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TERMINOLOGY ON COMBINED TRANSPORT

Note by the secretariat

This document lists the principal terms used in combined transport or related to it.

All the definitions referring specifically to the geographical framework of Europe may be applied to other regions of the world. They are intended for the work of the three intergovernmental organizations, the European Community, the European Conference of Ministers of Transport (ECMT) and the UN/ECE.

The purpose of this glossary is to determine the meaning of the terms in current use, and to make them more easily understandable by the increasing number of people who use them, the politicians, technical personnel or those operating in the various modes of transport concerned. These definitions are not applicable in their strictest sense to the legal and statistical fields, whose relevant documents of reference exist already.

This being the case, the translation of the most widely used terms in combined transport into the three working languages of the UN/ECE is intended to gradually harmonize this terminology.

CONTENTS

	<u>Page</u>
I. General Terms	5-6
1.0 Multimodal transport	
1.1 Intermodal transport	
1.2 Combined transport	
1.3 Road-rail transport	
1.4 Rolling road	
1.5 Accompanied combined transport	
1.6 Unaccompanied combined transport	
1.7 Roll-on-roll-off (RO-RO)	
1.8 Lift-on-lift-off (LO-LO)	
1.9 Feeder service	
1.10 Logistics	
1.11 Short sea shipping	
1.12 Consignment	
1.14 Limit of liability	
1.13 Transshipment	
II. Combined transport actors	6-7
2.0 Shipper/consignor/sender	
2.1 Forwarding agent/freight forwarder	
2.2 Consignee	
2.3 Transport operator/carrier	
2.4 Actual carrier/subcontractor	
2.5 Principal	
2.6 Multimodal transport operator (MTO)	
III. Transport units	7-8
3.0 Articulated vehicle	
3.1 Road train	
3.3 Semi-trailer	
3.2 Trailer	
3.4 Pocket wagon	
3.5 "Basket" wagon	
3.6 "Spine" wagon	
3.7 Low floor wagon	
3.8 Rolling-road wagon	
3.9 Double stack wagon	
3.10 Bimodal semi-trailer (rail-road)	
3.11 Panamax	
3.12 Overpanamax	

	<u>Page</u>
IV. Loading units	9-10
4.0 Loading unit	
4.1 Intermodal transport unit (ITU)	
4.2 Container	
4.3 Land container	
4.4 Maritime container	
4.6 High cube container	
4.7 Super high cube container	
4.8 TEU	
4.9 Swap body	
4.10 Stacking	
4.11 Stuffing/stripping	
4.12 Corner fitting	
4.13 Twistlock	
4.14 Tare	
V. The unit load	10-11
5.0 Unit load	
5.1 Pallet	
5.2 “Big bag”	
VI. Infrastructure and equipment	11-13
6.0 Terminal	
6.1 Logistic center	
6.2 Hub	
6.3 Freeport	
6.4 Dry port	
6.5 Rail loading gauge	
A gauge	
B gauge	
C gauge	
6.6 Track gauge	
6.7 Loading track	
6.8 Private siding	
6.9 Classic crane	
6.10 Gantry crane	
6.11 Straddle carrier	
6.12 Reach stacker	
6.13 Fork lift truck	
6.14 RO-RO ramp	
6.15 Spreader	

I. GENERAL TERMS

1.0 MULTIMODAL TRANSPORT:

Carriage of goods by two or more modes of transport.

1.1 INTERMODAL TRANSPORT:

The movement of goods in one and the same loading unit or road vehicle, which uses successively two or more modes of transport without handling the goods themselves in changing modes.

*By extension, the term **intermodality** has been used to describe a system of transport whereby two or more modes of transport are used to transport the same loading unit or truck in an integrated, without loading or unloading, in a [door to door] transport chain^{1/}.*

1.2 COMBINED TRANSPORT:

Intermodal transport where the major part of the European journey is by rail, inland waterways or sea and any initial and/or final legs carried out by road are as short as possible.

1.3 ROAD-RAIL TRANSPORT:

Combined transport by rail and road

*In English, the term **piggyback** does not refer to combined transport in general but specifically to the transport by rail of road semi-trailers.*

1.4 ROLLING ROAD:

Transport of complete road vehicles, using roll-on roll-off techniques, on trains comprising low-floor wagons throughout.

1.5 ACCOMPANIED COMBINED TRANSPORT:

Transport of complete road vehicles, accompanied by the driver, using another mode of transport (for example ferry or train).

1.6 UNACCOMPANIED COMBINED TRANSPORT:

Transport of road vehicles or Intermodal Transport Units (see 4.1), not accompanied by the driver, using another mode of transport (for example a ferry or a train).

^{1/} Commission Communication COM(97)243 Final used the term intermodality to describe a system of transport where at least two different modes of transport are used in an integrated way to complete a door to door transport chain.

1.7 ROLL-ON-ROLL-OFF (RO-RO):

Loading and unloading of a road vehicle, a wagon or an ITU on or off a ship on its own wheels or wheels attached to it for that purpose. In the case of rolling road, only road vehicles are driven on and off a train.

1.8 LIFT-ON-LIFT-OFF (LO-LO):

Loading and unloading of Intermodal Transport Units (ITU) using lifting equipment.

1.9 FEEDER SERVICE:

Short sea shipping service which connects at least two ports in order for the freight (generally containers) to be consolidated or redistributed to or from a deep-sea service in one of these ports.

By extension, this concept may be used for inland transport services.

1.10 LOGISTICS:

The process of designing and managing the supply chain in the wider sense.

The chain can extend from the delivery of supplies for manufacturing, through the management of materials at the plant, delivery to warehouses and distribution centres, sorting, handling, packaging and final distribution to point of consumption.

1.11 SHORT SEA SHIPPING:

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.

1.12 CONSIGNMENT:

Freight sent under a single contract of carriage.

In combined transport, this term may be used for statistical purposes, to measure loading units or road vehicles.

*The grouping together of several consignments into a full load is called **consolidation** or **groupage**.*

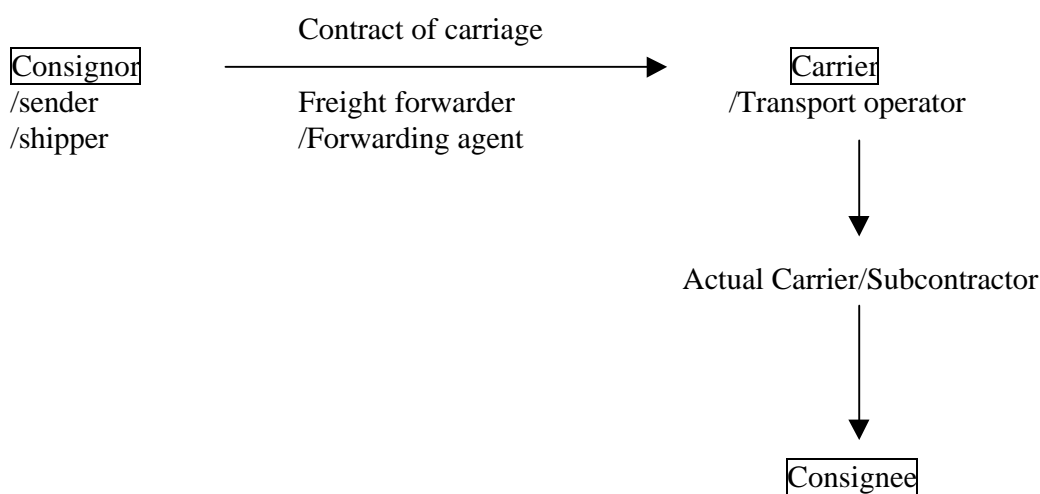
1.13 TRANSSHIPMENT:

Moving ITUs from one means of transport to another.

1.14 LIMIT OF LIABILITY

The maximum sum of money payable by a carrier to a shipper for any damage or loss to the cargo for which the carrier is liable under the contract of carriage. The amount of the limitation is determined by agreement or by law.

II. COMBINED TRANSPORT ACTORS



The above terms are used in (international) transport contracts.

2.0 SHIPPER/CONSIGNOR/SENDER:

A person or company* who puts goods in the care of others (forwarding agent/freight forwarder, carrier/transport operator) to be delivered to a consignee.

2.1 FORWARDING AGENT/FREIGHT FORWARDER:

Intermediary who arranges for the carriage of goods and/or associated services on behalf of a shipper.

* in the following definitions of this chapter, a person means either a physical or legal person or a company.

- 2.2 CONSIGNEE:**
Person entitled to take delivery of the goods.
- 2.3 TRANSPORT OPERATOR/ CARRIER:**
The person responsible for the carriage of goods, either directly or using a third party.
- 2.4 ACTUAL CARRIER/SUBCONTRACTOR:**
A third party who performs the carriage completely or partly.
- 2.5 PRINCIPAL:**
A person for whom another acts as an agent.
- 2.6 MULTIMODAL TRANSPORT OPERATOR (MTO)**
Any person who concludes a multimodal transport contract and assumes responsibility for the performance thereof as a carrier or a transport operator.

III. TRANSPORT UNITS

- 3.0 ARTICULATED VEHICLE:**
A motor vehicle coupled to a semi-trailer.
- 3.1 ROAD TRAIN:**
A motor vehicle coupled to a trailer (sometimes referred to in English as a drawbar-trailer combination).
- 3.2 TRAILER:**
A non-powered vehicle for the carriage of goods, intended to be coupled to a motor vehicle, excluding semi-trailers.
- 3.3 SEMI-TRAILER:**
A non-powered vehicle for the carriage of goods, intended to be coupled to a motor vehicle in such a way that a substantial part of its weight and of its load is borne by the motor vehicle. Semi-trailers may have to be specially adapted for use in combined transport.

3.4 POCKET WAGON:

A rail wagon with a recessed pocket to accept the road wheels of a semi-trailer.

3.5 “BASKET” WAGON:

A rail wagon with a demountable subframe, fitted with devices for vertical handling, to allow the loading and unloading of semi-trailers or road vehicles, not exceeding 12 m long.

3.6 “SPINE” WAGON:

A rail wagon with a central chassis designed to carry a semi-trailer.

3.7 LOW FLOOR WAGON:

A rail wagon with a low loading platform specially built to carry Intermodal Transport Units (ITU)

3.8 ROLLING-ROAD WAGON:

A rail wagon with low floor throughout which, when coupled together, form a rolling-road (cf. 1.4 and 1.7).

3.9 DOUBLE STACK WAGON:

A rail wagon designed for the transport of containers stacked on top of each other.

3.10 BIMODAL SEMI-TRAILER (RAIL-ROAD):

A road semi-trailer capable of being converted into a rail wagon by the addition of rail bogies.

3.11 PANAMAX:

Ship with dimensions that allow it to pass through the Panama canal: maximum length 295 m, maximum beam overall 32.25 m, maximum draught 13.50 m.

3.12 OVERPANAMAX:

Ship with at least one dimension greater than Panamax.

IV. LOADING UNITS

4.0 **LOADING UNIT:**

Container or swap body.

4.1 **INTERMODAL TRANSPORT UNIT (ITU):**

Containers, swap bodies and semi-trailers suitable for intermodal transport.

4.2 **CONTAINER:**

Generic term for a box to carry freight, strong enough for repeated use, usually stackable and fitted with devices for transfer between modes.

4.3 **LAND CONTAINER:**

Container built to the International Railway Union (UIC) standards, for use in rail-road combined transport.

4.4 **MARITIME CONTAINER:**

A container strong enough to be stacked in a cellular ship and to be top lifted. Most maritime containers conform to International Standard Organisation (ISO) standards.

4.5 **AIR CONTAINER:**

Container conforming to standards laid down for air transportation.

4.6 **HIGH CUBE CONTAINER:**

Container of standard ISO length and width but with extra height - 9'6" (2.9 m) instead of 8' (2.44 m).

4.7 **SUPER HIGH CUBE CONTAINER:**

Container exceeding ISO dimensions. These dimensions vary and may include, for example, lengths of 45' (13.72 m), 48' (14.64 m), or 53' (16.10 m).

4.8 **TEU:**

Twenty-foot Equivalent Unit. A standard unit based on an ISO container of 20 feet length (6.10 m), used as a statistical measure of traffic flows or capacities. One standard 40' ISO Series 1 container equals 2 TEUs.

4.9 SWAP BODY:

A freight carrying unit optimised to road vehicle dimensions and fitted with handling devices for transfer between modes, usually road/rail.

Originally, such units were not capable of being stacked when full or top-lifted. But many units can now be stacked and top-lifted and the main feature distinguishing them from containers is that they are optimised to vehicle dimensions. Some swap bodies are equipped with folding legs on which the unit stands when not on the vehicle.

4.10 STACKING:

Storage or carriage of Intermodal Transport Units (ITU) on top of each other.

4.11 STUFFING/STRIPPING:

Loading and unloading of cargo into or from an ITU.

4.12 CORNER FITTING:

Fixed points usually located at the top and bottom corners of a container into which twistlocks or other devices engage to enable the container to be lifted, stacked, secured.

These fittings are increasingly used on swap bodies, although not on the corners but on points which are compatible with 20 or 40 feet container corner fittings.

4.13 TWISTLOCK:

Standard mechanism on handling equipment which engages and locks into the corner fittings of ITU; also used on ships and vehicles to fix ITUs.

4.14 TARE:

Weight of ITU or vehicle without cargo.

V. THE UNIT LOAD

5.0 UNIT LOAD:

Palletised load or prepacked unit with a footprint conforming to pallet dimensions and suitable for loading into an ITU.

5.1 PALLET:

A raised platform, normally made of wood, facilitating the handling of goods. Pallets are of standard dimensions. The mostly used in Europe are 1000 mm x 1200 mm (ISO) and 800 mm x 1200 mm (CEN).

5.2 “BIG BAG” (Trade Mark):

A removable internal liner, strong enough to be lifted and to carry bulk cargoes of different types.

VI. INFRASTRUCTURE AND EQUIPMENT

6.0 TERMINAL:

A place equipped for the transshipment and storage of ITUs.

In French, for piggyback, also called “chantier terminal”

6.1 LOGISTIC CENTRE:

Geographical grouping of independent companies and bodies which are dealing with freight transport (for example, freight forwarders, shippers, transport operators, customs) and with accompanying services (for example, storage, maintenance and repair), including at least a terminal.

In English, also called “Freight village”. In Italian, also called “Interporto”.

6.2 HUB:

Central point for the collection, sorting, transshipment and distribution of goods for a particular area.

This concept comes from a term used in air transport for passengers as well as freight. It describes collection and distribution through a single point (“Hub and Spoke” concept).

6.3 FREEPORT:

Zone where goods can be manufactured and/or stored without payment of their relevant duties and taxes.

6.4 DRY PORT:

Inland terminal which is directly linked to a maritime port.

6.5 RAIL LOADING GAUGE:

The profile through which a rail vehicle and its loads (wagons - ITUs) must pass, taking into account tunnels and track side obstacles. There are 3 international gauges, agreed by UIC:

A GAUGE:

Total height wagon + ITU 3.85 m above the rail and 1.28 m on either side of the track axle.

B GAUGE:

Total height wagon + ITU 4.08 m above the rail and 1.28 m on either side of the track axle.

C GAUGE:

Total height wagon + ITU 4.65 m above the rail and 1.45 m on either side of the track axle.

Another gauge of particular significance for combined transport is the B+ GAUGE, for which the total height wagon + ITU is 4.18 m above the rail and 1.36 m on either side of the track axle. More generally, there are many other gauges recognised by rail networks (UIRR + Intercontainer).

6.6 TRACK GAUGE:

The distance between the internal sides of rails on a railway line. It is generally 1.435 m.

Other gauges are generally used in some European countries: for instance, 1.676 m in Spain and Portugal, 1.524 m in the Russian Federation.

6.7 LOADING TRACK:

Track on which ITUs are transhipped.

6.8 PRIVATE SIDING:

Direct rail connection to a company.

6.9 CLASSIC CRANE:

Conventional lifting crane where the load is suspended by cable via a jib.

The handling of ITUs requires the cable to be connected to the ITUs' corners.

6.10 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 manoeuvre in one direction. The load can be moved horizontally, vertically and sideways.

Such cranes normally straddle a road/rail and/or ship/shore interchange.

6.11 STRADDLE CARRIER:

A rubber-tyred overhead lifting vehicle for moving or stacking containers on a level reinforced surface.

6.12 REACH STACKER:

Tractor vehicle with front equipment for lifting, stacking or moving ITUs.

6.13 FORK LIFT TRUCK:

Vehicle equipped with power-driven horizontal forks, which engage in pockets in ITUs or below pallets and move or stack such units in a port or warehouse

6.14 RO-RO RAMP:

A flat or inclined ramp, usually adjustable, which enables road vehicles to be driven onto or off a ship or a rail wagon.

6.15 SPREADER:

Adjustable fitting on lifting equipment designed to connect with the upper corner fittings of an ITU or by grapple arms, taking the ITU from the bottom.
