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# **Economic Commission for Europe**

**Inland Transport Committee** 

# **Working Party on Transport Statistics**

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Item 4(a) of the provisional agenda

Data collection, methodological development and harmonization of transport statistics:

**Glossary for Transport Statistics** 

# **Proposed rail chapter for the Glossary for Transport Statistics**

Amendments as agreed by the Group of Experts and the Intersecretariat Working Group, as of 29 May 2018

#### **Summary**

The following document is a proposed draft of the rail chapter for the 5<sup>th</sup> edition of the UNECE/ITF/Eurostat Glossary for Transport Statistics, as of 29 May 2018. Users can see the changes described in the modifications file ECE/TRANS/WP.6/2018/Inf-1e.

# A. Railway Transport (version 29 May 2018)

#### A.I INFRASTRUCTURE

#### A.I-01 Track

A pair of rails over which rail borne vehicles can run maintained by an infrastructure manager.

When reporting the cumulative length of railway tracks in a country at the end of the reporting year, the tracks forming the following lines should be excluded:

- 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;
- Metro, Tram and Light rail urban lines;
- 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 tariffs as independent points of departure or arrival for the conveyance of passengers or goods, maintained and operated by the infrastructure manager.

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; refueling facilities and supply of fuel in these facilities.

#### 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.

#### A.I-02 Railway Line

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

A line can be made up of one or more tracks.

#### Excluded are:

- 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;
- Metro, Tram and Light rail urban lines;
- 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;
- Stretches of road or water even if rolling stock is conveyed over such routes, e.g. by wagon-carrying trailers or ferries.



## A.I-02.1 Principle Railway Lines

Railway lines maintained and operated for running trains.

The cumulative length of the principle 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, but not operated.
- Private lines and lines with no public access.

## A.I-03 Conventional railway line

All principal railway lines that are not classified as «dedicated high speed lines» or «upgraded high speed railway lines».

# A.I-04 Dedicated high-speed railway line

A line specially built to allow traffic at speeds generally equal to or greater than  $250\,\mathrm{km/h}$  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.

## A.I-05 Upgraded high-speed railway line

A conventional line specially upgraded to allow traffic at speeds of the order of 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-06 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, normally with around 1 000 m between the stations.



Also known as 'subway', 'metropolitan railway', 'heavy rail', 'rapid rail', 'rapid transit', 'metro' or 'underground'.

## A.I-07 Light (railway/rail) line

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

#### A.I-08 Tramline (streetcar)

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.

#### A.I-09 Sidings

Tracks branching off running main tracks/lines.

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

# A.I-10 **Private sidings** Privately operated pieces of rail infrastructure, connecting loading facilities (normally industry and other manufacturing sites) to the public rail network. A.I-11 **Marshalling Yard** Site especially equipped with a number of tracks or other equipment for railway vehicle marshalling (switching) operations. Sometimes referred to as classification yard. A.I-12 Halt Stop-off point generally open to passenger traffic only and not usually staffed. A.I-13 **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. A.I-13.1 (Passenger) Station Station for passenger traffic, equipped with specific facilities for the access of the passengers and providing related services. A.I-13.2 Rail freight terminal 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-14 Intermodal transport terminal Place equipped for the transhipment and storage of intermodal transport units (ITUs) between modes. 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, transhipment and distribution of goods for a particular region. A.I-15 **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. A.I-15.1 **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:

- (a) Manual: a level crossing where user-side protection or warning is manually activated by a railway employee.
- (b) Automatic with user-side warning: a level crossing where user-side warning is activated by the approaching train.
- (c) 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.

(d) 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.



# A.I-15.2 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.



## A.I-16 Electrified track/line

An electrified track or line with a least one track electrified.

Sections of lines adjacent to stations that are electrified only to permit shunting and not electrified as far as the next stations are to be counted as non-electrified lines.

## A.I-17 Rail track gauge

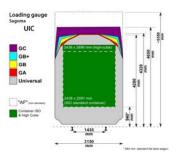
Track gauge: The smallest distance between a pair of rails measured between the inside surfaces of the rail heads.

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-18 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 ownersing at the disposalo the railway enterprise and hired by it and actually sed 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 ownerso 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, breakingup.

# A.II-02 High-speed railwayvehicle

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).

Included are trainsets that are technically divisible but are normally kept configuration. One trainset may be coupled to another one. Each trainset may he one tractive vehicle.



#### A.II-05 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 for the carriage of passengers and/or goods (a 'railcar').

#### A.II-06 Locomotive

A 'locomotive' is a tractive vehicle (or combination of several vehicles) that is not intended to carry a payload and has the ability to be uncoupled in normal operation from a train and to operate independently.

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-07 Shunter

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

#### A.II-08 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, mutatis mutandis, to railcars.

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-09 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-10 Metro vehicle

Electric railway vehicle designed for use on a metroline.

Usually drawing power from a third rail.

#### A.II-11 Tram (streetcar, also B.II-18)

Tractive railway vehicle with a power of less than 110 kW at the draw hook (coupler).

Normally used for shunting or for work trains and short-distance or low-tonnage terminal services. The definitions of the various categories of locomotives (electric, diesel) apply mutatis mutandis, to light rail motor tractors.

#### A.II-12 Tram-Train

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

# A.II-13 Light rail vehicle

Rail vehicle designed for use on a light rail line.

#### A.II-14 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-15 Rail coach

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

# A.II-16 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-17 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-18 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.

# A.II-19 Freight wagon orwagon

Railway vehicle normally intended for the transport of goods.

# A.II-20 Railway enterprise-owned wagon

Any wagon belonging to a railway enterprise.

Excluded are privately-owned wagons.

#### A.II-21 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.

## A.II-22 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.

#### A.II-23 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 2°C
- IR = Heavily insulated: characterised by a K coefficient equal to or less than 0.4 W/m 2°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.

# A.II-24 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  $+ 30^{\circ}$ 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-25 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  $+30^{\circ}$ 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. T e internal wagon temperature should be maintained between +12  $^{\circ}$ C and -20  $^{\circ}$ C inclusive.

# A.II-26 Heated wagon

Insulated wagon fitted with a heater.

- Class A. Heated equipment for use when the mean outside temperature is -10°C
- Class B. Heated equipment for use when the mean outside temperature is -20°C.

#### A.II-27 High sided wagon

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

# A.II-28 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.

#### A.II-29 Tank wagon

Wagon designed for the bulk transport of liquids or gases.

#### A.II-30 Silo wagon

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

# A.II-31 Wagon for intermodal transport (see G.II-10)

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.

# A.II-32 Wagon carrying capacity

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

# A.II-33 Age of railwayvehicle

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

# 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.



# 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.

## A.III-04 Integrated company

Railway transport operator also being an infrastructure manager.

# A.III-05 Types of employment

The main categories of employment being considered are:

- General administration including central and regional management staff (e.g. finance, legal, personnel etc.) and boards of directors

The management staff of specialist departments (operations and traffic, traction and rolling stock, ways and works) are excluded but are taken into account in the statistics specific to each of these services.

Operations and traffic

Station staff (excluding staff operating control and safety systems), train crews (excluding tractive units' crews) and associated central and regional offices. Includes tourism and advertising.

Traction and rolling stock

Tractive units' crews, workshop, inspection staff and associated central and regional offices.

- Permanent way (railway tracks) development and maintenance
- Permanent way (railway tracks) maintenance and supervision staff (including staff operating control and safety systems)
- Other operations.

Passenger and goods road services, shipping services, electric power plants, hotel staff etc.

#### A.III-06 Fare 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-07 Investment expenditure on infrastructure

Capital expenditure on new (railway) infrastructure (including extension of existing infrastructure), renewals and upgrades. Construction and extension of existing infrastructure, including reconstruction, renewal and major repairs of 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-08 Investment expenditure on rolling stock

Expenditure for purchase of new railway vehicles.

#### A.III-09 Maintenance expenditure on infrastructure

Non-capital expenditure that the infrastructure manager carries out in order to maintain the condition and capability of the existing infrastructure.

# A.III-10 Maintenance expenditure on rolling stock

Expenditure for keeping railway vehicles in working order.

#### 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:

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

#### 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.

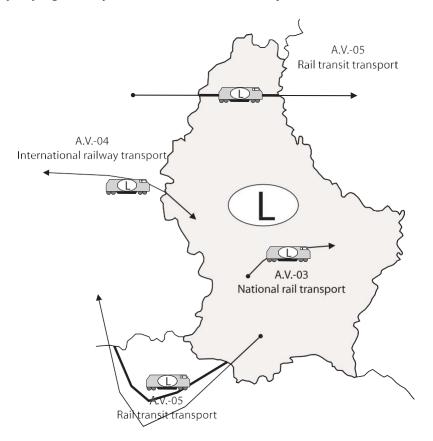
It may involve transit through a second country.

Sometimes refers to 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.

# 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, 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-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, 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-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:

- Full trainload: 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.
- 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 trainload are excluded.
- Smalls / small load: Any consignment other than full train loads or full wagon loads.

#### 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.

#### 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 fifteenth revised edition of the UN Recommendations on the Transport of Dangerous Goods, United Nations, Geneva 2007.

- 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: Radioactivematerial
- Class8: Corrosive substances
- Class 9: Miscellaneous dangerous substances and articles.

#### A.V-23 Goods loaded

Goods placed on a railway vehicle and dispatched by rail.

Unlike in road and inland waterway transport, transhipments 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, transhipments 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 located in the reporting country and a place of unloading 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 located in a foreign country and a place of unloading in the reporting 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 reporting 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, transhipments 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, transhipments 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

Unwanted or unintended sudden event or a specific chain of such events which have harmful consequences. Railway accidents are accidents in which at least one moving rail vehicle is involved.

They are divided into the following categories:

- Collisions
- Derailments
- Level crossing accidents
- Accidents to persons caused by rolling stock in motion
- Fires in rolling stock
- Others.

By definition suicides are excluded as they are a deliberate act.

For this reason, neither the UIC in its rail accident statistics nor the international road accident statistics take them into account. Because of their importance for rail safety and operations, suicide statistics should be collected separately. Terrorist acts are excluded.

#### A.VI-02 Incident

Any safety occurrence, other than an accident, affecting the safety of railway operations.

Also sometimes 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.

# 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 (Union Internationale des Chemins de Fer), 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 killed immediately or dying 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 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 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 excluding persons killed or seriously injured, excluding attempted suicides.

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

# A.VI-13 Collision

#### Collision of train with rail vehicle

A 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 train 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.

#### 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 onboard vehicles.

#### A.VI-17 Fires in rollingstock

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 RID/ADR section 1.8.5.

#### 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.