BRITISH STANDARD

BS 6079-2:2000

Incorporating Corrigendum No. 1

Project management —

Part 2: Vocabulary

ICS 01.040.03; 03.100.50

Committees responsible for this British Standard

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Fellowship for Operational Research
GAMBICA (BEAMA Ltd)
Health and Safety Executive
Highways Agency
Institute of Quality Assurance
Institution of Civil Engineers
Institution of Incorporated Executive Engineers
Institution of Mechanical Engineers
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Contents

Foreword

The preparation of this British Standard was entrusted to Technical Committee MS/2, Project management. It is a revision of BS 4335:1987, which is withdrawn.

The purpose of this British Standard is to standardize the terminology and symbols used in project management to facilitate communication and the spread of knowledge of the subject.

The changes made are in support of the other parts of BS 6079 which have extended the requirements for standardized terminology from the basic use in project network techniques to project management and its specialized use of other management techniques. Wherever possible the definitions given in BS 4335:1987 have been retained, although some have been deleted because they are no longer in use and others have been revised to reflect current usage or to improve clarity. No term has been included where its sense and usage in project management are adequately defined in *The Shorter Oxford English Dictionary*.

BS 6079 is now issued in three parts:

— BS 6079-1:2000, *Project management — Guide to project management*;

— BS 6079-2:2000, *Project management — Vocabulary*;

— BS 6079-3:2000, *Project management — Guide to the management of business related project risk*.

Because the vocabulary now covers a much wider field it has been decided for ease of use to present the terms in alphabetic order (rather than grouped in separate specialist sections, as was the case in the 1987 edition). The three annexes to this standard contain graphical illustrations, line of balance terminology and a list of commonly used acronyms respectively. The presentation of graphical illustrations in annex A is virtually the same as that in the 1987 edition.

A British Standard does not purport to include all the necessary provisions of a contract. Users of British Standards are responsible for their correct application.

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Summary of pages

This document comprises a front cover, an inside front cover, pages i and ii, pages 1 to 21 and a back cover.

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Introduction

The vocabulary has been arranged alphabetically in the main body of this standard. Where applicable informative reference has been made to other publications that give further guidance on the project management and associated general management techniques defined herein.

The annexes contain information on network symbols, Line of Balance terminology and a consolidated list of acronyms.

1 Scope

This standard defines the terms used in project management and network planning. It has a broad relevance to projects in many industries, commerce and the public sector and was prepared in support of the other parts of BS 6079.

2 Project management terminology

2.1

abstract resource

imaginary **resource** (**2.139**) introduced so that its availability and **activity** (**2.5**) requirement gives an extra means of control

NOTE For example, two jobs not being worked upon simultaneously in order to obviate an accident hazard.

2.2

acceptance criteria

performance requirements and essential conditions that have to be achieved before **project** (**2.116**) **deliverables** (**2.46**) are accepted

2.3

acceptance test

formal, predefined test conducted to determine the conformity of the **deliverable** (**2.46**) with the **acceptance criteria** (**2.2**)

2.4

accrued costs

costs that are earmarked for the **project** (**2.116**) and for which payment is due, but has not been made

2.5

activity

job

operation or **process** (**2.113**) consuming time and possibly other **resources** (**2.139**)

NOTE The position of **activity** (**2.5**) within the hierarchy of **project** (**2.116**) terms is shown in Figure 1.

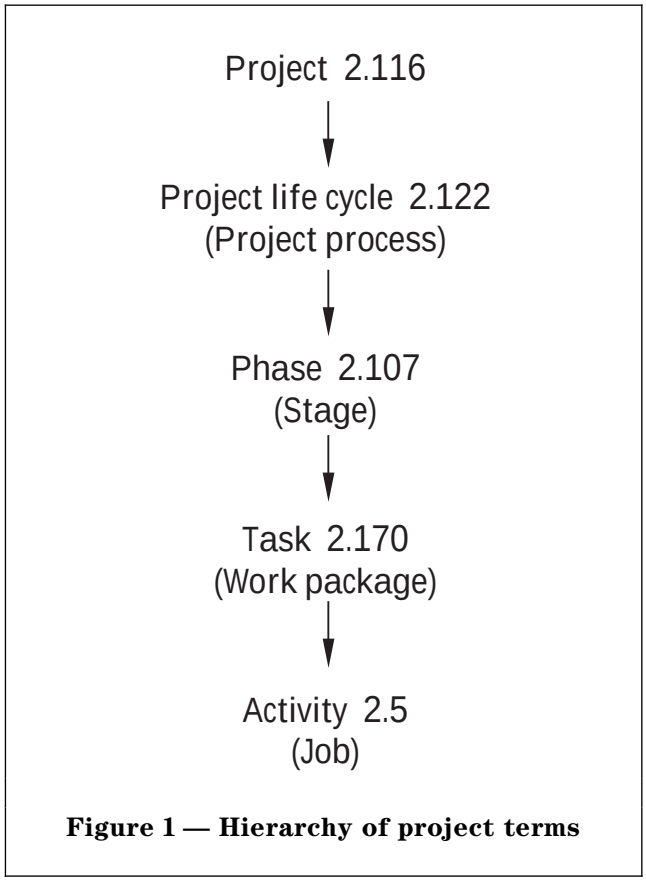


Figure 1 — Hierarchy of project terms

2.6

activity-on-arrow network

arrow diagram

network in which the **arrows** (**2.11**) symbolize the **activities** (**2.5**)

2.7

activity-on-node network

precedence diagram

network in which the **nodes** (**2.99**) symbolize the **activities** (**2.5**)

2.8

actual cost of work performed

cumulative cost of work accrued on the **project** (**2.116**) in a specific period or up to a specific **stage** (**2.165**)

NOTE For some purposes cost may be measured in labour hours rather than money.

2.9

actual costs

incurred costs (**2.78**) that are charged to the **project** (**2.116**) **budget** (**2.20**) and for which payment has been made, or accrued

2.10

AND relationship

logical relationship between two or more **activities** (**2.5**) that converge on or diverge from an **event** (**2.61**)

NOTE The **AND relationship** (**2.10**) indicates that every one of the **activities** (**2.5**) has to be undertaken.

2.11

arrow

directed connecting line between two **nodes** (**2.99**) in a network

NOTE 1 It symbolizes an **activity** (**2.5**) in an **activity-on-arrow network** (**2.6**).

NOTE 2 It symbolizes a **dependency** (**2.47**) relationship in an **activity-on-node network** (**2.7**) .

2.12

arrow diagram

see **activity-on-arrow network** (**2.6**)

2.13

associated revenue

that part of a **project** (**2.116**) cost that is of a revenue nature and therefore charged as incurred to the profit and loss account

NOTE **Associated revenue** (**2.13**) differs from the capital element of the **project** (**2.116**) in that the capital element is taken as an asset to the balance sheet and depreciated over future accounting periods.

2.14

audit

systematic retrospective examination of the whole, or part, of a **project** (**2.116**) or function to measure conformance with predetermined standards

NOTE **Audit** (**2.14**) is usually qualified, for example financial audit, quality audit, design audit, project audit, health and safety audit.

2.15

automatic decision event

decision event (**2.44**) where the decision depends only on the outcome of the preceding **activities** (**2.5**) and which can be programmed or made automatic

2.16

backward pass

procedure whereby the latest **event** (**2.61**) times or the latest finish and start times for the **activities** (**2.5**) of a network are calculated

2.17

bar chart

chart on which **activities** (**2.5**) and their durations are represented by lines drawn to a common time scale

NOTE 1 A **Gantt chart** (**2.72**) is a specific type of **bar chart** (**2.17**) and should not be used as a synonym for **bar chart** (**2.17**).

NOTE 2 See also **cascade chart** (**2.25**).

2.18

baseline

reference levels against which the **project** (**2.116**) is monitored and controlled

2.19

branching logic

conditional logic

alternative **paths** (**2.105**) in a **probabilistic network** (**2.112**)

2.20

budget

quantification of resources needed to achieve a **task** (**2.170**) by a set time, within which the **task** (**2.170**) owners are required to work

NOTE A **budget** (**2.20**) consists of a financial and/or quantitative statement, prepared and approved prior to a defined period, for the purpose of attaining a given objective for that period.

2.21

budgetary control

system of creating **budgets** (**2.20**), monitoring progress and taking appropriate action to achieve budgeted performance

NOTE A **budget** (**2.20**) should provide the information necessary to enable approval, authorization and policy making bodies to assess a project proposal and reach a rational decision.

2.22

business case

information necessary to enable approval, authorization and policy making bodies to assess a **project** (**2.116**) proposal and reach a reasoned decision

2.23

capital cost

the carrying cost in a balance sheet of acquiring an asset and bringing it to the condition where it is capable of performing its intended function over a future series of periods

NOTE See also **revenue cost** (**2.148**).

2.24

capital employed

amount of investment in an organization or **project** (**2.116**), normally the sum of fixed and current assets, less current liabilities at a particular date

2.25

cascade chart

bar chart (**2.17**) on which the vertical order of **activities** (**2.5**) is such that each **activity** (**2.5**) is dependent only on **activities** (**2.5**) higher in the list

2.26

cash flow

cash receipts and payments in a specified period

NOTE See also **net cash flow** (**2.95**).

2.27

change control

process (**2.113**) that ensures potential changes to the **deliverables** (**2.46**) of a **project** (**2.116**) or the sequence of work in a **project** (**2.116**), are recorded, evaluated, authorized and managed

2.28

child activity

subordinate **task** (**2.170**) belonging to a **parent activity** (**2.104**) existing at a higher level in the **work breakdown structure** (**2.179**)

2.29

commissioning

advancement of an installation from the **stage** (**2.165**) of static completion to full working order and achievement of the specified operational requirements

2.30

committed costs

costs that are legally committed even if delivery has not taken place, with invoices neither raised nor paid

2.31

configuration

functional and physical characteristics of a product as defined in technical documents and achieved in the product

NOTE In a **project** (**2.116**) this should contain all items that can be identified as being relevant to the **project** (**2.116**) and that should only be modified after authorization by the relevant manager.

2.32

configuration management

technical and administrative **activities** (**2.5**) concerned with the creation, maintenance and controlled change of **configuration** (**2.31**) throughout the life of the product

NOTE See BS EN ISO 10007:1997 for guidance on **configuration management** (**2.32**), including specialist terminology.

2.33

contingency plan

mitigation plan

alternative course(s) of action devised to cope with **project** (**2.116**) **risks** (**2.149**)

2.34

cost breakdown structure

hierarchical breakdown of a **project** (**2.116**) into cost elements

2.35

cost centre

location, person, **activity** (**2.5**) or **project** (**2.116**) in respect of which costs may be ascertained and related to cost units

2.36

cost code

unique identity for a specified element of work

2.37

cost performance index

a measure, expressed as a percentage or other ratio, of actual cost to **budget** (**2.20**)/plan

2.38

cost variance

the difference (positive or negative) between the actual expenditure and the planned/budgeted expenditure

2.39

cost-benefit analysis

analysis of the relationship between the costs of undertaking a **task** (**2.170**) or **project** (**2.116**), initial and recurrent, and the benefits likely to arise from the changed situation, initially and recurrently

NOTE The hard tangible readily measurable benefits may sometimes be accompanied by soft benefits which may be real but difficult to isolate, measure and value.

2.40

credited resource

resource (**2.139**) that is created by an **activity** (**2.5**) or **event** (**2.61**) and can then be used by the **project** (**2.116**)

2.41

critical path

sequence of **activities** (**2.5**) through a **project network** (**2.129**) from start to finish, the sum of whose durations determines the overall **project** (**2.116**) duration

NOTE There may be more than one such **path** (**2.105**).

2.42

critical path analysis

procedure for calculating the **critical path** (**2.41**) and **floats** (**2.68**) in a network

2.43

cycle

path (**2.105**) that emanates from a **decision event** (**2.44**) and intentionally leads back to itself or to a prior **event** (**2.61**)

NOTE The **path** (**2.105**) may be traversed more than once.

2.44

decision event

state in the progress of a **project** (**2.116**) when a decision is required before the start of any succeeding **activity** (**2.5**)

NOTE The decision determines which of a number of alternative **paths** (**2.105**) is to be followed.

2.45

deliberate decision event

decision event (**2.44**) where the decision is made as a result of the outcomes of the preceding **activities** (**2.5**) and possibly other information but which cannot be made automatically

2.46

deliverable

end-product of a **project** (**2.116**) or the measurable results of intermediate **activities** (**2.5**) within the **project organization** (**2.131**)

NOTE **Deliverables** (**2.46**) may be in the form of hardware, software, services, **processes** (**2.113**), documents or any combination of these.

2.47

dependency

precedence relationship

restriction that one **activity** (**2.5**) has to precede, either in part or in total, another **activity** (**2.5**)

2.48

dependency arrow

link

arrow (**2.11**) used in an **activity-on-node network** (**2.7**) to represent the interrelationships of **activities** (**2.5**) in a **project** (**2.116**)

2.49

deterministic network

network containing **paths** (**2.105**), all of which have to be followed and whose durations are fixed

NOTE **Deterministic network** (**2.49**) is a term used to distinguish traditional networking from probabilistic networking.

2.50

direct cost

costs that are specifically attributable to an **activity** (**2.5**) or group of **activities** (**2.5**) without apportionment

2.51

discounted cash flow

concept of relating future cash inflows and outflows over the life of a **project** (**2.116**) or operation to a common base value thereby allowing more validity to comparison of **projects** (**2.116**) with different durations and rates of **cash flow** (**2.26**)

2.52

dummy activity

logical link in **activity-on-arrow network** (**2.6**) that may require time but no other resource

NOTE There are three uses for a **dummy activity** (**2.52**) in **activity-on-arrow network** (**2.6**): logic, time delay and uniqueness.

2.53

earliest event time

earliest time by which an **event** (**2.61**) can occur within the logical and imposed constraints of the network

2.54

earliest finish time

earliest possible time by which an **activity** (**2.5**) can finish within the logical and imposed constraints of the network

2.55

earliest start time

earliest possible time by which an **activity** (**2.5**) can start within the logical and imposed constraints of the network

2.56

earned value

budgeted cost of work performed

the value of the useful work done at any given point in a **project** (**2.116**)

NOTE The **budget** (**2.20**) may be expressed in cost or labour hours.

2.57

earned value management

earned value analysis

technique for assessing whether the **earned value** (**2.56**) in relation to the amount of work completed, is ahead, on, or behind plan

2.58

end event

<project> **event** (**2.61**) with preceding, but no succeeding **activities** (**2.5**), within a **project** (**2.116**)

NOTE There may be more than one **end event** (**2.58**).

2.59

environmental factoring

use of data relating to an external factor (such as the weather) to modify or bias the value of parameters concerned

2.60

equivalent activity

activity (**2.5**) that is equivalent, in the probabilistic sense, to any combination of series and parallel **activities** (**2.5**)

2.61

event

state in the progress of a **project** (**2.116**) after the completion of all preceding **activities** (**2.5**), but before the start of any succeeding **activity** (**2.5**)

2.62

exception report

focused report drawing attention to instances where planned and actual results are expected to be, or are already, significantly different

NOTE An **exception report** (**2.62**) is usually triggered when actual values are expected to cross a predetermined threshold that is set with reference to the **project** (**2.116**) plan. The actual values may be trending better or worse than plan.

2.63

exclusive OR relationship

logical relationship indicating that only one of the possible **activities** (**2.5**) can be undertaken

2.64

fast-tracking

reducing the duration of a **project** (**2.116**) usually by overlapping **phases** (**2.107**) or **activities** (**2.5**) that were originally planned be to done sequentially

2.65

feasibility study

analysis to determine whether a course of action is possible within the terms of reference of the **project** (**2.116**)

2.66

feasible schedule

any schedule capable of implementation within the externally determined constraints of time and/or **resource** (**2.139**) limits

2.67

final report

post-implementation report

retrospective report that formally closes the **project** (**2.116**) having handed over the **project** (**2.116**) **deliverables** (**2.46**) for operational use

NOTE The **final report** (**2.67**) should draw attention to experiences that may be of benefit to future **projects** (**2.116**) and may form part of the accountability of the **project team** (**2.136**).

2.68

float

time available for an **activity** (**2.5**) or **parent activity** (**2.105**) in addition to its planned duration

NOTE See also **total float** (**2.175**) and **free float** (**2.70**).

2.69

forward pass

procedure whereby the **earliest event times** (**2.53**) or the earliest start and finish times for the **activities** (**2.5**) of a network are calculated

2.70

free float

time by which an **activity** (**2.5**) may be delayed or extended without affecting the start of any succeeding **activity** (**2.5**)

NOTE A **free float** (**2.70**) can never be negative.

2.71

functional organization

management structure where specific functions of an organization are grouped into specialist departments providing dedicated services

NOTE Examples of **functional organization** (**2.71**) are finance, marketing and design departments.

2.72

Gantt chart

particular type of **bar chart** (**2.17**) showing planned **activity** (**2.5**) against time

NOTE **Gantt chart** (**2.72**), although named for a particular type of **bar chart** (**2.17**), is in current usage as a name for bar charts in general.

2.73

hammock

activity (**2.5**), joining two specified points that span two or more **activities** (**2.5**)

NOTE 1 Its duration is initially unspecified and is only determined by the durations of the specified **activities** (**2.5**).

NOTE 2 **Hammocks** (**2.73**) are usually used to collect time-dependent information, e.g. overheads.

2.74

hierarchy of networks

range of networks at different levels of detail, from summary down to working levels, showing the relationships between those networks

2.75

host organization

organization that provides the administrative and logistical support for the **project** (**2.116**)

2.76

imposed date

point in time determined by circumstances outside the network

NOTE The symbol is inserted immediately above the **event** (**2.61**) concerned on **activity-on-arrow networks** (**2.6**) or adjacent and connected to the appropriate corner of the **node** (**2.99**) on **activity-on-node networks** (**2.7**).

2.77

inclusive OR relationship

logical relationship indicating that at least one but not necessarily all of the **activities** (**2.5**) have to be undertaken

2.78

incurred costs

sum of actual and **committed costs** (**2.30**), whether invoiced/paid or not, at a specified time

2.79

indirect cost

costs associated with a **project** (**2.116**) that cannot be directly attributed to an **activity** (**2.5**) or group of **activities** (**2.5**)

2.80

integrated logistics support

disciplined approach to **activities** (**2.5**) necessary to cause support considerations to be integrated into product design, develop support arrangements that are consistently related to design and to each other and provide the necessary support at the beginning and during customer use at optimum cost

2.81

internal rate of return

discount rate at which the **net present value** (**2.96**) of a future **cash flow** (**2.26**) is zero

NOTE **Internal rate of return** (**2.81**) is a special case of the **discounted cash flow** (**2.51**) procedures.

2.82

ladder

device for representing a set of overlapping **activities** (**2.5**) in a network diagram

NOTE The start and finish of each succeeding **activity** (**2.5**) are linked only to the start and finish of the preceding **activity** (**2.5**) by **lead** (**2.87**) and **lag** (**2.83**) **activities** (**2.5**), which consume only time.

2.83

lag

a) in a network diagram, the minimum necessary lapse of time between the finish of one **activity** (**2.5**) and the finish of an overlapping **activity** (**2.5**)

b) delay incurred between two specified **activities** (**2.5**)

2.84

latest event time

latest time by which an **event** (**2.61**) has to occur within the logical and imposed constraints of the network, without affecting the total **project** (**2.116**) duration

2.85

latest finish time

the latest possible time by which an **activity** (**2.5**) has to finish within the logical **activity** (**2.5**) and imposed constraints of the network, without affecting the total **project** (**2.116**) duration

2.86

latest start time

latest possible time by which an **activity** (**2.5**) has to start within the logical and imposed constraints of the network, without affecting the total **project** (**2.116**) duration

2.87

lead

in a network diagram, the minimum necessary lapse of time between the start of one **activity** (**2.5**) and the start of an overlapping **activity** (**2.5**)

2.88

logistics support analysis

selective application of a range of engineering **tasks** (**2.170**) undertaken during the product development **process** (**2.113**) to assist in complying with supportability and other **integrated logistics support** (**2.80**) objectives

2.89

loop

an error in a network which results in a later **activity** (**2.5**) imposing a logical restraint on an earlier **activity** (**2.5**)

2.90

management reserve

central contingency pool

sum of money held as an overall contingency to cover the cost impact of some unexpected **event** (**2.61**) occurring

NOTE This is self-insurance.

2.91

master network

network showing the complete **project** (**2.116**), from which more detailed networks are derived

2.92

milestone

key event

event (**2.61**) selected for its importance in the **project** (**2.116**)

NOTE **Milestones** (**2.92**) are commonly used in relation to progress.

2.93

multi-project scheduling

use of the techniques of **resource allocation** (**2.141**) to schedule more than one **project** (**2.116**) concurrently

2.94

negative total float

time by which the duration of an **activity** (**2.5**) or **path** (**2.105**) has to be reduced in order to permit a limiting **imposed date** (**2.76**) to be achieved

2.95

net cash flow

difference between cash received and payments made during a specific period

2.96

net present value

aggregate of future **net cash flows** (**2.95**) discounted back to a common base date, usually the present

2.97

network analysis

method used for calculating a **project's** (**2.116**) **critical path** (**2.41**), **activity** (**2.5**) times and **floats** (**2.68**)

NOTE See also **critical path analysis** (**2.42**), **project network techniques** (**2.130**).

2.98

network interface

activity (**2.5**) or **event** (**2.61**) common to two or more network diagrams

2.99

nodes

points in a network at which **arrows** (**2.11**) start and finish

2.100

non-splittable activity

activity (**2.5**) that, once started, has to be completed to plan without interruption

NOTE **Resources** (**2.139**) should not be diverted from a **non-splittable activity** (**2.100**) to another **activity** (**2.5**).

2.101

organizational breakdown structure

hierarchical way in which the organization may be divided into management levels and groups, for planning and control purposes

2.102

outsourcing

contracting-out

buying in facilities or work [as opposed to using in-house **resources** (**2.139**)]

2.103

parallel method

basic parallel method

procedure in which only those **activities** (**2.5**) which can start, by virtue of preceding **activities** (**2.5**) being complete, are ranked in priority order using a constant rule at each scheduling period

NOTE The **activities** (**2.5**) are considered sequentially from this list for scheduling depending on the availability of resources. Unscheduled **activities** (**2.5**) are retained in the list for ranking with new **activities** (**2.5**) at the next scheduling period.

2.104

parent activity

task (**2.170**) within the **work breakdown structure** (**2.179**) that embodies several subordinate **child activities** (**2.28**)

2.105

path

activity (**2.5**) or an unbroken sequence of **activities** (**2.5**) in a **project network** (**2.129**)

2.106

performance specification

statement of the totality of needs expressed by the benefits, features, characteristics, **process** (**2.113**) conditions, boundaries and constraints that together define the expected performance of a **deliverable** (**2.46**)

NOTE A **performance specification** (**2.106**) should provide for innovation and alternative solutions, by not defining or unduly constraining the technical attributes of the intended **deliverable** (**2.46**).

2.107

phase

<project> that part of a **project** (**2.116**) during which a set of related and interlinked **tasks** (**2.170**) are performed

NOTE 1 A **project** (**2.116**) consists of a series of **phases** (**2.107**) that together constitute the whole **project life cycle** (**2.122**) and definitions of the five primary **phases** (**2.107**) that may be recognized in all types of **project** (**2.116**) are given in Table 1. In practice the five primary **phases** (**2.107**) shown in Table 1 may sometimes be subdivided into further, more specific, **phases** (**2.107**) or **stages** (**2.165**) according to the nature of the **project** (**2.116**). Table 2 gives some examples of commonly used names for the more specific or subdivided **phases** (**2.107**) and **stages** (**2.165**) of **projects** (**2.116**).

NOTE 2 Figure 2 illustrates a typical **project life cycle** (**2.122**).

2.108

planned cost

estimated cost of achieving a specified objective

2.109

post-implementation report

see **final report** (**2.67**)

Table 1 — Project phases

Phase name and sequence	Definition
Conception	Triggers and captures new ideas or opportunities and identifies potential candidates for further development in the feasibility phase.
Feasibility	Demonstrates that the client's requirement can be achieved and identifies and evaluates the options to determine the one preferred solution.
Realization (implementation)	Develops the chosen solution into a completed deliverable.
Operation	Period when the completed deliverable is used and maintained in service for its intended purpose.
Termination	Completion of the project, either upon formal acceptance of its deliverables by the client and/or the disposal of such deliverables at the end of their life.
NOTE The terms given in italic type correspond to the phases shown in Figure 2.	

Table 2 — Typical project phases

Phase/Stage	Description
Conception Pilot study Research Initiation	Usually the start of project work, by translation of ideas and/or identifying needs.
Feasibility	Establishing the commercial, technical, social and environmental feasibility of project. Estimating project cost and time-scale, also identifying risks and health and safety issues; determining the support and capability of prospective contractors.
Evaluation	Evaluation of the whole or part of the project between phases; prospective contractor preparing tender.
Application	Making a formal proposal for authorization of a project.
Authorization	Getting agreement to proceed with project in whole or in part; by obtaining acceptance of a tender by the customer or board.
Definition	Verifying the approach; developing the specification.
Development	Designing a product that conforms to the specification.
Realization Implementation Production Manufacture Fabrication Construction Works	This phase can include several individual stages: design, procurement, construction, commissioning etc.
Installation Commissioning	Installing the plant/product and making it work.
Launch Introduction Branch-out Shipping	Open up sales to a pilot area, then whole market.
Handover Acceptance	Transferring responsibility for the project to a customer or functional department.
Operation In-use In-service	Maintaining the product.
Termination Disposal	Decommissioning the product; disposal of the project.
Final report	The last act of project manager, to document the history of the project.
NOTE The terms given in italic type correspond to the phases shown in Figure 2.	

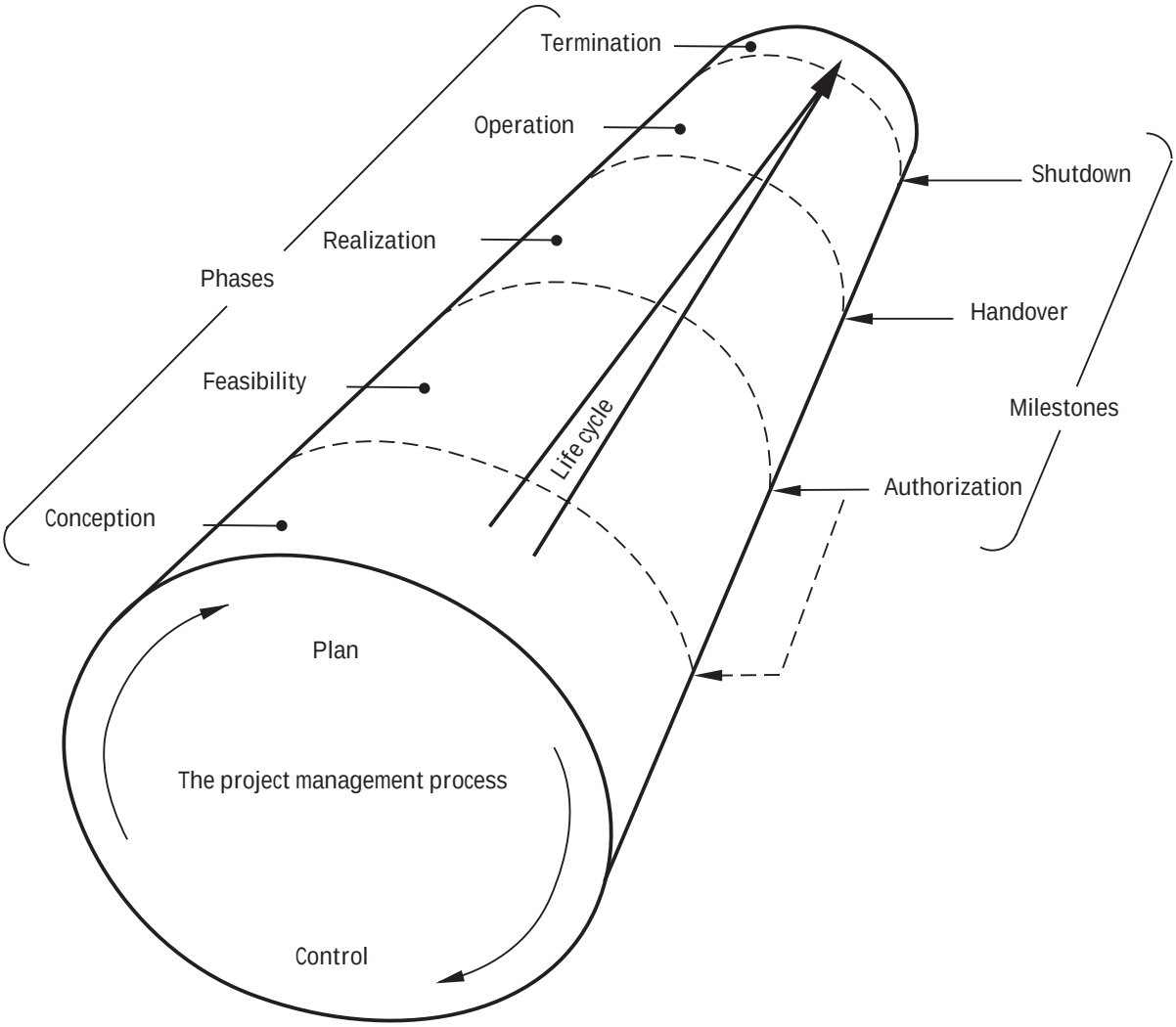


Figure 2 — Project management life cycle

2.110
precedence network
multiple dependency network
activity-on-node network (**2.7**) in which a sequence **arrow** (**2.11**) represents one of four forms of precedence relationship, depending on the positioning of the head and the tail of the sequence **arrow** (**2.11**)
NOTE 1 The relationships are:
start of **activity** (**2.5**) depends on finish of preceding **activity** (**2.5**), either immediately or after a lapse of time;
finish of **activity** (**2.5**) depends on finish of preceding **activity** (**2.5**), either immediately or after a lapse of time;
start of **activity** (**2.5**) depends on start of preceding **activity** (**2.5**), either immediately or after a lapse of time;
finish of **activity** (**2.5**) depends on start of preceding **activity** (**2.5**), either immediately or after a lapse of time.
NOTE 2 See annex C.

2.111
preceding event
tail event
in an **activity-on-arrow network** (**2.6**), an **event** (**2.61**) at the beginning of an **activity** (**2.5**)

2.112
probabilistic network
network containing alternative **paths** (**2.105**) with which probabilities are associated

2.113
process
set of interrelated resources and **activities** (**2.5**) which transform inputs into outputs

2.114
product breakdown structure
see **work breakdown structure** (**2.179**)

2.115

programme

group of related **projects** (**2.116**)

NOTE A group of unrelated **projects** (**2.116**) is sometimes known as a portfolio.

2.116

project

unique **process** (**2.113**), consisting of a set of coordinated and controlled **activities** (**2.5**) with start and finish dates, undertaken to achieve an objective conforming to specific requirements, including constraints of time, cost and **resources** (**2.139**)

[BS ISO 10006:1997, definition **3.1**]

2.117

project base date

reference date used as a basis for the start of a **project** (**2.116**) calendar

2.118

project brief

statement that describes the purpose, cost, time and performance requirements/constraints for a **project** (**2.116**)

2.119

project champion

person within the parent organization who promotes and defends a **project** (**2.116**)

2.120

project closure

formal termination of a **project** (**2.116**) at any point during its life

2.121

project coordination

communication linking various areas of a **project** (**2.116**) to ensure the transfer of information or hardware at interface points at the appropriate times and identification of any further necessary resources

2.122

project life cycle

all **phases** (**2.107**) or **stages** (**2.165**) between a **project's** (**2.116**) conception and its termination

NOTE The **project life cycle** (**2.122**) may include the operation and disposal of **project** (**2.116**) **deliverables** (**2.46**). This is usually known as an "extended life cycle".

2.123

project life cycle cost

cumulative cost of a **project** (**2.116**) over its whole life cycle

2.124

project log

project diary

chronological record of significant occurrences throughout the **project** (**2.116**)

2.125

project management

planning, monitoring and control of all aspects of a **project** (**2.116**) and the motivation of all those involved in it to achieve the **project** (**2.116**) objectives on time and to the specified cost, quality and performance

2.126

project management plan

a plan for carrying out a **project** (**2.116**), to meet specific objectives, that is prepared by or for the **project manager** (**2.127**)

2.127

project manager

individual or body with authority, accountability and responsibility for managing a **project** (**2.116**) to achieve specific objectives

2.128

project monitoring

comparison of current **project** (**2.116**) status with what was planned to be done to identify and report any deviations

2.129

project network

representation of **activities** (**2.5**) and/or **events** (**2.61**) with their interrelationships and **dependencies** (**2.47**)

2.130

project network techniques

project network analysis

group of techniques that, for the description, analysis, planning and control of **projects** (**2.116**), considers the logical interrelationships of all **project** (**2.116**) **activities** (**2.5**)

NOTE 1 The group includes techniques concerned with time, resources, costs and other influencing factors, e.g. uncertainty.

NOTE 2 The terms "programme evaluation and review technique" (PERT) "**critical path analysis**" (**2.42**) (CPA), "critical path method" (CPM) and "precedence method" refer to particular techniques and should not be used as synonyms for **project network techniques** (**2.130**).

2.131

project organization

structure that is created or evolves to serve the **project** (**2.116**) and its participants

2.132

project progress report

formal statement that compares the **project** (**2.116**) progress, achievements and expectations with the **project** (**2.116**) plan

2.133

project review calendar

calendar of **project** (**2.116**) review dates, meetings and issues of reports set against **project** (**2.116**) week numbers or dates

2.134

project schedule

project programme

see **scheduling**

2.135

project support staff

personnel external to the **project team** (**2.136**) who provide specialist services for the **project** (**2.116**)

2.136

project team

set of individuals, groups and/or organizations that are responsible to the **project manager** (**2.127**) for undertaking **project** (**2.116**) **tasks** (**2.170**)

2.137

quality plan

<project> that part of the **project** (**2.116**) plan that concerns quality management and quality assurance strategies

NOTE See also BS ISO 10006:1997.

2.138

requirements definition

statement of the needs that a **project** (**2.116**) has to satisfy

2.139

resource

any variable capable of definition that is required for the completion of an **activity** (**2.5**) and may constrain the **project** (**2.116**)

NOTE 1 A **resource** (**2.139**) may be non-storable so that its availability has to be renewed for each time period (even if it was not utilized in previous time periods).

NOTE 2 A **resource** (**2.139**) may be storable so that it remains available unless depleted by usage. Such a **resource** (**2.139**) may also be replenished by **activities** (**2.5**) producing credited and storable **resource** (**2.139**).

2.140

resource aggregation

summation of the requirements for each **resource** (**2.139**), and for each time period

NOTE Where the **earliest start time** (**2.55**) of an **activity** (**2.5**) is used alone, it is often termed an "early start" aggregation. Similarly a "late start" aggregation uses the **latest start times** (**2.86**).

2.141

resource allocation

scheduling of **activities** (**2.5**) and the **resources** (**2.139**) required by those **activities** (**2.5**), so that predetermined constraints of **resource** (**2.139**) availability and/or **project** (**2.116**) time are not exceeded

NOTE Decision on the use to be made of available **resources** (**2.139**).

2.142

resource constraint

limitation due to the availability of a resource

2.143

resource cumulation

process (**2.113**) of accumulating the requirements for each **resource** (**2.139**) to give the total required to date at all times throughout the **project** (**2.116**)

2.144

resource levelling

process (**2.113**) of amending a schedule to reduce the variation between maximum and minimum values of resource requirements

2.145

resource limited scheduling

scheduling of **activities** (**2.5**), so that predetermined **resource** (**2.139**) levels are never exceeded

NOTE This may cause the minimum overall or specified **project** (**2.116**) duration to be exceeded.

2.146

resource smoothing

scheduling of **activities** (**2.5**), within the limits of their **float** (**2.68**), so that fluctuations in individual **resource** (**2.139**) requirements are minimized

2.147

retention

agreed proportion of a due payment that is retained by the client for a specified period after handover to ensure performance

2.148

revenue cost

expenditure charged to the profit and loss account as incurred or accrued due

2.149

risk

combination of the probability or frequency of occurrence of a defined threat or opportunity and the magnitude of the consequences of the occurrence

NOTE Combination of the likelihood of occurrence of a specified **event** (**2.61**) and its consequences (see IEC 56/669/CDV).

2.150

risk analysis

systematic use of available information to determine how often specified **events** (**2.61**) may occur and the magnitude of their likely consequences

2.151

risk evaluation

process (**2.113**) used to determine **risk management** (**2.153**) priorities

2.152

risk identification

process (**2.113**) of determining what could pose a **risk** (**2.149**)

2.153

risk management

systematic application of policies, procedures, methods and practices to the **tasks** (**2.170**) of identifying, analysing, evaluating, treating and monitoring **risk** (**2.149**)

NOTE IEC 56/669/CDV gives the following definition "systematic application of management policies, procedures and practices to the tasks of identifying, analysing, monitoring and controlling risks".

2.154

risk quantification

process (**2.113**) of applying values to the various aspects of a **risk** (**2.149**)

2.155

risk reduction

see **risk treatment** (**2.159**)

2.156

risk register

formal record of identified **risks** (**2.149**)

2.157

risk response

contingency plans (**2.33**) to manage a **risk** (**2.149**) should it materialize

2.158

risk sharing

diminution of a **risk** (**2.149**) by sharing it with others, usually for some consideration

2.159

risk treatment

selection and implementation of appropriate options for dealing with **risk** (**2.149**)

2.160

secondary risk

risk (**2.149**) that can occur as a result of treating a **risk** (**2.149**)

2.161

simulation

what-if simulation

the purpose of **simulation** (**2.161**) is to change the value of the parameters of the **project network** (**2.129**) to study its behaviour under various conditions of its operation

2.162

slack

calculated time span within which an **event** (**2.61**) has to occur within the logical and imposed constraints of the network, without affecting the total **project** (**2.116**) duration

NOTE 1 It may be made negative by an **imposed date** (**2.76**).

NOTE 2 The term **slack** (**2.162**) is used as referring only to an **event** (**2.61**).

2.163

splittable activity

activity (**2.5**) that can be interrupted in order to allow its **resources** (**2.139**) to be transferred temporarily to another **activity** (**2.5**)

2.164

sponsor

individual or body for whom the **project** (**2.116**) is undertaken and who is the primary **risk** (**2.149**) taker

2.165

stage

see **phase** (**2.107**)

2.166

stage payment

payment part way through a **project** (**2.116**) at some predetermined **milestone** (**2.92**)

2.167

stakeholder

a person or group of people who have a vested interest in the success of an organization and the environment in which the organization operates

2.168

start event

<project> **event** (**2.61**) with succeeding, but no preceding **activities** (**2.5**)

NOTE There may be more than one **start event** (**2.168**).

2.169

statement of work

document stating the requirements for a given **project** (**2.116**) **task** (**2.170**)

2.170

task

work package

group of **activities** (**2.5**) which are the responsibility of a single owner

NOTE See hierarchy of **project** (**2.116**) terms shown in Figure 1.

2.171

tied activities

activities (**2.5**) that have to be performed sequentially or within a predetermined time of each other

2.172

time based network

linked bar chart

bar chart (**2.17**) that shows the logical and time relationships between **activities** (**2.5**)

2.173

time limited scheduling

scheduling of **activities** (**2.5**), so that the specified **project** (**2.116**) duration, or any **imposed dates** (**2.76**) are not exceeded

NOTE This may cause the envisaged **resource** (**2.139**) levels to be exceeded.

2.174

time now

specified date from which the forward analysis is deemed to commence

2.175

total float

time by which an **activity** (**2.5**) may be delayed or extended without affecting the total **project** (**2.116**) duration

2.176

transfer of risk

see **risk sharing** (**2.158**)

2.177

transit time

dependency (**2.47**) link that requires time and no other **resources** (**2.139**)

NOTE It may be a negative time.

2.178

unlimited schedule

infinite schedule

schedule produced without **resource constraint** (**2.142**)

2.179

work breakdown structure

way in which a **project** (**2.116**) may be divided by level into discrete groups for programming, cost planning and control purposes

NOTE See **work package** (**2.180**) and **task** (**2.170**).

2.180

work package

see **task** (**2.170**)

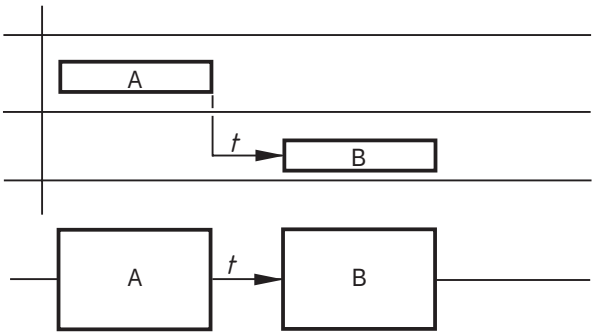
Annex A (informative)
Recommended symbols used in network diagrams

A.1 Symbols for use in precedence networks

NOTE 1 The relationships shown in the **bar charts** (**2.17**) are represented by the symbols in the diagram below.

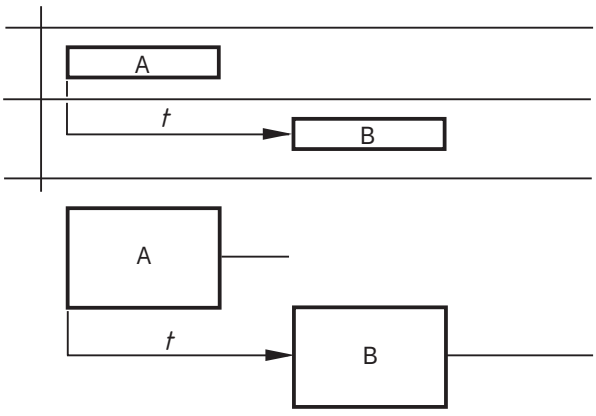
NOTE 2 The time r on the **dependency** (**2.47**) **arrow** (**2.11**) is positive and greater than or equal to zero.

NOTE 3 The dependencies are not restricted to single use and may be used in combination.



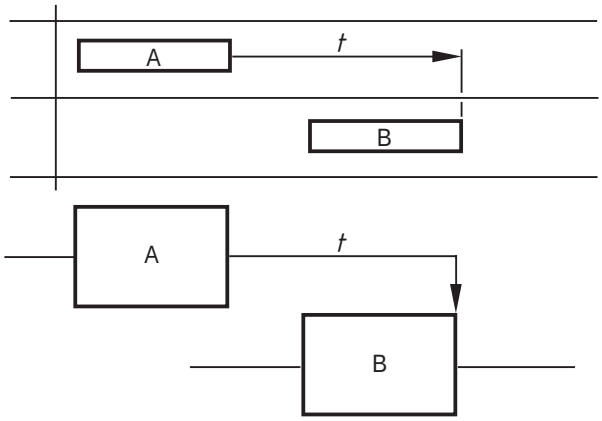
B cannot start until t time units after A has finished

Figure A.1 — Finish to start



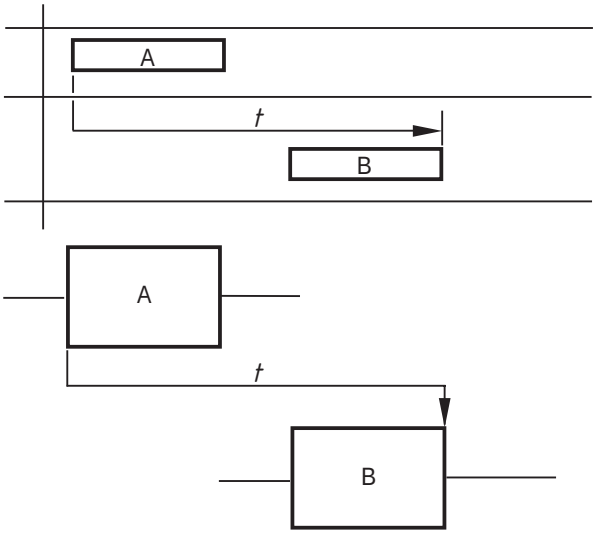
B cannot start until t time units after A has started

Figure A.2 — Start to start



B cannot finish until *t* time units after A has finished

Figure A.3 — Finish to finish



B cannot finish until *t* time units after A has started

Figure A.4 — Start to finish

A.2 Symbols for use in activity-on-arrow probabilistic networks

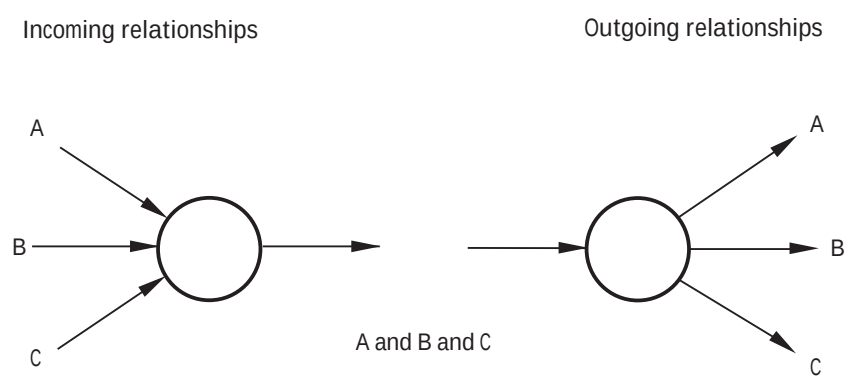


Figure A.5 — AND

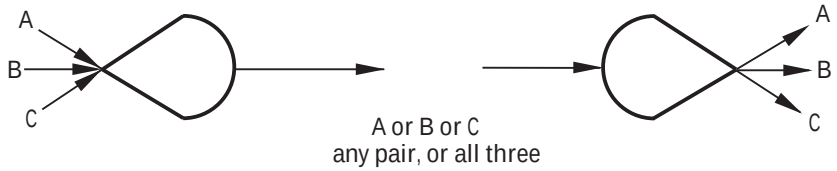
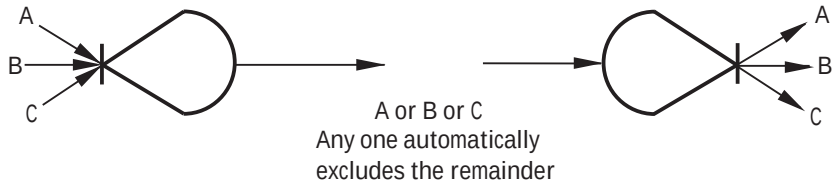


Figure A.6 — Inclusive OR



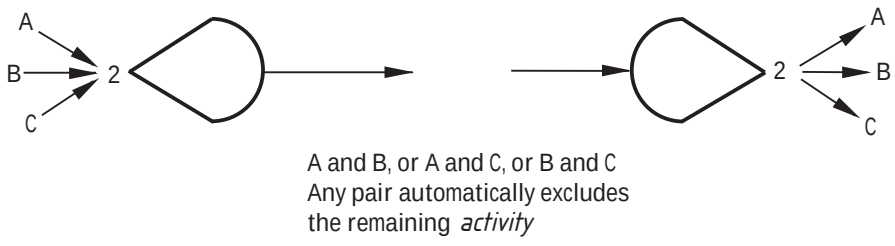


Figure A.7 — Exclusive OR

A.3 Symbols for use in activity-on-node probabilistic networks

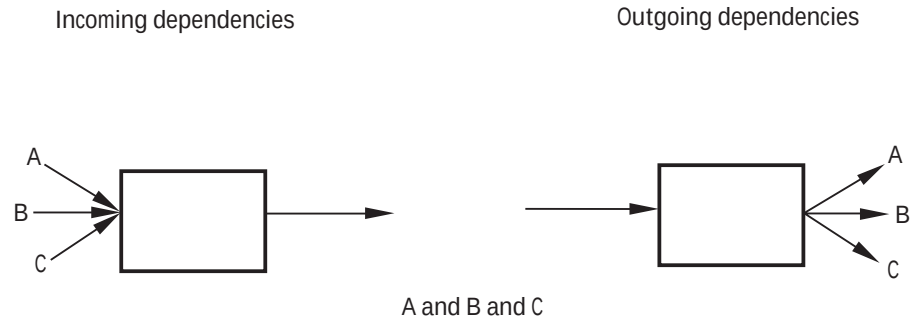


Figure A.8 — AND

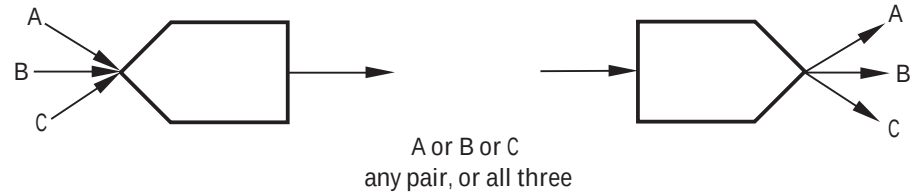


Figure A.9 — Inclusive OR

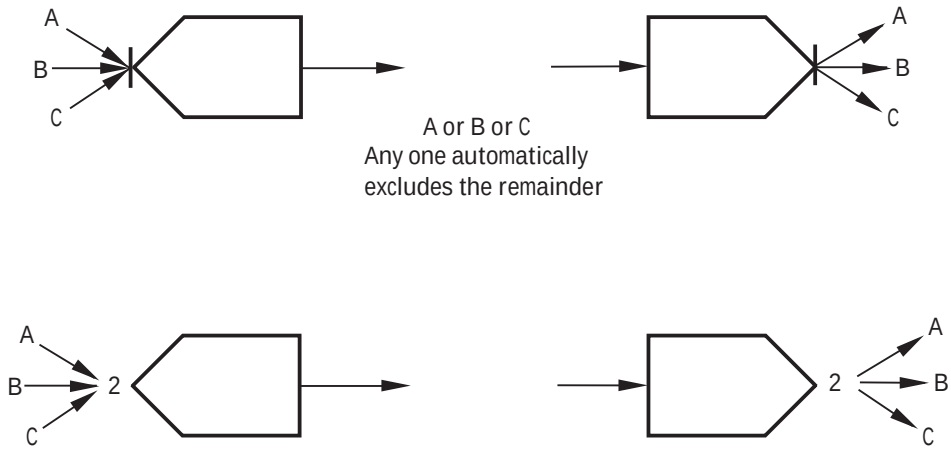


Figure A.10 — Exclusive OR

Annex B (informative)

Line of balance terminology

NOTE 1 This technique originated in the manufacturing industries for controlling the manufacture of components and sub-assemblies in repetitive production. It has since been adopted as a graphical technique for the control of resources in multi-project situations.

NOTE 2 It is advisable to differentiate between these similar (but not identical) related techniques and consequently this annex has been subdivided accordingly.

B.1 General terms

B.1.1

cumulative delivery diagram

curve or block diagram that shows the cumulative number of final products required for delivery in each time period of a manufacturing **product breakdown structure** (**2.115**)

B.1.2

line of balance network

LOB network

multi-start, single-end network showing the sequence of the **activities** (**2.5**) required to manufacture and assemble one (or a batch) of identical final products

B.1.3

line of balance diagram

LOB diagram

diagram that shows, for every **event** (**2.61**) in the line of balance network, the number of sets of items which have reached the **stage** (**2.165**) represented by that **event** (**2.61**)

B.1.4

line of balance

line drawn on a line of balance diagram showing the balance quantity at each **event** (**2.61**)

B.1.5

balance quantity

number of sets of items required at an **event** (**2.61**), at a specified report date, in order to allow the subsequent **activities** (**2.5**) to be completed in time to meet the delivery schedule defined by the cumulative delivery diagram

B.1.6

lead time

time that has to elapse between the achievement of an **event** (**2.61**) and the completion of the last **activity** (**2.5**) in the line of balance network, after allowing for all network constraints

B.1.7

set of items

number of detail parts, or sub-assemblies, etc., required at the appropriate **event** (**2.61**), to be produced for each final product or batch

B.2 Graphical techniques terminology

B.2.1

elemental trend analysis

graphical technique for the programming and control of repetitive or continuous work with maximum effective resource utilization

B.2.2

parallel line method

elemental trend analysis method of programming, with each operation proceeding at the same rate

B.2.3

non-parallel line method

elemental trend analysis method of programming, with each operation proceeding at a rate governed by the constraints of the prevailing conditions

B.2.4

buffer time

allotted period of time between the completion of one operation and the start of the next sequential operation

Annex C (informative)

List of acronyms commonly used in project management (PM)

ACC	annual capital charge
ACWP	actual cost of work performed (**2.8**)
ANOVA	analysis of variance
AOA	activity-on-arrow (**2.6**)
AON	activity-on-node (**2.7**)
ARM	availability, reliability, maintainability
ATE	actual time expended to date
BAC	budget at completion
BC	business case (**2.22**)
BCWP	budgeted cost of work performed (**2.56**)
BCWS	budgeted cost of work scheduled
BOK	body of knowledge
CADMID	concept, assessment, demonstration, monitoring, in-service, disposal
CAR	contractor's all risk
CBA	cost-benefit analysis (**2.39**)
CBS	cost breakdown structure (**2.34**)
CCB	configuration/change control board
CDR	critical design review
CDS	continuing design services
CFIOT	concept, feasibility, in-service, operation, termination

CIF	carriage, insurance, freight
CM	configuration management (**2.32**)
COEIA	combined operational effectiveness and investment appraisal
CPA	contract price adjustment
CPA	critical path analysis (**2.42**)
CPI	cost performance index
CPM	critical path methods
CS^2	cost and schedule control system
CS2	cost and schedule control system
CSCS	cost and schedule control system
DCF	discounted cash flow (**2.51**)
DDP	delivery duty paid
EAC	estimated cost at completion
ECR	engineering change request
ECTC	estimated cost to complete
EET	earliest event time (**2.53**)
EFT	earliest finish time (**2.54**)
EMAC	engineering man-hours and cost
EST	earliest start time (**2.55**)
ETA	elemental trend analysis
ETC	estimated time at completion
EVA	earned value analysis (**2.57**)
EVM	earned value management (**2.57**)
EVMS	earned value management system
FD	full development
FDP	full development and production
FF	free float (**2.70**)
FLAC	four letter acronym
FMEA	failure mode and effect analysis
FOB	free on board
FOR	free on rail
GPV	gross present value
H&S	health and safety
HASAWA	health and safety at work act
HR	human resources
IA	investment appraisal
ILS	integrated logistics support (**2.80**)
IPMA	international project management team
IPMT	integrated project management team
IPR	intellectual property rights
IPT	integrated project team
IRR	internal rate of return (**2.81**)
IS	information systems
ISD	in-service date
ISEB	information systems examination board
IT	information technology
ITT	invitation to tender
LCC	life cycle costing
LET	latest event time (**2.84**)
LFE	learning from experience
LFT	latest finish time (**2.85**)
LOB	line of balance
LRM	linear responsibility matrix
LSA	logistics support analysis (**2.88**)
LST	latest start time (**2.86**)
NACNOC	no acceptable certification no contract
NAPNOC	no agreed price, no contract
NDT	non-destructive testing
NIMBY	not in my back yard
NOSCOS	needs, objectives, strategy, and organization control system
NOSOCS&R	needs, objectives, strategy, organization control, system and risk
NPV	net present value (**2.96**)
OBS	organizational breakdown structure (**2.101**)
OD	original duration (planned for the project)
PAYE	pay as you earn
PBS	product breakdown structure (**2.114**)
PD	project definition
PDM	precedence diagram method
PDR	preliminary design review
PDS	post-design services
PERT	programme evaluation and review techniques
PESTEL	political, ecomonic, sociological, technological, environmental, legal
PFI	private finance initiative
PM	project management (**2.125**)
PM	project manager (**2.127**)
PMP	project management plan (**2.126**)
PNA	project network analysis
PNT	project network techniques (**2.130**)
PPE	post project evaluation
PPP	public–private partnership
PRD	project definition
PRINCE2	projects in a controlled environment
QA	quality assurance

QC	quality control
QMS	quality management system
QP	quality plan (**2.137**)
R & D	research and development
RFI	request for information
RFP	request for proposals
RFQ	request for quotation
RIDDOR	reporting of injuries, diseases and dangerous occurrences regulations
RIRO	rubbish in – rubbish out
ROCE	return of capital employed
ROI	return on investment
RR	rate of return
SDR	system design review
SE	systems engineering
SEBA	synthetic environment-based acquisition
SFR	sinking fund return
SIP	software intensive project
SIS	software intensive system
SMAC	site man-hours and cost
SMART	specific, measurable, achievable, realistic, time-bound
SOW	statement of work (**2.169**)
SPI	schedule performance index
SRD	sponsor's requirement definition
SRD	system requirement document
SV	schedule variance
SWOT	strength, weakness, opportunity, threat
TCP	time, cost and performance
TDR	test discount rate
TF	total float (**2.175**)
TLMP	through life management plan
TOR	terms of reference
TQM	total quality management
URD	user requirement document
V & V	validation and verification
VA	value analysis
VE	value engineering
VM	value management
VoP	variation of price
WBS	work breakdown structure (**2.179**)
WLC	whole life cost(-ing)
WP	work package (**2.180**)

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[1)] Withdrawn.
[2)] Formerly BS 6079:1996, *Guide to project management.*

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