

Transport services — Logistics — Glossary of terms

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National foreword

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Foreword

This European Standard (EN 14943:2005) has been prepared by Technical Committee CEN/TC 320 "Transport - Logistics and services", the secretariat of which is held by DS.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by June 2006, and conflicting national standards shall be withdrawn at the latest by June 2006.

This European Standard has been prepared by Working Group 6 "Transport Services: Logistics" of CEN/TC 320 "Transport Services".

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.

Introduction

Logistics is now widely recognised as a highly important function of every organisation dealing with physical goods (and of many that do not). In order to make it work effectively along the total physical and information chains of supply, delivery and planning, it uses a number of terms that, while in frequent use, are rarely fully defined. The wider dissemination of logistics concepts has brought about the creation of new terms and changes in meaning of older terms; these need to be understood throughout Europe.

Although the word “logistics” has military origins, the concepts and functions of logistics are nowadays adopted by all kinds of private-sector and public-sector organisations as well as in the military sector. In this European Standard the terms are defined with reference to the needs of commercial organisations, i.e. business systems. Most of the definitions are also appropriate for non-commercial organisations.

In preparing this list of terms stringent selection criteria have been applied. The Glossary lists only those terms that have a realistic relationship with logistics. Terms of a general nature, having a meaning which is identical to or very similar to the definition to be found in a conventional dictionary, are not listed.

Similarly, terms which are frequently used in a logistics environment but which originate from a different business function or are of a specialist nature are not listed. This refers in particular to terms in the areas of:

- finance;
- commerce, including payment terms;
- information technology;
- mathematics.

Terms are defined by reference to their usage in European organisations, although some terms and definitions of American origin that have achieved wide acceptance are also included.

Important sources of information have included:

- *Terminology in Logistics: Terms & Definitions*. European Logistics Association (ELA), Brussels, 1994
- *BS 5191 Production Planning and Control Terms - Vocabulary*. British Standards Institution (BSi), London (new edition in press).
- *APICS Dictionary (10th edition)*. APICS, Falls Church, VA, USA, 2000

Where possible, reference has been made to existing *de jure* and *de facto* standards such as:

- *UN Trade Data Elements Directory*
- Delivery conditions as described by the International Chamber of Commerce

- *UN / EDIFACT: United Nations Electronic Data Interchange for Administration and Transport*. Economic Commission for Europe, ISBN 92-1-116650.

Throughout, consistency with terms used in ISO, EDI and other publications has been sought.

This Glossary is an update and extension of pEN 12777, although some terms which are now considered out-of-date have been eliminated. A number of new terms have been added as a consequence of new developments in the field of logistics.

The sequence of entries in the Glossary is purely alphabetical, for simplicity and ease of use. In addition an Annexe provides a categorisation of terms. A second Annex lists logistics-related acronyms.

A recent CEN Report (CR 13908), prepared by CEN/TC 273/WG 4 “Logistics Performance Measures, Requirements and Measuring Methods”, deals comprehensively with the definition and measurement of performance in logistics. Consequently only a limited number of logistics performance indicators has been included in this Glossary of terms.

1 Scope

This European Standard establishes definitions for commonly used terms in logistics. It encompasses all aspects of logistics and supply chain management including transport. The terms, with their definitions, are presented in strict alphabetical order with no attempt to relate them to any particular function within the logistics concept.

2 Normative references

Not applicable.

3 Terms and definitions

3.1

A item

small group of items (material or product) that according to an ABC classification, represent a large part of the total consumption value, production value, turnover value or stocks

[See: ABC classification]

3.2

ABC analysis (Pareto-analysis)

method of analysis where items are sorted according to certain characteristics (e.g. historical or anticipated consumption multiplied by unit value), into sequential order and stratified into classes

3.3

ABC classification

classification of a group of items (materials or products) into three or more categories stratified in sequence of their importance or magnitude, e.g. for the purpose of stock control and planning.

NOTE The classification is the result of an ABC analysis.

The categories being designated, for example, A, B and C, where:

A: small group of items (materials or products) that represents a large part of the total consumption value, production value, turnover value or stocks. Most attention is paid to this category;

B: intermediate group that is paid less attention;

C: large group of items (materials or products) that represent only a small part of the total consumption value, production value, turnover value or stocks. Relatively speaking, this category receives the least attention and requires mostly a different solution

3.4

ABC zoning

assignment of storage locations in a store to one of three or more areas (zones) according to travel distance/time to the point of supply in order to minimise travel time

3.5

abnormal demand

see: incidental demand

6

3.6

accessibility

ability of a carrier to provide service between a provenance and a destination

3.7

accessorial service

service rendered by a carrier in addition to its transportation service, e.g. such as stopping in transit to complete loading or for partial unloading, or heating, refrigerating, or storing shipped goods

3.8

accompanied transport

transport of complete road vehicles through another mode of transport (e.g. by ferry or train) accompanied by the driver

3.9

accumulation bin (assembly bin)

physical location used to accumulate all of the components that go into an assembly before sending the assembly order out to the assembly floor

3.10

active stock

stock that covers raw material, work in process, finished products which will be used or sold within a given period

3.11

acknowledgement of receipt

notification relating to the receipt of something such as goods, messages and documents

3.12

actual demand

demand that represents firm customer orders

3.13

actual stock

amount of stock at a particular moment in time

3.14

add/delete bill of material

planning bill of material to forecast options

NOTE

In this bill of material a standard item can be replaced by another item.

3.15

additional loading device

standardised carrying platform suited to materials handling equipment or surrounding/bordering vessel that loads quantities of goods and combines them for transportation, transhipment or storing

3.16

additional requirement

supplementary need of materials which is calculated according to a predetermined schedule from supplementary needs arising from rejects and technical changes etc., and/or a known incidental need

NOTE

It is a part of the gross requirements.

3.17

ADR(Accord européen relatif au transport international des marchandises Dangereuses par Route)
regulations which govern the international movement of dangerous goods by road

3.18

advance material request (AMR)

ordering materials before the release of the formal product design

3.19

advanced planning and scheduling (APS)

decision support tools employing computer based optimisation, that deal with analysis and planning of logistics and manufacturing over short, intermediate, and long-term time periods

3.20

advanced ship notice (ASN)

EDI notification of shipment of product

3.21

agent

person or organization authorized to act for or on behalf of another person or organization

3.22

aggregate forecast

estimate of sales for some grouping of products, perhaps for all products or within a family of products, produced by some manufacturing facility

NOTE Stated in terms of units or money worth or both, the aggregate forecast is used for sales and operations planning purposes and to control the total company forecast.

3.23

aggregate inventory management

establishing the overall levels of stock desired and implementing controls to ensure that individual replenishment decisions achieve this goal

3.24

aggregate plan

plan that includes data relating to all items or to groups or families of items

NOTE Usually the basis of the production plan.

3.25

aggregate stock

stock for any grouping of items or products, involving multiple stock keeping units

3.26

aggregation (- level, - plan, - reporting, - stock etc.)

combining parts to form sets on the basis of certain criteria, the aim being to enable these sets to be regarded as a single whole with respect to particular points of consideration or planning functions. These sets can again be combined to form new sets

NOTE 1 Figures relating to sets frequently possess more reliability for (long term) planning than the figures relating to the parts. For the aggregation of products, the criteria can, for example, be selected on the basis of commercial considerations (e.g. all products with a particular performance) or production considerations (e.g. all products with a particular type of labour content). The sets of products created in this way can be regarded as a single whole for the purpose of planning.

NOTE 2 Reverse of aggregation is detailing.

3.27

aggregation level

extend to which products or items are grouped in an aggregate plan

3.28

air consignment note

see: air way bill

3.29

air container

container conforming to European Standards laid down for air transportation

3.30

air/surface (intermodal) container

article of transport equipment having an internal volume of 1 m³ (35,3 ft³) or more, fitted with top and bottom corner fittings, with restraint provisions compatible with an aircraft restraint system, and an entirely flush base bottom to allow handling on roll conveyor cargo handling systems

NOTE The container is primarily intended for transport by air and interchange with surface transport modes (road, rail and sea). Containers of these types have type codes 90 to 99.

3.31

air way bill (AWB), (air consignment note)

document made out by or on behalf of the carrier(s), confirming receipt of the goods by the carrier and evidencing the contract between the shipper and the carrier(s) for the carriage of goods by aircraft as described therein

3.32

all time order

last order for a particular product in the last phase of its life cycle

NOTE This order is of such a size that the total demand for and/or consumption of this product that is to be expected in the future can be satisfied.

3.33

all time requirement

total requirement for a particular product to be expected in the future

NOTE Used for products in the last phase of their life cycles, when production is (nearly) stopped.

3.34

all time stock

stock accumulated in view of the fact that the relevant product is not to be produced any longer

3.35

allocated material

material on hand or on order that is assigned to specific future production or customer order.

[See also: reserved material]

3.36

allocation (reservation)

division and/or allotment/assignment of goods, activities, capacity, costs, and/or (production) resources to organizational units such as customers, suppliers, factory or department or to products

3.37

allotment

(in transport) share of the capacity of a means of transport assigned to a certain party, e.g. a carrier or an agent, for the purpose of the booking of cargo for a specific voyage

3.38

amplification effect (bullwhip effect, business chain effect, Forrester effect)

see: Forrester effect

3.39

ancillary material (indirect material)

material used in production which is no longer found as such in the product, e.g. cutting oil, maintenance material

3.40

approved demand

units ordered and accepted in an ordering system, due for immediate delivery

NOTE Forward orders become approved demand when they are released for immediate delivery.

3.41

areas/fields of application

application of logistics in subsystems such as procurement, production, distribution, product maintenance, and reversed distribution is described as logistics with the appropriate pre-fix

3.42

assemble to order

type of manufacturing in which components and/or subassemblies are assembled or configured only when a customer order is received.

[See also : Decoupling point]

3.43

assembled part (sub-assembly)

assembled product which itself is used in a higher level assembled product

3.44

assembly

1. (process) stage of production in which components are put together into an end product appropriate to the process concerned

2. (product) combination of parts and possibly raw materials put together to make up a composite article

3.45

assembly lead time

period of time between the moment a work order is issued to the assembly floor and the moment of delivery of the assembled product to the store or receiving organisations

3.46

assembly level

relative position of a part or sub-assembly within a hierarchy of assemblies

NOTE It is recommended that a final assembly be designated assembly level 0; the sub-assemblies and/or parts constituting a final assembly should be designated assembly level 1, 2, and so on.

3.47

ATA carnet (Admission Temporaire / Temporary Admission)

international customs document that enables travellers taking goods abroad temporarily (e.g. samples, goods for exhibitions) to avoid all duty payments and formalities at the frontier

3.48

auto-discrimination

ability of a bar code reader to distinguish automatically between two or more symbologies (e.g. Interleaved 2 of 5, Code 39)

3.49

automatic guided vehicle (AGV)

unmanned vehicle controlled electronically

NOTE AGV's follow a prescribed path, stopping at each machining or assembly station for automatic or manual loading and unloading of parts.

3.50

automatic identification and data capture (AIDC)

identification and/or direct collection of data into a microprocessor controlled device such as a computer system or a programmable logic controller (PLC), without manual input

3.51

automatic identification (Auto ID)

mode of identifying an item by machine (and entering the data automatically into a computer)

NOTE Usually data is automatically input via a computer. The most widely used recognition technology, at present, is probably bar code; others include, optical character recognition (OCR), magnetic ink character recognition (MICR), and radio frequency (RFID), machine vision, magnetic stripes and voice systems.

3.52

automatic storage/retrieval system (AS/RS)

high-density rack storage system with vehicles automatically loading and unloading the racks

3.53

available to promise (ATP)

uncommitted portion of a company's stock or planned production of an item, to support customer order promising.

[See also: capable to promise]

NOTE The figure is frequently calculated from the master production schedule.

3.54

available stock

stock of products or end items free to meet customer orders

3.55

available work

work that is actually in a department ready to be worked on

NOTE opposed to scheduled work which may not yet be physically on hand.

3.56

averaging

(in shipping) apportionment of the loss of a vessel, cargo or freight through unavoidable accident or through unintentional damage to the vessel or sacrifice of cargo, among the owners or insurers

3.57

B-item

item (material or product) that according to an ABC classification belongs to a group of items that represents the second largest part of the total consumption value, production value, turnover value or stocks

NOTE E.g. of the total value consumed / produced or stored.

3.58

back haul

return movement of a means of transport which has provided a transport service in one direction

3.59

back order (unfilled order)

open order or commitment for which the delivery time has passed

3.60

back scheduling (backward scheduling)

method of obtaining a production schedule by working backwards from the required due date in order to predict the latest start date consistent with meeting that due date

3.61

back flushing (post deduct)

deduction from inventory of the component parts used in an assembly or subassembly by exploding the bill of material by the production count of assemblies produced

3.62

backlog

quantity of goods still to be delivered, received, produced or issued, for which the planned or agreed date has expired

3.63

balance

(in transport) case where there is an equal tonnage traffic flow in the two directions, between provenance and destination

NOTE Ideally, the case where a loaded truck sent from provenance to destination would return fully loaded.

3.64

balance of load record

comparative loading on machines or other work centres, that is imposed by outstanding orders, at a particular moment in time

3.65

balanced product set

set of all the components needed to complete a particular assembly

3.66

balanced scorecard

set of enterprise-wide performance measures designed to drive a business towards strategic objectives

3.67

balancing work load (BW)

concept of running a manufacturing process with the goal of achieving a constant throughput time (and controlled improvement)

3.68

bar charts planning

planning process in which the activities are schematically represented by means of bars with the length of the bar representing the time and the position of the bar showing the mutual relationship between the activities.

[See also: Gantt chart]

3.69

bar code

code representing characters by sets of parallel bars of varying thickness and separation which are read optically by transverse scanning

3.70

bar coding

method of encoding data, employing a series of alternating bars and spaces of varying thickness and separation, designed to be interpreted by electronic readers

3.71

base demand

percentage of a company's demand that derives from continuing contracts and/or existing customers

3.72

base stock system

pull ordering system used at a stock point in which supplies are ordered when the echelon stock level has dropped below a certain point.

[See also: "re-order level ordering system" (B-Q system)]

3.73

batch

definite quantity of a product or a component that is treated and identified as one entity with respect to certain operations e.g. handling, processing, purchasing, production, transport.

[See also: lot]

3.74

batch operation cycle time

length of time required from the start of set-up to the end of cleanup for a production batch at a given operation. Includes set-up, production, cleanup etc.

3.75

batch production

production process where products or components are produced in batches and where each separate batch consists of a number of the same products or components

3.76

batch size stock

residual stock which arises because input and output batches respectively are not equal in size

3.77

batch sizing technique (lot sizing technique)

technique used in determining lot-sizes such as:

- fixed quantity; economic order quantity; least total cost (part period balancing); least unit cost; period order quantity; lot for lot (discrete order quantities)

3.78

batch splitting (lot splitting)

dividing a batch into two or more sub-batches and simultaneously processing each sub-batch on identical (or very similar) work centres

3.79

batch quantity (lot size)

number, volume or weight of products or components in a batch

3.80

belt conveyor

equipment for moving goods using a moving belt as the transport medium

NOTE 1 The belt is usually driven by a drum at one end, passing over a free-running drum at the other end. The upper portion of the belt may be supported by free-running idlers or suitable flat surfaces.

NOTE 2 This type of conveyor can be arranged for horizontal or inclined transport; the angle of slope depending on the character of the goods moved and the type of belt surface.

3.81

benchmarking

process of comparison of performances between enterprises, involving a clear understanding of current processes and open exchange of data for the purpose of improvement

3.82

Berne gauge

most restrictive loading gauge or the lowest common denominator of loading gauges on the railways of Continental Europe

3.83

bill of lots

method of tracking the specific multi-level lot composition of a manufactured item

NOTE This provides the necessary where-used and where-from relationships required in lot traceability.

3.84

bill of labour (BOL)

listing of the required capacity and key resources required to manufacture one unit of a selected item or family

NOTE 1 Often used to predict the impact of the item scheduled on the overall schedule and load of the key resources. Rough cut capacity planning uses these profiles to calculate the approximate capacity requirements of the master production schedule and/or the production plan.

NOTE 2 Compare also: bill of resources, product load profile.

3.85

bill of lading (B/L)

document which evidences a contract of the carriage by sea and the taking over or loading of the goods by the carrier, and by which the carrier undertakes to deliver the goods against surrender of the document.

NOTE 1 A provision in the document that the goods are to be delivered to the order of a named person, or to order, or to bearer, constitutes such an undertaking.

The document may have the following functions:

- receipt for goods, signed by a duly authorized person on behalf of the carriers;
- proof of title to the goods described therein;
- evidence of the terms and conditions of carriage agreed upon between the two parties

3.86

bill of materials (BOM)

list of all parts, sub-assemblies and raw materials that constitute a particular assembly, showing the quantity of each required

NOTE The list may or may not be structured to show the assembly levels pertaining to each item on the list.

3.87

bill of material processor (BOMP)

computer program for maintaining and retrieving bill of material information

3.88

bill of process

list of processes, materials, resources, tooling, energy and (bill of manufacturing) durations needed to make a product

NOTE Often used in process manufacturing and structured so that it is clear what is needed at each process on the routing and what is needed to carry out that process.

3.89

bill of resources

listing of the required capacity and key resources required to manufacture one unit of a selected item or family.

[See also : bill of labour, capacity bill of material]

NOTE Often used to predict the impact of the item schedule on the overall schedule and load of the key resources. Rough-cut capacity planning uses these profiles to calculate the approximate capacity requirements of the master production schedule and/or the production plan.

3.90

bimodal trailer

trailer which is able to carry different types of standardized unit loads, e.g. a chassis which is appropriate for the carriage of one forty foot equivalent unit (FEU) or two twenty foot equivalent units (TEU's)

3.91

bimodal transport

carriage of goods by two modes of transport, usually road and rail

3.92

bin

stackable additional loading device with a bottom and four sidewalls equipped with wheels (rollable) or suitable for handling by roller conveyors or fork lift trucks

NOTE The outside dimensions are usually suited to the basic dimensions of a pallet.

3.93

bin location record (bin location file)

record that specifically identifies the physical location where each item in inventory is stored

3.94

blanket order (bulk order)

long-term commitment to a vendor for material against which short-term releases will be generated to satisfy requirements

3.95

blend formula

type of bill of material used for the blending operation when it is only part of the process and therefore contains only some of the ingredients in the full bill of material

NOTE It will also take into account any differences in batch size of the blending operation and the production order.

3.96

block rack

storage facility for storing a number of items one behind the other in channels to achieve high density storage

NOTE For retrieval items are removed either from the side of storing (according to the LIFO principle) or from the opposite side (according to the FIFO principle).

3.97

block schedule

schedule where a period of time relatively long compared with that actually needed to carry out the operation is allocated to each operation

3.98

block stack

method of storing items with or without additional loading devices by putting them closely together in stacks on the floor with more than two rows behind each other

3.99

block train

train which runs between two different points without intermediate marshalling or without transshipping loading units between sets of rail wagons

3.100

blocked stock (stock on hold)

stock from which no deliveries may be made and/or where no consumption may take place until further notice

3.101

bonded goods

goods which are stored under charge of customs viz. customs seal until the import duties are paid or until the goods are taken out of the country

3.102

bonded warehouse

warehouse in which goods not yet cleared by the customs are stored until duties are paid or these goods are otherwise properly released

3.103

book inventory

accounting definition of stock units or value obtained from perpetual stock records rather than by actual count

3.104

booked ex-stock

status indicating that the delivered product quantity and value has been accounted for in the stock account of the department concerned

3.105

booked in-stock

status indicating that the received product quantity and value has been accounted for in the stock account of the department concerned

3.106

bordereau

document used in road transport, listing the cargo carried on a road vehicle, often referring to appended copies of the road consignment note

3.107

bottleneck

stage in a process which limits performance

3.108

bottom-up re-planning

(in MRP) process of using pegging data to solve material and resource availability and/or other problems

NOTE This process is accomplished by the planner (with the help of the computer system) who evaluates the effects of possible solutions. Potential solutions could include compressing lead time, cutting order quantity, and substituting material.

3.109

box pallet

pallet with or without a lid, having a superstructure of at least three fixed, removable or collapsible, vertical sides, solid, slatted or mesh, which commonly permits stacking

3.110

B-Q ordering system

see: re-order level ordering system

3.111

B-S ordering system

see: Min-Max ordering system

3.112

bracing

securing a shipment inside a carrier's vehicle to prevent damage

3.113

break bulk cargo (conventional cargo)

general cargo conventionally stowed as opposed to unitised, containerised and roll-on roll-off cargo

3.114

break-even point

point in the volume of production where the value of sales equals the cost of manufacture. Volumes below this point make a loss and above it they make a profit

NOTE A break-even point is commonly expressed graphically. It can apply to a single product, or to a group of products or to a complete plant.

3.115

break-even weight

(in air cargo) weight at which it is cheaper to charge the lower rate for the next higher weight break multiplied by the minimum weight indicated, than to charge the higher rate for the actual weight of the shipment (cargo)

3.116

break through planning

see: Hoshin planning

3.117

bridge crane

material handling equipment for overhead movement of cargo or bulk material by a trolley running on a bridge-type structure (horizontal beam)

NOTE Typical load suspension devices are forks, grasps, and magnetic or vacuum spreaders.

3.118

bridge shipment

shipment process during which a carrier receives freight for another carrier and delivers it to a third carrier, thereby dealing directly with neither the shipper nor the consignee

3.119

bucketed system

technique applicable to material requirements planning where all time-phased requirements occurring in a period or 'bucket', e.g. a week, are combined into one total requirement, phased to occur at the beginning of the period

3.120

bucket-less system

technique applicable to material requirements planning where each time-phased requirement is regarded as discrete and processed individually by the MRP system

3.121

buffer stock

stock to decouple two processes

3.122

buffer types

stock types which are used to prevent underloading in the production

NOTE Accordingly, more of these products are produced temporarily than are immediately required; the resultant stock is called the capacity loading stock (not a buffer stock). The products generally chosen as buffer types are those which sell well.

3.123

build cycle

time interval between major set ups in production

3.124

bulk cargo

unpacked homogeneous cargo poured loose in a certain space of a vessel, e.g. oil and grain

3.125

bulk order

see: blanket order

3.126

build standard (modification standard)

version of the bill of materials used to manufacture a product

3.127

bulk storage

large scale storage for raw materials, intermediates, or finished products

3.128

bulk store

store where items are held in large quantity packs

NOTE May be issued in these packs to customers or to the picking store if they are to be issued in smaller quantities.

3.129

build cycle

time interval between major set ups in production

3.130

bullwhip effect

see: Forrester effect

3.131

business chain effect

see: Forrester effect

3.132

business process re-engineering (BPR)

systematic review of the activities carried out by an enterprise to improve performance by focusing on the steps in each business process, which add value to the final customer, without regard to functional areas

NOTE BPR aims to eliminate non-value adding activities and reduce process cost and cycle time.

3.133

business resource planning (BRP)

approach to business planning which aims at complete consistency of all aspects of the business, laid down in the plans of all levels, budgets etc.

3.134

business to administration (B2A)

supply of trade information from a company to the government or customs authorities

3.135

business to business (B2B)

trade transaction using electronic communication between purchaser and supplier

NOTE Frequently the Internet or electronic data interchange (EDI) is used to communicate information between the purchaser and the supplier thus avoiding the need for written documentation.
[See: paperless purchasing.]

3.136

business to consumer (B2C)

trade transaction using electronic communication between a company and a consumer

3.137

by product

product produced as residual part of the main manufacturing process

NOTE By-products occur typically in process industries such as oil refineries and chemical plants where production of the primary product results in production of by-products at interim stages.

3.138

by product bill of material

bill of material where by-products appear

NOTE It differs little from a normal bill of material except that the by-product unit quantity may be shown as a proportion of the primary product.

3.139

C item

item (material or product) that according to an ABC classification belongs to a (large) group of items that represents the third (a small) part of the total consumption value, production value, turnover value or stocks

3.140

cabotage

1. transport of goods between two ports or places located in the same country;
2. (in road cargo) transport of cargo within or from a country other than the country where the vehicle is registered;
3. carriage of a container from an overflow area to an area specified by the owner of that container, during which time the carrier has unlimited use of the container

3.141

call-off order

instruction to a supplier to deliver from a blanket purchase order a specific quantity of goods on a specific date or within a specific period

NOTE The call-off may also specify time and place.

3.142**Camp lot size formula (Wilson lot size formula)**

formula for calculating the optimum order quantity.

See also: Economic order size (EOQ).

The basic formula is:

$$\text{Quantity} = \sqrt{\frac{2(d)(c)}{(i)(u)}}$$

where

d is the annual demand;

c is the average cost of order preparation?

i is the annual inventory carrying cost percentage;

u is the unit cost

3.143**cantilever racking (Christmas tree rack)**

storage facility for storing long size material in racks of fixed or movable arms overhanging on one or both sides of posts arranged in line

NOTE In case of light goods storage and retrieval can be operated manually, otherwise by fork lift trucks, rack serving units or stacker cranes.

3.144**capable to promise (CTP)**

1. method of determining potential product availability throughout a product's supply chain using available to promise calculations;

2. quantity of products available as a result of capable to promise calculations.

See also: available to promise

3.145**capacity**

ability, in a given time, of a resource, measured in quality and quantity

NOTE A resource can encompass an organisational unit, production, transport or other facility or an employee.

3.146**capacity buying**

arrangement whereby a purchaser commits a specific amount of a supplier's resources for a period of time for the manufacture of goods required by the purchaser

NOTE The purchaser, in due course, issues a purchase order that states the quantities and delivery dates of the goods to be supplied from the committed resources.

3.147

capacity group

organisational unit in which the resources are sufficiently homogeneous to permit capacity to be meaningfully measured as a single unit, e.g. a group of similar machines or employees with similar skills

3.148

capacity requirements plan (projected load, load profile)

display by type of resource of present and future loads (capacity required), based on planned and released shop orders, and of planned capacity (available capacity), phased over a period of time

3.149

capacity requirements planning (CRP)

system that calculates time-phased capacity requirements by type in order to execute the production programme

3.150

capacity smoothing (load levelling)

see: smoothing

3.151

cargo

collection / quantity of goods (carried on a means of transport) transported from one place to another

NOTE Cargo can consist of either liquid or solid materials or substances, without any packaging (e.g. bulk cargo), or of loose items of unpacked goods, packages, unitised goods (on pallets or in containers) or goods loaded on transport units and carried on active means of transport.

3.152

cargo assembly (in air cargo)

separate reception of parcels or packages and the holding of them for later despatch as one consignment

3.153

cargo disassembly (in air cargo)

separation of one or more of the component parts of a consignment (from other parts of such consignment) for any purpose other than that of presenting such part or parts to customs authorities at the specific request of such authorities

3.154

cargo manifest (freight manifest)

list detailing all items of cargo despatched on a particular flight, vessel or vehicle

3.155

cargo type

classification of cargo carried, or intended to be carried, on means of transport, based on its general appearance

3.156

cargo type code

numeric system representing types of cargo, packages and packaging materials in trade, transport and other activities related to international trade

3.157

carousel rack (tower rack)

storage facility for storing goods in racks either movable sideways or circulating horizontally and vertically

3.158

carrier

party undertaking transport of goods from one point to another

3.159

carrier haulage

inland transport service which is offered by the carrier under the terms and conditions of the tariff and of the relevant transport document

3.160

carrying-chain conveyor

material handling equipment for horizontal or inclined movement of unit loads on circulating (endless) carrying chains

3.161

cell (manufacturing cell)

manufacturing or service unit consisting of a number of work stations and the materials transport mechanisms and storage buffers that interconnect them

3.162

cell layout

equipment configuration to support cell manufacturing

3.163

cell production

method of production (layout, planning and operation) using a self contained group of work stations that in sequence process one or a family of components, subassemblies or products

3.164

cellular pallet-wide container

pallet-wide container used in overland movements but designed to fit into a cell slot within a ship's hold

3.165

central warehouse

stock point from which other warehouses are replenished

NOTE The central warehouse may or may not undertake other functions.

3.166

certificate of conformance

signed document from a supplier to his customer, usually on a standard form that accompanies a delivery of items, which verifies that the items supplied conform to the customer's specified requirements

3.167

certified supplier

status awarded to a supplier who consistently meets predetermined quality, cost, delivery, financial, and count objectives. Incoming inspection may not be required

3.168

chain conveyor

material handling equipment for moving goods by using a continuously circulating chain as pulling structure

NOTE According to its type of construction distinction can be made between “carry-on” and overhead” chain conveyors.

3.169

change order

formal notification that a purchase order or shop order shall be modified in some way

3.170

change-over time (COT)

time required to change a work station from a state of readiness for one operation to a state of readiness for another

NOTE Change-over time may be less than the sum of breaking down and set-up times.

3.171

channels of distribution

any series of firms or individuals that participates in the flow of goods and services from the raw material supplier and producer to the final user or consumer

3.172

charter party (charter contract)

(in air cargo) contract in which the owner of a vessel or aircraft agrees to place it or part of it at the disposal of a merchant or a shipper, the charterer, for the carriage of goods from one port or ports to another port or ports for which he receives a freight per tonne cargo, or to let his vessel or aircraft for a definite period or trip for which a hire is paid

3.173

charterer

person who has signed a charter party with the owner of a vessel or an aircraft and thus hires or leases a vessel or an aircraft or a part of the capacity thereof

3.174

christmas tree rack

see: cantilever racking

3.175

clean bill of lading

bill of lading which does not contain any qualification about the apparent order and condition of the goods to be transported (The Hague rules)

NOTE It bears no superimposed clauses expressly declaring a defective condition of the goods or packaging (Resolution of the International Chamber of Shipping (ICS, 1951).

3.176

clean on board

when goods are loaded on board and the document issued in respect to these goods is clean

3.177

closed loop material requirements planning

overall system where material requirements planning is linked to other systems to provide closed loop MRP feedback of information between the planning and executing functions, thus closing the information loop

NOTE 1 Production programmes are developed through the master production scheduling and capacity requirements planning systems, and the programmes input to the MRP system that generates time-phased manufacturing and buying instructions. Purchasing and shop order systems feed back information about performance to the MRP system to enable corrective action to be taken, if necessary.

NOTE 2 Another term for closed loop system is feedback control system.

3.178

closing stock

stock of product at the end of a period

3.179

CMR (Convention relative au Contrat de Transport International des Marchandises par Route)

contract for the international carriage of goods by road

3.180

collaborative planning, forecasting, replenishment (CPFR)

business process enabling supply chain partners to coordinate plans to reduce the variance between supply and demand and share the benefits of a more efficient and effective supply chain

3.181

combined lead time

see: cumulative lead time

3.182

combined transport

1. means of transport where one (passive) transport device is carried on another (active) device which provides traction;

2. intermodal transport where the major part of the journey is by air, rail, inland waterway or sea and any initial and or final leg is carried out by road

3.183

combined transport document (CTD)

negotiable or non-negotiable document evidencing a contract for the performance and/or procurement of performance of combined transport of goods

3.184

combined transport operator (CTO)

party who undertakes to carry goods with different modes of transport

3.185

combined working cycle

working cycle of a discontinuous material handling equipment in a store where the empty return from a storage location is avoided by making a retrieval operation

3.186

commercial order

see: customer order

3.187

commercial system

systems which have an objective to achieve profit by satisfying the demand of a customer

NOTE 1 Commercial systems can deal with material goods, non-material goods (e.g. banking), projects (e.g. designing buildings), services, personnel.

NOTE 2 Commercial systems may be called business systems.

3.188

commodity

1. any article of commerce or goods shipped;

2. indication of the type of goods

3.189

common item (common part)

component or sub-assembly that is found in all products in the total range of products under consideration

3.190

common parts bill of material

type of planning bill of material that groups all common components for a product family into one bill of material structured as a pseudo bill

NOTE This bill of material can be seen as a special version of the modular bill of material.

3.191

component

uniquely identifiable product that is considered indivisible for a particular planning or control purpose

NOTE A component for one organizational group may be the final assembly of another group, e.g. an electric motor.

3.192

component offset

time by which the issue date of an individual component differs from that of the whole order

NOTE Component offset is used in cases where the duration of manufacturing operations is relatively long and not all the components are required at the start of the process.

3.193

computer aided design (CAD)

application of computers in the interactive mode for design, drafting and storing designs

3.194

computer aided engineering (CAE)

engineering process supported by computers

3.195

computer aided manufacture (CAM)

manufacture where computers are used to instruct and control production, plant and equipment

3.196

computer integrated manufacture (CIM)

manufacture where various computerised systems are linked to provide an integrated manufacturing system

3.197

computer numerically controlled machine (CNC machine)

machine whose operation is controlled by a computer programme

3.198

concurrent engineering (simultaneous engineering)

technique of time compression that overlaps the stages of designing, developing and launching a product and usually involves inter-dependent design processes being carried out simultaneously by multi-disciplinary co-operation rather than sequentially

3.199

configuration (of a product) (product configuration)

physical and functional characteristics of a product inclusive its product structure

NOTE This term also applies to data required to define, manufacture, test, install and service a product.

3.200

confirmation lead time

period of time between the moment an order is placed with a supplier (date of order release) and the moment the order confirmation is received from the supplier (order confirmation date)

3.201

confirmation order

order issued to a supplier, documenting goods or services and related terms of an order placed orally or otherwise before the usual purchase document

3.202

consignee

party described in the transport document to whom the goods, cargo or containers are to be delivered

3.203

consignment

separately identifiable amount of goods transported or available to be transported and specified in one single transport document

NOTE Consignment is part of the hierarchy of terms: goods item, shipment, consignment, combined consignment, load.

3.204

consignment note (way bill)

document prepared by the shipper and comprising a transport contract

NOTE It contains details of the consignment to be carried out to the place of loading and it is signed by the inland carrier as a proof of receipt.

3.205

consignment stock

goods located at an external customer's premises that are still the property of the supplier

NOTE Payment for these goods is made to the supplier only when they are sold or used by the external customer.

3.206

consignor (shipper)

individual or organisation that prepares or instructs the preparation of a bill of lading by which a carrier is directed to transport goods from one location to another

3.207

consolidated bill of lading

bill of lading used when goods are grouped into one large box, in a freight container

3.208

consolidation

1. combining quantitative and/or financial data to a certain level according to a particular aggregation structure

2. (in transport) grouping together of smaller consignments of goods into a large consignment for carriage as a larger unit.

3.209

constituent part

single or assembled product which is used in a higher level assembled product

[see also: component]

3.210

constraint

any element or factor that prevents a system from achieving a higher level of performance with respect to its goal

NOTE Constraints may be physical, such as machine speeds, or managerial, such as a policy or procedure or may come from the market.

3.211

consumable material

see: indirect material

3.212

consumption of forecast

process whereby a forecast is confirmed by customer orders, or other types of actual demands, as they are received

3.213

container

special box to carry freight, strengthened and stackable and allowing horizontal or vertical transfer

NOTE For the technical issues there is an ISO-standard (ISO 1496).

3.214

container manifest (unit packing list)

document specifying the contents of particular freight containers or other transport units, prepared by the party responsible for their loading into the container or unit

3.215

continuous replenishment

process by which a supplier is notified by the customer of actual sales or warehouse shipments and commits to replenishing the goods (by size, colour, and so on) without stock outs and without receiving replenishment orders

3.216

control

(in decision making) arrangements or mechanisms which ensure that processes run according to planned output

3.217

controlled store

store where receipts and issues and the quantities held of all items are continuously recorded

NOTE All issues and receipts are required to be confirmed in accordance with a plan or authorisation system

3.218

convention Internationale concernant le transport des Marchandises par chemin de fer (CIM)

international agreement, applied by 19 European railway companies, setting out conditions for international railway transport of goods and the liabilities of the carrier

3.219

convention relative au contrat de transport international de Marchandises par Route (CMR)

convention for the international carriage of goods by road, setting out the conditions of carriage and the liabilities of the carrier

3.220

conventional cargo

see: break bulk cargo

3.221

conveyor

material handling equipment for moving goods along stationary, continuous, linear paths

NOTE The main drive of driven conveyors mainly operates continuously, i.e. it neither stops for loading and unloading goods nor for buffering.

3.222

co-product

one of a set of parallel primary parent items produced on the same work order as a result of normal processing

NOTE 1 Any of these may be used as a basis for planning and control.

NOTE 2 Like by-products, they are commonly found in process industries.

3.223

corner casting

components found at the base of a container or swap body into which the twist locks of a carrying vehicle will engage for securing the unit during transit

NOTE 1 Containers also have them fitted at the top to enable lifting by a gantry or mobile crane, and to lock containers together when being stacked.

NOTE 2 For the technical issues there is an ISO-standard.

3.224

count point (pay point)

point in the supply chain where storage units physically leave the store and therefore are identified, registered and deleted from the accounts

NOTE Count points may be designated at the ends of lines or upon removal from a work centre, but most often they are designated as the points at which material transfers from one department to another.

3.225

count point back flush (key point back flush)

back flush technique using more than one level of the bill of material and extending back to the previous points where production was counted

3.226

counterbalanced lift truck

stacking lift truck fitted with fork arms (which can be replaced by another device) on which the load, either palletised or not, is put in a cantilever position in relation to the front wheels and balanced by the mass of the truck

3.227

country code

representation of names of countries (three digit number code and two letters, ISO 3166)

3.228

country of departure

country from which a means of transport is scheduled to depart or has departed

3.229

country of destination

country to which goods are (to be) transported as final country for delivery, or to which persons (intend to) travel

3.230

country of despatch (country of provenance, country whence consigned)

country from which goods are initially (to be) shipped to the importing country without any commercial transaction taken place in the intermediate countries

3.231

country of origin (origin)

country in which the goods have been produced or manufactured, according to criteria, laid down for the purposes of application of the customs tariff, of quantitative restrictions, or of any other measure related to trade

NOTE In this definition the word "country" may include a group of countries, a region or a part of a country.

3.232

crane

hoisting machine for lifting, dropping and moving goods in one or more horizontal directions

NOTE It enables intermittent moves of varying size and weight within a fixed space.

3.233

critical path

series of the successive activities in a network of activities, of which the sum of the duration determines the delivery moment of the project

3.234

critical path method (CPM)

network planning technique used for planning and controlling the activities in a project

NOTE By showing each of these activities and their associated times, the "critical path" can be determined. The critical path identifies those elements that actually constrain the total time for the project.

3.235

critical ratio

dispatching rule which calculates a priority index number by dividing the time to due date remaining by the expected elapsed time to finish the job

NOTE Typically ratios of less than 1 are behind, ratios greater than 1 are ahead, and a ratio of 1 is on schedule.

3.236

cross docking

operation in which incoming combined consignments are split (de-grouping) and sorted into shipments having the same destination (grouping) and immediately prepared for shipping and further transportation

3.237

cross trades

(in shipping) services of a vessel between nations other than then the nation in which the vessel is registered

3.238

cumulative lead time (total lead time)

summation of the lead times of all the activities on the critical path for purchasing, manufacturing and distribution of an item

NOTE Longest planned length of time required to accomplish a series of activities.

3.239

cumulative manufacturing requirements planning

planning of parts and subassemblies by exploding a master schedule, as in MRP except that the master scheduled items and therefore the exploded requirements are time-phased in cumulative form

NOTE Usually these cumulative figures cover a planning year.

3.240

curtain sides

plastic curtains that provide a swap body or trailer with strong but soft waterproof sides and can be drawn back or raised to permit side access

3.241

customer

person, department or organisation inside or outside a company to which goods and/or services are supplied

3.242

customer bill of material

translation of a customer order or demand (mostly in terms of functions) into specific master level items

NOTE This bill is used as input for the final assembly (schedule) or the shipment planning (when the system configuration is done by the customer).

3.243

customer feature

product attribute specifically ordered by the customer

NOTE Such attributes determined during manufacture are often called "options" whilst additions which are not integral with the product are normally called "Accessories".

3.244

customer order (commercial order)

order from a customer inside or outside the company

NOTE Often referred to as an "actual demand" to distinguish it from a "forecasted demand".
[See also: sales order.]

3.245

customer order decoupling point

point in the supply chain which provides a buffer between the customer order driven materials flow and the forecast driven materials flow

3.246

customer order lead time

period of time between issuing a supply order (request for supply) and the arrival of the corresponding delivery at the customer.

[See also: order lead time]

3.247

customer order processing

aggregate of activities performed in the commercial sector in order to optimise the execution of customers orders

NOTE These activities comprise:

- customer order registration;
- customer order clearing;
- customer order confirmation;
- invoicing.

3.248

customer service

actions and attitudes that assist the customer to derive added value from the product or service

3.249

customer service level

1. measure of the delivery performance;

2. measure for the ability to fulfil customer supply orders from the offered range of deliverable goods completely according to sorts and quantities as well as within the specified time

3.250

customised flow production

way of organising a manufacturing unit in order to make customised products in various options without intermediate stocks thus acquiring most advantages of line production

3.251

customs goods classification

classification of certain goods coded according to the relevant customs nomenclature

NOTE E.g. harmonised system.

3.252

cut-off procedure

procedure needed to make sure that the status of a physical count and the relative computer record is identical notwithstanding the time lapse

3.253

cut-off time

time up to which bookings will be accepted, or cargo will be received, to ensure that the cargo will be accepted for a specific sailing or flight or consolidation

3.254

cycle counting

stock accuracy audit technique where stock is counted on a cyclic schedule rather than once a year

NOTE Cycle counts are usually carried out on a regular, defined basis (often more frequently for high-value fast-moving items and less frequently for low-value or slow-moving items).

3.255

cycle stock

portion of stock required to meet normal production demand, excluding excess stock and safety stock

3.256

cycle time

time between subsequent initiations of a repetitive process

3.257

cyclical production

production process in which different products are produced in a fixed sequence which is regularly repeated

3.258

damped reaction

reacting to changes in demand and/or stock level in such a way that the production level is only gradually adjusted to this change

NOTE The object is to prevent as far as possible the production level from being adjusted (with all the costs this involves) to changes which later prove to have been only temporary.

3.259

dangerous goods declaration

document issued by a consignor in accordance with applicable conventions or regulations, describing hazardous goods or materials for transport purposes, and stating that the latter have been packed and labelled in accordance with the provisions of the relevant conventions or regulations

3.260

data element

unit of data that, in a certain context, is considered indivisible (ISO/IEC 2382-4)

3.261

decentralised inventory control (decentralised stock control)

decision making on stock levels exercised at each stocking location for stock keeping units at that location

3.262

decoupling point

point in the supply chain which provides a buffer between differing input and output rates

3.263

decoupling point position

position of the decoupling point determines the way in which the business is managed and controlled and how various partners communicate along the product-axis.

DP position for particular product/market combination is determined in a trade off between market requirements versus stock investment requirements, within the constraints of business characteristics such as lead time and flexibility of the supplying organisation. Five different DP positions representing five basic logistic structures cover all possible product/market situations:

- (DP-1) make and ship to stock;
- (DP-2) make to stock;
- (DP-3) assemble to stock;
- (DP-4) make to order;
- (DP-5) purchase and make to order

3.264

decoupling stock (buffer stock)

stock which serves to make two successive processes in the goods flow independent of each other to the desired extent

NOTE This includes: anticipation stock, capacity loading stock, cyclical stock, seasonal stock, batch size stock, safety stock (buffer stock) and working stock.

3.265

dedicated capacity

work centre that is designated to produce a single item or a limited number of similar items

3.266

dedicated factory

see: focused factory

3.267

de-expediting

action of lowering the priority of a job or order by setting a later completion date

3.268

de-groupage

splitting up of loads into consignments, or a consignment into shipments, or shipments into (end) items of (finished) goods

3.269

delivery

to supply and to make goods available to the customer in conformity with the conditions agreed upon in the order

3.270

delivery date

date on which purchased goods are (must be) received

3.271

delivery instruction

document issued by a buyer giving instructions regarding the details of the delivery of goods ordered

3.272

delivery lead time

time between the receipt of a customer order and the delivery of the product to the customer

3.273

delivery order

1. (in shipping) document issued by or on behalf of the carrier authorising the release of import cargo identified thereon and manifested under a single Bill of Lading;

2. (in air cargo) authorization of the entitled party for the shipment to a party other than the consignee showed on the Air Way Bill

3.274

delivery plan

plan, authorised by the commercial and technical sectors, which states per finished product the quantity per unit of time to be delivered

3.275

delivery reliability

ratio, measured over a defined period of time, between the quantity of goods delivered in the period on the date promised by the supplier and the total quantity of goods planned for delivery in that period

3.276

delivery service

(in sales) service provided to the customer from the time an order is placed until the product is delivered

NOTE Important key features of delivery service are:

- product availability;
- delivery lead time and punctuality;
- communications/documentations

3.277

delivery terms

see: terms of delivery, Incoterms

3.278

delivery time

time between ordering and delivery

3.279

demand

1. need for a particular product/ -group or component;

NOTE The demand could come from any number of sources.

2. quantity of goods required from a supplier to be delivered in a particular period or at a specific date / moment;

3. requirement for a particular product or component arising from a number of sources, internal or external

3.280

demand filter

standard which is set to monitor individual sales data in forecasting models

NOTE Usually set to be tripped when the demand for a period differs from the forecast by more than some number of mean absolute deviations.

3.281

demand management

function of recognizing and managing all independent demands for products, matching them to capacity, allowing order acceptance and monitoring fulfilment of orders

NOTE It encompasses the activities of:

- forecasting;
- order entry;
- order promising;
- branch warehouse requirements;
- inter-plant requirements;
- service parts requirements

3.282

demand pull

triggering of material movement downstream in the supply chain from any work station only when the subsequent work station (or the customer) requires it.

See also: JIT and make to order

NOTE The aim is minimise work in progress.

3.283

demand time fence (DTF)

point in time in the master production schedule that indicates a change in the ability of the business to meet a demand for an item

NOTE The DTF might be set one month before the completion date for an item, after which the production programme for that item would be frozen and no further changes allowed.

3.284

demand uncertainty

uncertainty or variability in demand as measured by the standard deviation, mean absolute value deviation (MAD) or variance of forecast errors

3.285

demountable body

loading unit equipped with landing legs, which can be used interchangeably between different road vehicles

NOTE Its ability to be left freestanding, enables the tractor unit to be released for other work.

3.286

demurrage

rate or amount payable to owner of the means of transport for failure to load or discharge within the time allowed

3.287

dependent demand

demand for items derived from the demand of other products

3.288

design change note

see: modification

3.289

design for manufacture (DFM)

see: manufacturability

3.290

design for manufacture and assembly (DFMA)

product development approach that involves the manufacturing function in the initial stages of product design to ensure ease of manufacturing and assembly

3.291

despatch note

document recording that products are available for despatch and authorising arrangements for delivery

3.292

deterministic models

models where no uncertainty is included, e.g., inventory models without safety stock considerations

3.293

deterministic requirements calculation

requirements calculation on a time basis with respect to material and components, making use of explosion based on the quantity of finished products to be produced

3.294

direct delivery

conveyance of goods directly from the vendor to the buyer

NOTE Frequently used if a third party acts as intermediary agent between vendor and buyer.

3.295

direct discharge

unloading goods from a vessel on to a railroad car, road vehicle or barge with the purpose of immediate transport from the port area

NOTE Usually occurs when ports lack adequate storage space or when ports are not equipped to handle a specific cargo.

3.296

direct material

material that becomes a part of the final product in measurable quantities

3.297

direct supply

marketing channel with no intermediaries (wholesalers and retailers) between producer and user, for which the producer assumes the responsibilities or activities normally undertaken by a third party

3.298

disbursement

physical issuance and reporting of the movement of raw material, components, or other items from a stores room or warehouse

3.299

discharge

1. unloading of a vehicle, a vessel or an aircraft;
2. landing of cargo

3.300

discrete manufacturing

method of manufacturing where products are manufactured in a non-continuous manner, e.g. automobiles, appliances, computers

3.301

discrete order

see: lot for lot

3.302

disintermediation

process of eliminating an intermediate stage in a supply chain

3.303

dispatching

detailed allocation and subsequent control of production resources to individual work orders

3.304

distribution

1. process of allocating and transporting goods to various parties;
2. part of the supply chain that is responsible for moving products from the supplier to the customer

3.305

distribution centre

warehouse for the receipt, the storage and the distribution of goods.

[See also : field warehouse.]

3.306

distribution channel

trading route by which a company distributes goods

3.307

distribution requirements planning (DRP)

stock replenishment technique in a distribution system which derives demands at upstream stock points from the aggregated demand at the immediate downstream stock points, using lead time offset and requirements netting

3.308

distribution resource planning (DRP II)

stock replenishment and capacity planning technique which adds the planning of key resources in a distribution system to distribution requirements planning

NOTE 1 It extends the MRP logic into the planning of key resources contained in a distribution system.

NOTE 2 Examples of these key resources are warehouse space, work force, money and trucks.

3.309

distribution structure

structure of the total of the distribution channels along which a product or group of products travels from the manufacturer to the customer (consumer)

3.310

distributor

business that does not manufacture its own products, but purchases and resells these products

NOTE Such a business usually has a finished goods inventory.

3.311

diversion

carrier service that permits changing the consignee and/or destination while the shipment is in route and paying the through rate from provenance to final destination

3.312

door to door transport (point to point transport, house to house transport)

transport of cargo from the premises of the consignor to the premises of the consignee

NOTE In the United States the term "point to point transport" is used instead of the term "door to door transport", because the term "house" may mean "customs house" or "brokers house", which are usually located in the port.

3.313

dock-to-stock

program by which specific quality and packaging requirements are met before the product is released

3.314

double order point system

distribution inventory management system which includes two order points

NOTE 1 The smallest equals the original order point, which covers replenishment lead time. The second order point is the sum of the first order point plus normal usage during manufacturing lead time.

NOTE 2 It enables warehouses to forewarn on manufacturing of future replenishment orders.

3.315

downstream operation

tasks subsequent to the task currently being planned or executed

3.316

down time

period of time during which a work station is not available for production due to a functional failure

3.317

drawback

refund of customs duties paid on material imported and later exported

3.318

draw-bar trailer combination

equipment consisting of a trailer drawn behind a rigid truck that has a draw-bar at the rear of its chassis

3.319

drop shipment

deliveries of shipments from a single shipper to multiple consignees along the route leading to an ultimate destination

3.320

dual sourcing (second sourcing)

selection of and working with two equivalent suppliers for a certain product.

[See also: multiple sourcing]

3.321

due date

date when purchased material or production on order is due to be available

3.322

dunnage

packaging inside a handling unit to prevent direct contact between the product and the handling unit, e.g. glass components do need dunnage.

3.323

durable goods

(in general) any goods whose continuous serviceability is likely to be many years (e.g. over 7)

3.324

dynamic batch sizing (dynamic lot sizing)

process of or techniques used in recalculating periodically the order quantities in order to adjust them for changes in requirements

3.325

dynamic storage

storage procedure with an occasional or continuous movement of storage units while being stored

3.326

earliest due date (EDD)

priority rule that sequences the jobs in a queue according to their (operation or job) due dates

3.327

early finish date (EFD)

(in project management) earliest time an activity may be completed, equal to the early start of the activity plus its duration

3.328

echelon stock

stock at a particular stock point plus all stock downstream

3.329

economic order quantity (EOQ) (economic batch size)

type of fixed-order-quantity model that determines the amount of an item to be purchased or manufactured at one time.

[See: camp lot size formula]

NOTE The intent is to minimize the combined costs of acquiring and carrying stock.

3.330

economic stock

1. (general) stock appropriated by a company, the result being that it incurs risks in this respect (a drop in price and unmarketability);

NOTE 1 This economic stock is the sum of the physical stock and the goods ordered but not yet received, minus the goods sold but not yet delivered.

2. (in stock control) physical stock of a product plus the quantity of that product ordered but not yet received, minus the quantity of that product already reserved

NOTE 2 term relating to ordering systems, e.g. B-Q system, s-S system, MRP-I system).

3.331

economic trade off (ETO)

calculations leading to a decision by which the cost increase in one system is valued by the cost (over)compensated by a decrease in another system

NOTE Only the direct relation between the decision and (company) cash flow is taken into account.

3.332

economy of scale

(in production) reduction of unit cost attributable to the distribution of fixed costs over a larger quantity of units produced

NOTE Economy of scale relates to quantity, cf. economy of scope which relates to quality.

3.333

effective date

date on which a component or an operation is to be added or removed from a bill of material or an assembly process

NOTE 1 The effective dates are used in the explosion process to create demands for the correct items.

NOTE 2 Normally, bill of material and routing systems provide for an effective 'start date' and 'stop date', signifying the start or stop of a particular relationship.

3.334

efficient consumer response (ECR)

logistics concept based on collaborative management along the supply chain, helping companies serve consumers better, faster and at less cost by working together with trading partners

NOTE The ECR principles are based on the Just-in-Time concept – inventories replaced by good information flow. The most important field of application is the FMCG sector. Manufacturer – Retailer partnership leads to mutual benefits helping serve customers in the more efficient way on one side and reducing costs on the other.

3.335

effectiveness

ratio between the real output of a system and the norm output

3.336

efficiency

ratio between the norm input of a process and the actual output

3.337

eighty-twenty rule (Pareto's law)

rule which states that in many cases approximately 80 % of the turnover (stock etc.) can be ascribed to approximately 20 % of the customers, articles or orders

[See also: ABC- analysis]

NOTE The actual ratio in a particular case can be determined by ranking the customers and products etc. in order of magnitude and then calculating what percentage of the turnover (stock etc.) corresponds to 10 %, 20 %, 30 % etc. of the customer and products etc.

3.338

elasticity of demand / supply

ratio of the percentage change in quantity demanded (supplied) to the percentage change in price

3.339

electronic business (e-business, e-commerce)

business transacted by electronic communication, particularly using internet technology

NOTE E-business is often divided into two types:

1. Business to Business (B2B) where orders and other transactions are automatically passed from the customer's computer system to the supplier's without human intervention;
2. Business to Customer (B2C) where the customer places orders or makes enquiries direct onto the supplier's Website, usually with secure credit card payment.

3.340

electronic data interchange (EDI)

1. (general) transfer of structured data in electronic form between computer systems in separate organizations;
2. (in business) transfer of structured business data by agreed message standards in electronic form between computer systems in separate organizations

3.341

electronic data interchange for administration, commerce and transport (UN/EDIFACT)

ISO application level syntax rules for the structuring of user data and of the associated service data in the interchange of messages in an open environment

3.342

electronic data interchange (EDI) message

approved, published and maintained formal description of how to structure the data, required to perform a specific business function, in such a way as to allow for the transfer and handling of this data by electronic means.

[See also: electronic data interchange]

3.343

electronic product code (EPC)

protocol for product identification based on radio frequency identification (RFID), intended to be used globally

NOTE EPC is administered by a joint venture of EAN and UCC.

3.344

end item

1. any item subject to a customer or sales forecast;
2. product sold as a component item or repair part

3.345

endorsement

transfer of the right to obtain delivery of the goods of the carrier by means of the consignee's signature on the reverse side of a bill of lading

NOTE If the name of the new consignee (transferee) is not stated, the endorsement is an open one which means that every holder of the document is entitled to obtain delivery of the goods.

3.346

engineer to order

type of product engineering in which detailed product design is first triggered by the customer order

3.347

engineering bill of material

bill of material containing data regarding product design

NOTE It is organized from a functional point of view, e.g. all items that are required to build an electrical system are grouped together.

3.348

engineering change note (ECN) (engineering change order ECO)

reference document that defines an impending change to the item(s) and the timing of the change by date, batch or serial number

3.349

enterprise resource planning (ERP)

integrated information system for the effective planning and control of all resources needed to take, make, ship and account for customer orders in a manufacturing, distribution or service company

3.350

enterprise resource planning (ERP) system

accounting-oriented information system for identifying and planning the enterprise wide resources needed to take, make, ship and account for customer orders

3.351

equilibrium point

point in a market where the demand for a product and the supply of that product are exactly equal

3.352

estimate (in planning)

overall plan indicating the direction of activities in a particular future period

3.353

estimated time of arrival (ETA)

expected date and time of arrival in a certain (air)port

3.354

estimated time of departure (ETD)

expected date and time when a certain (air)port is left

3.355

European article number (EAN)

13-digit, sequential code to identify consumer products

NOTE 1 The EAN-product code, usually represented as a bar code.

NOTE 2 The code has been designed by the European Article Number Association in Brussels which represents the National EAN Associations in the member countries.

3.356

European Article Numbering Association

international body responsible for administering the EAN-system

NOTE There are affiliates in many countries e.g. CCG in Germany, DCC in Japan, ANA in the UK. In North American the Uniform Code Council (UCC) is responsible for the Uniform Product Code (UPC), which is a sub set of the EAN code.

3.357

European article numbering (EAN) system

set of standards enabling the efficient management of global, multi-industry supply chains by uniquely identifying products, shipping units, assets, locations and services.

[See also: automatic identification]

NOTE It facilitates electronic commerce processes including full tracking and traceability.

3.358

excess stock

any stock in the system that exceeds the minimum amount necessary to achieve the desired throughput rate at the constraint or that exceeds the minimum amount necessary to achieve the desired due date performance

3.359

exempt carrier

for-hire carrier that is free from economic regulation

3.360

expected completion quantity

planned quantity of a manufacturing order after expected scrap or yield loss