kerosene type jet fuel is a distillate used for aviation turbine power units. It has the same distillation characteristics between 150°C and 300°C (generally not above 250°C) and flash point as kerosene. In addition, it has particular specifications (such as freezing point) which are established by the International Air Transport Association (IATA). It includes kerosene blending components.

**H.II-05 OTHER KEROSENE**

Other kerosene is a refined petroleum distillate used in sectors other than aircraft transport. It distils between 150°C and 300°C.

**H.II-06 GAS/DIESEL OIL**

Gas/diesel oil is primarily a medium distillate distilling between 180°C and 380°C.

*It comprises transport diesel (as road diesel for diesel compression ignition usually of low sulphur content) and heating and other gas oil (light heating oil for industrial and commercial purposes, marine diesel and diesel used in rail traffic and other gas oil including heavy gas oils distilling between 380°C and 540°C used as petrochemical feedstocks). Also blending components are included.*

**H.II-07 FUEL OIL (RESIDUAL)**

Residual fuel oil covers heavy fuel oils including those obtained by blending.

*Kinematic viscosity is above 10 cSt at 80°C. The flash point is always above 50°C and density is always more than 0.90 kg/l.*

**H.II-08 BIOGAS**

Biogas is a gas composed principally of methane and carbon dioxide produced by anaerobic digestion of biomass or by thermal processes from biomass, including biomass in waste.

*It includes biogases from anaerobic fermentation (such as landfill gas and sewage sludge gas) and biogases from thermal processes.*

**H.II-09 BIOGASOLINE**

This category includes all liquid fuels of natural origin (e.g. produced from biomass and/or the biodegradable fraction of waste), suitable to be blended with or replace motor gasoline from fossil origin. Biogasoline is composed of pure biogasoline and blended biogasoline.

**H.II-10 BIODIESELS**

This category includes all liquid fuels of natural origin (e.g. produced from biomass and/or the biodegradable fraction of waste), suitable to be blended with or replace gas/diesel oil from fossil origin. Biodiesels are composed of pure biodiesels and blended biodiesels.

**H.II-11 OTHER LIQUID BIOFUELS**

This category includes liquid biofuels, used directly as fuel, not included in the definitions of biogasoline, biodiesel or bio jet kerosene and liquid biofuels consumption that cannot be reported under the right category because of missing information.

**H.II-12 ELECTRICAL ENERGY**

Electrical energy covers all types of generated electricity in all types of power plants (e.g. in nuclear, thermal, hydro, wind, photovoltaic or other plants) to be distributed to consumers through the grid or consumed locally.

*It excludes electricity generated on board of vehicles, such as regenerative brakes and a battery electric vehicle that includes an auxiliary power unit (range extender).*





### **H.II-13 NATURAL GAS**

Natural gas comprises gases occurring in underground deposits, whether liquefied or gaseous, consisting mainly of methane. Natural gas includes “non-associated” gas originating from fields producing hydrocarbons only in gaseous form and “associated” gas produced in association with crude oil, as well as methane recovered from coal mines (colliery gas).

Compressed (CNG) or liquefied (LNG) natural gas can be used in transport as a fuel.

### **H.II-14 HYDROGEN**

A chemical element with high energy content that can be extracted from various sources and with various extraction methods and can be used to produce electricity for transportation purposes by a fuel cell.

## **H.III ENERGY CONSUMPTION BY THE TRANSPORT SECTOR**

### **H.III-01 ENERGY CONSUMPTION BY RAIL TRANSPORT**

Covers all consumption for use in rail traffic, including industrial railways and electrified urban transport systems.

It includes tram, metro, subway, urban and suburban rail, high speed train, and maglev.

*It excludes inputs into electrical power stations managed by the railways. Tram, metro and subway consumption are included here but not in rail statistics.*

### **H.III-02 ENERGY CONSUMPTION BY ROAD TRANSPORT**

Covers quantities used in road vehicles for the propulsion of such vehicles, whether utility vehicles or motor cars for own use or the use of others, including omnibuses belonging to railway companies.

*It includes fuel used by agricultural vehicles on highways. Consumption by civil engineering vehicles licensed to use the public road network is also included under road transport, in so far as they are subject to the normal taxation system.*

*Consumption of trolleybuses, trolley trucks and other road vehicles with overhead wires is included here.*

*It excludes energy used in stationary engines, for non-highway use in tractors (motor fuel consumed by agricultural vehicles), bitumen used in road surfacing and energy used in engines at construction sites.*

### **H.III-03 ENERGY CONSUMPTION BY DOMESTIC NAVIGATION**

Refers to fuels delivered to vessels transporting goods or people and undertaking a domestic voyage. A domestic voyage is between ports of departure and destination in the same national territory without intermediate ports of call in foreign ports. Note that this may include journeys of considerable length between two ports in a country (e.g. San Francisco to Honolulu).

*Transit journeys through a country are excluded.*

*This definition contrasts with inland waterways transport statistics.*

### **H.III-04 ENERGY CONSUMPTION BY PIPELINE TRANSPORT**

Refers to fuels and electricity used in the support and operation of pipelines transporting gases, liquids, slurries and other commodities between points within the national territory. It comprises the consumption at pumping stations and for the maintenance of the pipeline. Consumption for maintaining the flow in gathering and distribution pipelines is excluded.

**H.III-05 ENERGY CONSUMPTION BY INTERNATIONAL MARINE BUNKERS**

Refers to quantities of fuels delivered to ships (including passenger ships) of any nationality for consumption during international voyages transporting goods or passengers. International voyages take place when the ports of departure and arrival are in different national territories. Fuels delivered for consumption by ships during domestic transportation and fishing are not included. For the purposes of energy statistics, international marine bunkers are not included in exports; they are recorded separately due to their importance, e.g. for the estimation of greenhouse gas emissions.

*This definition contrasts with maritime transport statistics.*

**H.III-06 ENERGY CONSUMPTION BY AIR TRANSPORT**

Refers to energy consumption by international aviation bunkers and domestic aviation.

International aviation bunkers are quantities of fuels delivered to civil aircraft of any nationality for consumption during international flights transporting goods or passengers. International flights take place when the ports of departure and arrival are in different national territories.

Domestic aviation refers to quantities of aviation fuels delivered to all civil aircraft undertaking a domestic flight transporting passengers or goods, or for purposes such as crop-spraying and the bench-testing of aero engines. A domestic flight takes place when the departure and landing airports are on national territory. In cases where distant islands form part of the national territory, requiring long flights through the air space of other countries, those flights are, nevertheless, considered part of domestic aviation. Military use of aviation fuels should not be included. The use of fuel by airport authorities for ground transport within airports is excluded.



# Environmental impact of transport







# I. Environmental impact of transport

## I.I GREENHOUSE GAS (GHG) EMISSIONS

### I.I-01 GREENHOUSE GASES (GHG)

A greenhouse gas is a gas that absorbs infrared radiation (IR) and radiates heat in all directions.

In the context of transportation GHG emissions, the following list of gases is typically considered:

- Carbon dioxide (CO<sub>2</sub>);
- Methane (CH<sub>4</sub>);
- Nitrous oxide (N<sub>2</sub>O);
- Hydrofluorocarbons (HFCs).

*Source: IPCC guidelines for National Greenhouse Gas Inventories.*

### I.I-02 WELL-TO-WHEEL (WTW) EMISSIONS

All GHG emissions from the production, transportation, transformation and distribution of the fuel, and the fuel combusted by the vehicle. Well-to-wheel emissions can be divided into well-to-tank emissions and tank-to-wheel emissions.

*Well-to-wheel emissions exclude emissions from the manufacture of the vehicle, as well as any non-exhaust emissions such as from the vehicle's brakes or tyres.*

### I.I-03 WELL-TO-TANK (WTT) EMISSIONS

All GHG emissions from the production, transportation, transformation and distribution of the fuel used to power the vehicle.

*Well-to-tank emissions exclude emissions from the manufacture of the vehicle.*

### I.I-04 TANK-TO-WHEEL (TTW) EMISSIONS

All GHG emissions from combusting the fuel used to power the vehicle.

*Tank-to-wheel emissions exclude any non-exhaust emissions such as from the vehicle's brakes or tyres.*

## I.II AIR POLLUTANT EMISSIONS

### I.II-01 EMISSIONS OF CO, NO<sub>x</sub>, NMVOCs, PM<sub>10</sub>, PM<sub>2.5</sub> AND SO<sub>x</sub>

Emissions of CO, NO<sub>x</sub>, NMVOCs, PM<sub>10</sub>, PM<sub>2.5</sub> and SO<sub>x</sub> can be grouped into acidifying substances, particulates and ozone precursors. Transport contributes significantly to emissions of NO<sub>x</sub>, NMVOCs, PM and CO. NO<sub>x</sub> contributes to acidification, formation of ground level ozone and particulate formation.

- PM<sub>2.5</sub>: particulate matter with aerodynamic diameter of 2.5 µm or less;
- PM<sub>10</sub>: particulate matter with aerodynamic diameter of 10 µm or less;
- NMVOCs: non-methane volatile organic compounds;
- SO<sub>x</sub>: sulphur oxides;
- NO<sub>x</sub>: nitrogen oxides;
- CO: carbon monoxide.



## I.III NOISE

### I.III-01 NOISE

Unwanted or excessive sound.

- Environmental noise

Unwanted or harmful outdoor sound created by human activities, including noise emitted by means of transport, road traffic, rail traffic, air traffic, and from sites of industrial activity.

- Transport noise

Unwanted or excessive sound produced by transport systems.

### I.III-02 DB (DECIBEL)

Unit of sound level measurement defined in ISO Standard 80000-3:2006.

- dBA

Unit of sound level measurement, which incorporates a frequency weighting approximating the characteristics of human hearing.

### I.III-03 LEQ–EQUIVALENT CONTINUOUS SOUND LEVEL

Leq is a method of describing sound levels that vary over time, resulting in a single decibel value which takes into account the total sound energy over the period of time of interest.

- Noise level

A physical scale for the description of environmental noise, which has a relationship with a harmful effect, expressed in decibels (dB).

Standard noise level indicators:

- Lden (day-evening-night noise indicator) for overall annoyance,
- Lday (day-noise indicator): for annoyance during the day period,
- Levening (evening-noise indicator): for annoyance during the evening period;
- Lnight (night-time noise indicator): for sleep disturbance.

### I.III-04 NOISE CONTOURS

A series of lines superimposed on a map representing equal levels of noise exposure. They show areas in which noise levels exceed a given decibel (dB) threshold.

- Noise contours–airports

As a result of flight traffic, noise impact is either observed or calculated for every point around the airport. Due to a difference in distance from the noise source, these values may vary sharply from one point to another.

Noise contours are isolines or lines of equal noise impact, using leq or equivalent measures. These lines connect together points where equal noise impact is observed or calculated.

## I.IV LANDSCAPE FRAGMENTATION

### I.IV-01 LANDSCAPE FRAGMENTATION

The degree to which the landscape facilitates or impedes movement among resource patches. It is expressed in effective mesh size and density.

*Landscape fragmentation is the result of transforming large habitat patches into smaller, more isolated fragments of habitat. This process is most evident in urbanised or otherwise intensively used regions, where fragmentation is the product of the linkage of built up areas via linear infrastructure, such as roads and railroads.*

# J

## Passenger mobility







# J. Passenger mobility

## J.I URBAN AND SHORT DISTANCE MOBILITY (up to 300 km)

### J.I-01 TRIP

A trip (or journey) is a one-way course of travel from one place to another with a single main purpose.

The movement from an origin (stay) to the final destination.

The origin and destination may have the same location or purpose, where the trip is the movement in between. A trip may be made in one or more of stages.

*Transport professionals' trips (e.g. taxi drivers, bus/train drivers) are excluded. Trips taking place fully on foreign territory may be excluded.*

*Active modes are included.*

### J.I-02 STAGE/LEG

A smaller part of an overall trip/journey.

A trip can also consist of a number of stages. A new stage is defined when there is a change in the mode of transport or when there is a change of vehicle requiring a separate ticket.

A stage is a movement making use of one single transport mode, including any waiting time directly before or during the movement. A stage is defined by one single mode of transport.

*The waiting time between the two vehicles is included in the stage(s).*

### J.I-02.1 ROUND TRIP

Two-way course of travel to a destination and back to origin, along the same route, consisting of outward and return trip/journey.

Round trips are split into two separate journeys, one outward and one return. The destination of the outward journey is recorded as the midpoint of the round trip.

### J.I-03 TRAVEL DISTANCE

The length of a stage between two points.

Only distances on public areas, roads, paths, rails and seaways are included.

### J.I-04 TRAVEL TIME

Travel time for a trip: the duration from the moment of departure from one activity to the moment of arrival at the next activity.

Travel time for a stage: the duration from "begin waiting for" until "alighting from" the mode.

### J.I-05 MODE OF TRANSPORT

Means of conveyance for trip/journey or for shipment.

Other travel modes which cannot be assigned to the categories described in section B.II (Transport equipment (vehicles)) such as motor-driven wheelchairs, self-balancing scooters, Segways, scooters, one wheelers (motorised), horseback, horse carriages, dog sleds (non-motorised), etc. may also be included.

### J.I-06 MAIN TRAVEL MODE

The main transport within a trip which has been used for the longest distance.



### **J.I-07 PURPOSE (TRIP PURPOSE, DESTINATION PURPOSE, ACTIVITY)**

Purpose of a trip is the main activity at the destination of a trip.

Trip purpose categories:

- Work (commuting): Work/commuting is first of all trips to the workplace at the location of the respondent's employer.

*A meeting outside the address of the company is a business trip. For employees working at a construction site for a long period, trips directly from home to the construction site are work/commuting trips too.*

- Professional / business: Trip related to work but not considered as commuting.
- Education: School or educational institution, school field trips, etc.
- Shopping: Shopping, groceries, non-daily shopping, etc.
- Escorting: Picking up/accompanying/escorting people, taking children to school, bringing someone to the station etc.
- Leisure: Visiting friends/relatives, going out to eat or drink, touring/walking, sport/hobby, visiting vacation home, recreation at water/beach/mountains, cultural activities, entertainment, holiday, sightseeing, agro-tourism, voluntary work, private meetings, other leisure, etc.
- Personal business: Services/personal care, health treatment, hair dresser, personal reasons, visiting a lawyer, religious activity, bank, post office, bringing or picking up things, etc.

### **J.I-08 CAR OCCUPANCY**

The number of persons in a passenger car by all ages, from babies to the oldest.

*Excluding professional drivers.*

## **J.II MEDIUM- AND LONG-DISTANCE TRAVEL WITH OVERNIGHT STAY**

### **J.II-01 TRIP AND JOURNEY**

Trip: the movement from an origin where the respondent has an activity to the destination where the respondent has (another) activity. The new activity can be the same kind of activity but with a different destination.

Journey: the sum of trips away from home and back home again, which could include at least one overnight stay.

The destination of a journey for a medium- or long-distance travel with overnight stay is the final destination.

*Professional transport trips are excluded.*

### **J.II-02 STAGE**

A stage is a movement making use of one transport mode, including any waiting time directly before or during the movement. A stage is defined by one single mode of transport.

*If a change of mode of transport takes place, this means that another stage is initiated upon the change of transport modes.*

### **J.II-03 DISTANCE**

Distance is defined as the length of the travelled track.

*Only distances on public areas, roads, paths, rails, sky and seaways are included.*

### **J.II-04 TRAVEL TIME AND DURATION OF A JOURNEY**

Travel time: the time spent travelling from the moment of departure from one activity to the moment of arrival at the new activity. The travel time includes the time spent waiting between two consecutive stages.

Duration of a journey: the number of nights spent from leaving home until returning home.



### **J.II-05 TRAVEL PURPOSE**

The purpose of a journey is the main reason for a journey.

Travel purposes are:

- Professional/business purpose: business in course of work, trade, employee business, education as part of a position, commuting to a workplace so far away that a place to stay at the destination is needed.
- Private purpose: all purposes that are not professional.

### **J.II-06 ACCOMPANYING TRAVELLERS AND CAR OCCUPANCY**

Accompanying travellers: persons travelling together.

*For cars and taxis, other persons in the same vehicle are covered.*

Car occupancy: The number of persons in a car.

## **J.III URBAN AREA AND URBAN MOBILITY**

### **J.III-01 URBAN AREA**

Urban area consisting of a city plus its commuting zone.

*This is defined in the EU-OECD functional urban area definition (EU-OECD FUA) and was formerly known as LUZ (larger urban zone).*

### **J.III-02 URBAN AND NON-URBAN MOBILITY**

Urban mobility: Trips made by residents of an urban area, where both origin and destination are inside the same urban area.

Non-urban Mobility: Any trips made by people living outside the urban area or where at least one endpoint is outside the urban area.

*For passenger mobility means of transport may be used that are not covered in Chapter B.II. such as motor-driven wheelchairs, self-balancing scooters, Segway, push scooters, one wheelers (motorised), horseback, horse carriage, dog sled (non-motorised), etc. The classification of such means of transport into 'motorised' and 'non-motorised' is a way of producing internationally comparable statistics on passenger mobility by such transport means.*



# Symbols and abbreviations







# Symbols and abbreviations

## INTERNATIONAL ORGANISATIONS

<b>CAST:</b>	Commercial Aviation Safety Team
<b>CEN:</b>	European Committee for Standardization
<b>Eurostat:</b>	The Statistical office of the European Union
<b>IATA:</b>	International Air Transport Association
<b>ICAO:</b>	International Civil Air Organization
<b>IEA:</b>	International Energy Agency
<b>IMO:</b>	International Maritime Organization
<b>IPCC:</b>	Intergovernmental Panel on Climate Change
<b>ISO:</b>	International Organization for Standardization
<b>ITF:</b>	International Transport Forum
<b>IWG.Trans:</b>	Intersecretariat Working Group on Transport Statistics
<b>UIC:</b>	Union Internationale des Chemins de Fer
<b>UNCTAD:</b>	United Nations Conference on Trade and Development
<b>UNECE:</b>	United Nations Economic Commission for Europe

## CLASSIFICATIONS AND NOMENCLATURES

<b>ADR:</b>	European Agreement concerning the International Carriage of Dangerous Goods by Road, United Nations, 2017
<b>HSC:</b>	High Speed Craft code, International Maritime Organization
<b>ICST-COM:</b>	International Classification of Ships by Type, European Commission
<b>IMDG:</b>	International Maritime Dangerous Goods code, International Maritime Organization
<b>ISIC/Rev.4:</b>	International Standard Industrial Classification of All Economic Activities, United Nations Statistics Division
<b>NACE/Rev.2:</b>	Statistical Classification of Economic Activities in the European Community, Official Journal of the European Union N° L 393/1, 30 December 2006
<b>NST 2007:</b>	Standard Goods Nomenclature for Transport Statistics
<b>NUTS:</b>	Nomenclature of Territorial Units for Statistics, Eurostat
<b>R.E.3:</b>	United Nations Consolidated Resolution on the Construction of Vehicles

<b>RID:</b>	Regulation concerning the International Carriage of Dangerous Goods by Rail, Intergovernmental Organisation for International Carriage by Rail, 2017
<b>SOLAS:</b>	International Convention for the Safety of Life at Sea, International Maritime Organization
<b>SITC/Rev.4:</b>	Standard International Trade Classification, Statistical Papers, Series M, No. 34/Rev. 4, United Nations, 2006
<b>UN/LOCODE:</b>	United Nations Code for Trade and Transport Locations

## ABBREVIATIONS

<b>AADT:</b>	Average annual daily traffic
<b>AIS:</b>	Automatic Identification System
<b>BTO:</b>	Basic Transport Operations
<b>CNG:</b>	Compressed Natural Gas
<b>DWT:</b>	Deadweight
<b>FS:</b>	Flight stage
<b>FUA:</b>	Functional Urban Area
<b>GHG:</b>	Greenhouse gas
<b>GT:</b>	Gross tonnage
<b>HFC:</b>	Hydrofluorocarbon
<b>ITU:</b>	Intermodal Transport Unit
<b>IWT:</b>	Inland Waterway Transport
<b>LASH:</b>	Light-aboard-ship
<b>LNG:</b>	Liquefied Natural Gas
<b>LPG:</b>	Liquefied Petroleum Gas
<b>MAIS:</b>	Maximum Abbreviated Injury Scale
<b>NGL:</b>	Natural Gas Liquids
<b>NMVOC:</b>	Non-methane volatile organic compound
<b>OFOD:</b>	On-flight origin/destination
<b>PM:</b>	Particulate matter
<b>TEL:</b>	Tetraethyllead
<b>TEN:</b>	Trans-European Transport Network
<b>TTW:</b>	Tank-to-wheel
<b>TML:</b>	Tetramethyllead
<b>VAT:</b>	Value-Added Tax
<b>WTT:</b>	Well-to-tank
<b>WTW:</b>	Well-to-wheel



## UNITS

<b>°C:</b>	Degree Celsius	<b>kWh:</b>	Kilowatt-hour
<b>µm:</b>	Micrometer	<b>L:</b>	Litre
<b>cc:</b>	cubic centimetre	<b>Lb:</b>	Pound
<b>Cm:</b>	Centimetre	<b>m:</b>	Metre
<b>cSt:</b>	Centistokes	<b>m2:</b>	Square metre
<b>cu.in:</b>	Cubic inch	<b>MTOE:</b>	Million tonne of oil equivalent
<b>dB:</b>	Decibel	<b>pkm:</b>	Passenger-kilometre
<b>dBA:</b>	A-weighted decibel	<b>t:</b>	Tonne (metric)
<b>GWh:</b>	Gigawatt-hour	<b>TEU:</b>	Twenty-foot Equivalent Unit
<b>Hz:</b>	Hertz	<b>TJ:</b>	Terajoule
<b>J/s:</b>	Joules per second	<b>tkm:</b>	Tonne-kilometre
<b>Kg:</b>	Kilogram	<b>TOE:</b>	Tonne of oil equivalent
<b>Km:</b>	Kilometre	<b>TWh:</b>	Terawatt – hour
<b>Km/h:</b>	Kilometres per hour	<b>vkm :</b>	Vehicle-kilometre
<b>kW:</b>	Kilowatt	<b>W/(m2.°C):</b>	Watt/square meter/°C





# Glossary for transport statistics

The Glossary for transport statistics was published for the first time in 1994 with the purpose of assisting member countries during the collection of data on transport using the Common Questionnaire developed by the UNECE, the International Transport Forum and Eurostat. It has since evolved to cover all areas of transport statistics.

The present fifth edition is the result of continuing valuable cooperation between the three organisations, that — through the action of the Intersecretariat Working Group (IWG. Trans.) — has put a sustained effort into harmonizing transport statistics at the European and international level. The IWG provided valuable input with respect to missing definitions, terminology that is outdated, as well as definitions that should be reformulated or clarified, revised and illustrated.

The new 5th edition of the Glossary comprises 744 definitions and represents a point of reference for all those involved in transport statistics. By following the guidance contained within these definitions, a considerable contribution will be given to the improvement in both the quality and comparability of the data.

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## For more information

### **Eurostat**

<https://ec.europa.eu/eurostat/>

### **United Nations Economic Commission for Europe**

[www.unece.org/trans/](http://www.unece.org/trans/)

### **International Transport Forum**

[www.itf-oecd.org/](http://www.itf-oecd.org/)