

A

ARA ports

Short for the seaports in Antwerp, Rotterdam and Amsterdam (Aberle 2000, p. 34).

B

Bullwhip Effect

"The Bullwhip Effect is essentially the phenomenon of demand variability amplification along a supply chain, from the retailers, distributors, manufacturer, and the manufacturers' suppliers, and so on. Lee et al. characterize this phenomenon as demand distortion, which can create problems for suppliers, such as grossly inaccurate demand forecasts, low capacity utilization, excessive inventory, and poor customer service." (Lee et al. 2000, p. 626)

C

Clearance Profile

A clearance profile is a defined boundary line that is usually determined for the vertical transverse plane of a track (for example, of roads or railroad tracks). In terms of railroads, clearance profiles regulate the permissibility of the arrangement of structural facilities near the track. Vehicle boundary lines regulate the permissibility of vehicle dimensions. Clearance profiles and vehicle boundary lines are directly interdependent (Menius and Matthews 2020, p. 53).

D

DIN (Deutsches Institut für Normung)

The DIN is the independent platform for standardisation in Germany and worldwide. A standard is a document that specifies requirements for products, services or processes. It thus creates clarity about their properties, facilitates the free movement of

goods and promotes exports. It supports rationalisation and quality assurance in business, technology, science and administration. It serves to ensure the safety of people and property and to improve quality in all areas of life. (DIN 2021)

E

Economies of Scale

"Economies of scale occur when the average cost of all units declines as the level of an activity, such as production, increases. The average cost decline can result from high fixed costs, lower input prices due to high volume purchasing, or learning economies. Economies typically apply only over a range of output rather than for all possible output levels. Beyond a certain point, diseconomies of scale can set in. Scale economies can serve as the basis for cost leadership in an industry, but large-scale investment brings the risk of holding excess capacity during a downturn. Globalization and outsourcing have eroded the importance of scale as a competitive weapon." (Linden 2016)

H

Hub-and-Spoke (HuB) -System

A hub & spoke network is a special network with a certain number of nodes between which a flow of goods exits. A subset of centrally located nodes serves as a transshipment point (hub). The remaining nodes (end nodes) are connected in a star shape by a spoke and usually with one hub. The flow of goods between two nodes is direct if both nodes are hubs or one of the two is a hub and both are connected by a spoke. Otherwise, the flow is routed via at least one other Hub. In contrast to complete networks, in which every node is connected to every other node and direct transports take place, a hub-and-spoke network contains significantly fewer connections. The transport volume per connection is greater, so larger transport units can be selected and thus transport costs can be saved. However, the transport times between the end nodes of such a network are usually longer than in complete networks. Hub-and-Spoke networks are used in air traffic, by large freight forwarders, parcel services and the postal service as well as

computer and communication networks. (Domschke et al. 2018, p. 10)

Hinterland

Term used in connection with seaports. The seaport hinterland is the catchment area which is supplied with imported goods from the port or where goods to be exported are provided (Hompel and Heidenblut 2011, p. 278).

I

Intermodal

Refers to the use of different means of transport (road, rail, air, sea) to transport goods in one and the same loading unit (container, swap body, etc.) or with the same road vehicle (Hompel and Heidenblut 2011, p. 138).

J

Just-In-Time (JIT)

The basic idea is to synchronize the successive production and transport processes in such a way that each process provides the material exactly when the respective downstream process requires it, i.e. "just in time". In the ideal case, no inventory is then required between the processes, and one has an "inventory-free" logistics chain or only very low buffer stocks. Low inventories, short lead times and correspondingly short delivery times, are the main advantages of the JIT concept (Tempelmeier 2018, p. 13).

Just-in-Sequence

Special concept of JIT manufacturing, in which the material is delivered in the correct order (sequence) in which it is to be processed. Used primarily in the automotive sector (Tempelmeier 2018, p. 19).

L

Last-Mile

Transport process from the last location of the supplier or logistics service provider to the customer. Usually generates the largest

share of the costs of a parcel delivery (Koch 2012, p. 191; Völkert 2019).

M

Milk Run

"A milk run is a concept to serve supplier relations with regular volumes. It is a fixed tour with a fixed sequence of stops serving at least one supplier and being executed cyclically or according to a fixed schedule. [...]The milk run can be – but does not have to be – a round tour starting and ending at the receiving plant in order to allow an exchange of full and empty returnable containers. A milk run might contain a transshipment." (Meyer 2017, p. 29)

P

Pre- or on-carriage leg

On-carriage means goods are picked up by the logistics service provider and collected at a goods distribution center. The post-carriage leg is what happens after the main leg. The goods are distributed and transported to the recipients. For container transportation by sea, the container ship is the main means of transportation. Pre-carriage is any inland movement from the place of shipment to the port of loading. The transport from port of loading to port of discharge is the main run or main carriage. On-carriage stands for any inland movement after the container has been unloaded at the port of discharge to the final destination (Tempelmeier 2018, p. 24; Hompel and Heidenblut 2011, p. 124).

R

RoRo

Roll-on/roll-off is a procedure in which road or rail vehicles with or without load drive onto another transport vehicle (without the use of other lifting equipment) and leave it again after transport (e.g. vehicles - ferry) (Hompel and Heidenblut 2011, p. 262).

T

Transshipment

Refers to the process of transferring goods from one logistics system to or from another. This includes, for example, stock transshipment or port transshipment. Transshipment can be manual, mechanized or automated (Hompel and Heidenblut 2011, p. 319).

Tri- and Bimodal

Transport that includes two or three modes of transport and offers corresponding transshipment possibilities, for example from road to rail or inland waterway and vice versa (Hompel and Heidenblut 2011, p. 35).

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Further reading

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