

GLOSSARY

OF MULTIMODAL TRANSPORT TERMS

3PL – A third-party, or contract, logistics company. A firm to which logistics services are outsourced. Third party logistics providers typically specialize in integrated operation, warehousing and transportation services that can be scaled and customized to customers' needs based on market conditions, such as the demands and delivery service requirements for their products and materials.

Accompanied transport – Combined transport is said to be "accompanied" when the driver of a complete freight carrying road vehicle is accompanying that vehicle, while it is being transported using other mode of transport.

Authorized Economic Operator – A party involved in the international movement of goods, in whatever function, that has been approved by, or on behalf of, a national Customs administration as complying with WCO or equivalent supply chain security standards.

Backhaul – A freight movement in a direction (or lane) of secondary importance or light demand. Backhauls are preferable to deadheads by transportation companies, since revenue is generated. In order to entice shippers to move goods in backhaul markets, carriers may offer lower rates.

Barge – A flat bottomed inland cargo vessel for canals and rivers with or without own propulsion for the purpose of transporting goods.

Berth – A location in a port where a vessel can be moored often indicated by a code or name.

Break-Bulk cargo – Cargo in-between bulk and containerized, which must be handled piece-by-piece by terminal workers (stevedores). Often stored in bags or boxes and stacked onto pallets. Smaller lift equipment (forklifts, small cranes) used than for containerized cargo, but more labour intensive.

Bulk cargo – Cargo that is stowed loose on transportation vehicles, in a tank or hold without specific packaging, and handled by pump, scoop, conveyor, or shovel. Examples: grain, coal, petroleum, chemicals.

Bundling – When the compatible freight flows of the shippers are consolidated in space, as well as synchronized in time.

Bunker Adjustment Factor (BAF) – Adjustment applied by liner conferences to offset the effect of fluctuations in the cost of bunkers.

Carrier – A firm that provides transportation services, typically owning and operating transportation equipment.

Co-modal – A term first used by the EU in 2006 and refers to the intelligent use of two or more modes of transport on their own and in combination to get the biggest benefit from each of them so that the overall journey is the most sustainable that it can be. This optimising in the use of resources has economic, environmental and societal benefits.

CO₂ – Carbon dioxide.

Cohesion Fund (CF) – Aimed at Member States whose Gross National Income (GNI) per inhabitant is less than 90 % of the EU average, to reduce economic and social disparities and to promote sustainable development.

Commonwealth Independent States (CIS) – A regional organisation, formed during the breakup of the Soviet Union, whose participating countries are former Soviet Republics.

Consignment – Act of giving over to another party's charge, custody or care any material or goods, but retaining legal ownership until the material or goods are sold.

Consolidation – Bringing together many small shipments, often from different shippers, into large shipment quantities, in order to take advantage of economies of scale in transportation costs. In-vehicle consolidation is when a vehicle makes pickups from many customers and consolidates freight inside the vehicle. Out-of-vehicle consolidation occurs at a terminal facility, usually to a single customer/region.

Container – A single, rigid, sealed, reusable metal box in which merchandise is shipped by vessel, truck, or rail. Container types include standard, high cube, hardtop, open

top, flat, platform, ventilated, insulated, refrigerated, or bulk.

Crane – A machine designed for moving and lifting weight by means of a movable projecting arm or a horizontal beam, which is able to travel over a certain distance.

Cross-dock – Transportation terminal in which received items are transferred directly from inbound to the outbound shipping dock, with storage only occurring temporarily during unloading and loading. No long-term storage is provided. Usually used only for vehicle transfers. Often owned and operated by large shippers.

Deadhead – The return of an empty transportation container to its point of origin (empty move).

Deadweight – The number of long tons that a vessel can transport of cargo, supplies and fuel. It is the difference between the number of tons of water a vessel displaces "light" (empty) and the number of tons it displaces when submerged to the "load line".

Distribution Center (DC) – The warehouse facility which holds inventory from manufacturing pending distribution to the appropriate stores.

Door-to-Door – Transportation service arrangement in which freight is moved from origin (shipper) through to ultimate destination for a given rate. Trucking companies typically offer door-to-door service. Railroads do not, unless the shipper and consignee both have rail sidings. Brokers often package together door-to-door service through contracts with multiple carriers.

Economies of scale – The cost advantages that enterprises obtain due to size, output,

or scale of operation, with cost per unit of output generally decreasing with increasing scale as fixed costs are spread out over more units of output.

Electronic Chart Display and Information System (ECDIS) – A computer-based navigation information system that complies with International Maritime Organization (IMO) regulations and can be used as an alternative to paper nautical charts.

Estimated Time of Arrival (ETA) – A measure of when a ship, vehicle or cargo is expected to arrive at a certain place.

Estimated Time of Departure (ETD) – A measure of when a ship, vehicle or cargo is expected to depart a certain location.

European Regional Development Funds (ERDF) – Fund allocated by the European Union, aimed to strengthen economic and social cohesion by correcting imbalances between its regions.

Ferry (Short Sea Shipping) – A ship (a merchant vessel) used to carry vehicles and cargo, operating on regular, frequent, return services.

Freight Forwarder – An agency that receives freight from a shipper and then arranges for transportation with one or more carriers for transport to the consignee. Often used for international shipping. Will usually consolidate freight from many shippers to obtain low, large volume transportation rates from carriers (through a contract). Often owns some pickup and delivery equipment; uses to transport freight to/from consolidation facilities. Also provide other shipping services: packaging, temporary freight storage, customs clearing.

Freight rate – A freight rate is a price at which a certain cargo is delivered from one point to another. The price depends on the form of the cargo, the mode of transport, the weight of the cargo, and the distance to the delivery destination.

Freight size – Freight is most often measured by its weight, and transportation vehicles of varying sizes typically have weight capacities that cannot be exceeded due to engineering or regulatory reasons. Freight may also be measured by cube, which generally refers to the volume of the freight. A vehicle is said to cube-out if it does not exceed its weight capacity, but its volume is completely full.

Full-truckloads (TL/FTL) – A truckload shipment is when the shipper contracts an entire truck for direct point-to-point service. Truckload shipments are priced per mile within designated lanes, regardless of the size of the shipment provided it fits (weight, cube) within the vehicle. Less expensive per unit weight shipped than LTL. A truckload carrier is a trucking company specializing in point-to-point truckload shipments.

Game theory – The study of strategic decision making, specifically of models of conflict and cooperation between intelligent rational decision-makers.

Greenhouse Gas (GHG) – A gas in an atmosphere that absorbs and emits radiation within the thermal infrared range. The primary greenhouse gases in Earth's atmosphere are water vapour, carbon dioxide, methane, nitrous oxide, and ozone.

Haulage – The inland transport service which is offered by the carrier under the

terms and conditions of the tariff and of the relative transport document.

Hinterland – A German word meaning "the land behind" (a city, a port, or similar). Specifically, the term is applied to the inland region lying behind a port, claimed by the state that owns the coast. The area from which products are delivered to a port for shipping elsewhere is that port's hinterland.

Horizontal collaboration – Approach characterized by independent shippers pro-actively working together in clusters or communities to combine their overlapping freight flows, sharing supply chain assets for mutual benefits.

Information and Communication Technology (ICT) – Refers to all the technology used to handle telecommunications, broadcast media, management information systems, audiovisual processing and transmission systems.

Inland Waterway Transport (IWT) – The transport with ships via inland waterways (canals, rivers, lakes etc.) between inland ports or quays and wharfs.

Intermodal Transportation – Transporting freight by using two or more transportation modes, such as by truck and rail or truck and oceangoing vessel, where the load is transported from an origin to a destination in one and the same intermodal transportation unit (e.g. a TEU1 container) without handling of the goods themselves when changing modes.

International Maritime Dangerous Goods Code (IMDG Code) – International guideline to the safe transportation or shipment of dangerous goods or hazardous materials by water on vessel.

IMDG Code is intended to protect crew members and to prevent marine pollution in the safe transportation of hazardous materials by vessel.

Just in Time (JIT) – Method of inventory control that creates the movement of material into a specific location at the required time, i.e. just before the material is needed in the manufacturing process. The technique works when each operation is closely synchronized with the subsequent ones to make that operation possible.

Less-than-truckload (LTL) – When a shipper contracts for the transportation of freight that will not require an entire truck. LTL shipments are priced according to the weight of the freight, its commodity class (which generally determines its cube/weight ratio), and mileage within designated lanes. An LTL carrier specializes in LTL shipments, and therefore typically operates a complex hub-and-spoke network with consolidation and deconsolidation points; LTL carriers carry multiple shipments for different customers in single trucks.

Lift on, lift off (Lo/Lo) – A method by which quay cranes are used to load and unload containers or generalized cargo, onto and from an ocean vessel.

Liner Service – International water carriers that ply fixed routes on published schedules.

Logistics Service Providers (LSPs) – A firm that provides service to its customers of outsourced (or "Third Party") logistics services for part, or all of their supply chain management functions. *See also 3PL*

Marco Polo – An EC programme that co-funded, from 2007 to 2013, projects aimed

to ease road congestion and the pollution it causes by promoting a switch to greener transport modes for European freight traffic.

Milk run – A round trip that facilitates either distribution or collection. A sequential collection of goods from multiple sources and the direct service to the customers without intermediate handling features of the goods. A prerequisite for the milk run approach is the spatial proximity between the supplier and the customer.

Motorways of the Sea (MOS) – A concept in the transport policy of the European Union, stressing the importance of sea transport. The main aim is to improve port communications with peripheral regions of the European. The concept came about in the White paper *European transport policy for 2010: time to decide* of the European Commission.

Multimodal – Freight transportation under a single contract but where a sequence of at least two different modes of transport is used.

Pallet – Flat transport structure that supports goods. A pallet is the structural foundation of a unit load which allows handling and storage efficiencies.

Physical Internet – In logistics, is an open global logistics system founded on physical, digital, and operational interconnectivity, through encapsulation, interfaces and protocols.

Quay – Dock in a port.

Railroad car – A vehicle used for the carrying of cargo or passengers on a rail transport system (also known as railcar). Such cars, when coupled together and

hailed by one or more locomotives, form a train.

River Information Systems (RIS) – Modern traffic management systems enhancing a swift electronic data transfer between water and shore through in-advance and real-time exchange of information.

Roll on, roll off (Ro/Ro) – A method of ocean cargo service using a vessel with ramps which allows wheeled vehicles to be loaded and discharged without cranes.

Rolling Highway – In rail transportation, a rolling highway, or rolling road is a form of combined transport involving the conveying of road trucks by rail.

Ropax – A Ro/Ro vessel built for freight vehicle transport along with passenger accommodation.

Semi-trailer - A trailer without a front axle, coupled with a tractor unit for transport.

Shapley value – A solution concept in cooperative game theory. A coalition of players cooperates, and obtains a certain overall gain from that cooperation. The Shapley value provides one possible answer to the different contribution of each player to the overall cooperation.

Shipper (Consignor) – An individual or firm that sends freight.

Skipper – Person who has command of a boat, vessel, barge. It is used more than “captain” for certain types of craft such as barges.

Stevedoring – To load or unload a ship.

Stowage – The method of placing cargo into a single hold or compartment of a ship to prevent damage and/or shifting.

Supply chain – System of organizations, people, activities, information, and resources involved in moving a product or service from supplier to customer.

Synchro-modal – Synchro-modal freight transportation is positioned as the next step after intermodal and co-modal transportation, and involves a structured, efficient and synchronized combination of two or more transportation modes. Through synchro-modal transportation, the carriers or customers select independently at any time the best mode based on the operational circumstances and/or customer requirements.

TEN-T – Trans-European Transport Network.

TEU – Twenty-foot equivalent unit. Method of measuring vessel load or capacity, in units of containers that are twenty feet long. A 40' long container measures 2 TEUs.

Towing – Coupling two or more objects together so that they may be pulled by a designated power source.

Trailer-on-flatcar (TOFC)/Piggyback – A term used in intermodal transportation in which truck trailers or container/chassis combinations are placed directly onto rail flatcars for the rail portion of the trip. TOFC trains are generally heavier and longer per unit ton shipped, but have the advantage that unloaded trailers can be moved out of the intermodal terminal without worrying about finding a chassis; thus, the equipment management issues are simpler.

Track gauge – Spacing of the rails on a railway track, measured between the inner faces of the load-bearing rails.

Train ferry – A ship (ferry) designed to carry railway vehicles, typically used for transporting trains across a stretch of water from one railway to another.

Truck – A motor vehicle designed to transport cargo (called a lorry in the United Kingdom, Ireland, and Indian Subcontinent). In the EU, vehicles with a gross combination mass of up to 3,500 kilograms are known as light commercial vehicles, and those over as large goods vehicles.

Vessel – A floating structure designed for transport.

Vessel Manifest – A list of all cargoes on a vessel.

World Customs Organisation (WCO) – Provides leadership, guidance and support to Customs administrations to secure and facilitate legitimate trade, realize revenues, protect society and build capacity.

References:

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