

CONFIRMED
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Glossary of

Terms used in project network techniques

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- British Production and Inventory Control Society
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The following bodies were also represented in the drafting of the standard, through subcommittees and panels:

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Foreword

This British Standard has been prepared under the direction of the Quality, Management and Statistics Standards Committee. It is a revision of BS 4335:1972, which is withdrawn.

The changes made to the terminology established by the 1972 issue of this standard are minor and mainly editorial rather than fundamental. They mainly reflect the wish of the United Kingdom to rationalize terminology world-wide, and accordingly it was decided to adopt as the prime term “project network techniques” in preference to “project network analysis” as was provisionally agreed by the INTERNET standardization group in 1970. Related British Standards that were taken account of during the preparation of this standard were:

BS 3138, *Glossary of terms used in work study and organization and methods (O & M)*.

BS 3527, *Glossary of terms used in data processing*.

BS 4058, *Specification for data processing flow chart symbols, rules and conventions*.

The purpose of this British Standard glossary is to standardize the terminology and symbols used in project network techniques to facilitate communication and the spread of knowledge in this subject. Although it has not proved possible to reach agreement on incorporating many of the various forms of symbol identification and graphical representation submitted for inclusion, the prime symbols have been included in the glossary and recommendations concerning the symbols for use in precedence networks and decision networks are included in appendices.

IMPORTANT NOTE The glossary sets out the preferred terms in logical sequence together with abbreviations in common use. Parentheses () enclose words or phrases that are not part of the term or definition and can be omitted without affecting the meaning. Deprecated synonyms are printed in non-bold type below the preferred term. An index has been provided to assist the location of words used in the text of definitions that are defined elsewhere in this standard. Terms given in their defined forms are italicized. Also the practice of repeating and particularizing in specific sections terms which appear in the general section has been carried on from the previous edition, as has the five-figure numbering system, despite the absence of subsections.

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Summary of pages

This document comprises a front cover, an inside front cover, pages i and ii, pages 1 to 18, an inside back cover and a back cover.

This standard has been updated (see copyright date) and may have had amendments incorporated. This will be indicated in the amendment table on the inside front cover.

0 Scope

This British Standard presents in a structured form terms, definitions and symbols used in project network techniques. Appendices have been included to form an interface with other related disciplines.

NOTE The publications referred to in this British Standard are listed on the inside back cover.

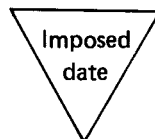
1 General

No.	Term	Definition
10001	project	An enterprise (<i>activity</i> or set of inter-related <i>activities</i>) that has a definable start and a definable completion (see Appendix B of BS 6046-1:1984).
10002	project management	The mobilization and management of <i>resources</i> (including the technical, time and cost aspects) for the purpose of completing a <i>project</i> (see 2.3 of BS 6046-1:1984).
10003	project management team	A multi-disciplinary group of people headed by a <i>project manager</i> established to fulfil the range of managerial responsibilities inherent in the project management task (see 2.3 of BS 6046-1:1984).
10004	project manager	The individual to whom authority, responsibility and accountability has been assigned for the overall management of <i>resources</i> (including the technical, time and cost aspects) of a <i>project</i> , and the motivation of all those involved (see 2.3 of BS 6046-1:1984).
10005	project coordination	The communication linking various areas of a <i>project</i> to ensure the transfer of information or hardware at interface points at the apposite times, and the identification of any further necessary <i>resources</i> .
10006	project monitoring	The comparison of current project status with what was planned to be done, to identify and explain any deviations. NOTE Action to recover from any adverse situation is covered under <i>project control</i> .
10007	project control	An extension of <i>project monitoring</i> in which some action (not necessarily corrective) is applied to a <i>project</i> and the implementation is later measured to check its effectiveness and possibly to supplement it by further action. What was planned to be done may also be revised.
10008	project programme	A diagram or list showing work to be done, with associated times.
10009	matrix organization	An organization in which people report to <i>project managers</i> for tasks AND other managers for specialist discipline functions (see Appendix A of BS 6046-1:1984).
10010	simulation	The processing of a project model (usually mathematical) to reproduce what would be expected to happen in the <i>project</i> , with different conditions and different starting points.
10011	work breakdown structure	The way in which a <i>project</i> may be divided into discrete groups for programming, cost planning and control purposes. (See also <i>work package</i>).
10012	work package	A group of <i>activities</i> (normally related in some way or ways) that are defined at a level with a <i>work breakdown structure</i> . NOTE Not all <i>work packages</i> need be at the same level and they need not all contain elements of work; some may be present for cost control purposes only, e.g. holding packages for the procurement of bulk items prior to later allocation to other particular <i>work packages</i> . (See 12.2 of BS 6046-1:1984.)

No.	Term	Definition
10013	project review calendar	Calendar of project review dates, meetings and issues of reports set against project week numbers or dates.
10014	network project network	A representation of <i>activities</i> and/or <i>events</i> with their inter-relationships and <i>dependencies</i> .
10015	hierarchy of networks	A range of <i>networks</i> at different levels of detail, from summary down to working levels, showing the relationships between those <i>networks</i> .
10016	project network techniques (abbrev. PNT); project network analysis (abbrev. PNA)	A group of techniques that, for the description, analysis, planning and control of <i>projects</i> , considers the logical inter-relationships of all project activities.
		NOTE 1 The group includes techniques concerned with time, <i>resources</i> , costs and other influencing factors, e.g. uncertainty.
		NOTE 2 The terms “program evaluation and review technique” (abbrev. PERT), “critical path analysis” (abbrev. CPA), “critical path method” (abbrev. CPM) and “precedence method” refer to particular techniques and should not be used as synonyms for <i>project network techniques</i> .
10017	deterministic network	A <i>network</i> containing <i>paths</i> , all of which have to be followed and whose <i>durations</i> are fixed.
10018	probabilistic network	A <i>network</i> containing alternative <i>paths</i> with which probabilities are associated.
10019	activity-on-arrow network arrow diagram	A <i>network</i> in which the <i>arrows</i> symbolize the activities (see also clause 2).
10020	activity-on-node network precedence diagram	A <i>network</i> in which the <i>nodes</i> symbolize the <i>activities</i> (see also clause 3).
10021	bar chart	A chart on which <i>activities</i> and their <i>durations</i> are represented by lines drawn to a time scale.
10022	time-based network linked bar chart	A <i>bar chart</i> that shows the logical relationships between <i>activities</i> .
10023	cascade chart	A <i>bar chart</i> on which the vertical order of <i>activities</i> is such that each activity is dependent only on <i>activities</i> higher on the list.
10024	master network	A <i>network</i> showing the complete <i>project</i> , from which more detailed <i>networks</i> are derived.
10025	summary network	A <i>network</i> in which the amount of detail presented is condensed.
10026	skeleton network	A <i>summary network</i> obtained by reducing the number of <i>activities</i> in a <i>network</i> without changing the logical or timing relationships of the remaining <i>activities</i> .
10027	arrow	A directed connecting line between two <i>nodes</i> in a <i>network</i> .
10028	path	An <i>activity</i> or an unbroken sequence of <i>activities</i> .
10029	node	A point in a <i>network</i> at which <i>arrows</i> start and/or finish.
10030	activity	An operation or process consuming time and possibly other <i>resources</i> .
10031	hammock	An <i>activity</i> , joining two specified <i>events</i> , that may be regarded as spanning two or more <i>activities</i> .

NOTE Its *duration* is initially unspecified and is only determined by the difference between the earliest and latest times of the *events* concerned.

No.	Term	Definition
10032	event	A state in the progress of a <i>project</i> after the completion of all preceding <i>activities</i> but before the start of any succeeding <i>activity</i> .
10033	milestone key event	An <i>event</i> selected for its importance in the <i>project</i> .
10034	interface	An <i>activity</i> or <i>event</i> common to two or more <i>networks</i> .
10035	duration	The estimated or actual time required for the completion of an <i>activity</i> .
10036	time now	The specified date from which the forward analysis is deemed to commence.
10037	project base date	A reference date used as a basis for the start of a project calendar.
10038	imposed date	A point in time determined by circumstances outside the <i>network</i> .



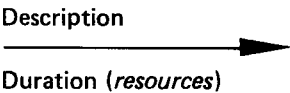
NOTE The symbol is inserted immediately above the *event* concerned on *activity-on-arrow networks* or adjacent and connected to the appropriate corner of the *node* on *activity-on-node networks*.

10039	earliest start time of an activity (abbrev. EST)	The earliest possible time by which an <i>activity</i> can start within the logical and imposed constraints of the <i>network</i> .
10040	earliest finish time of an activity (abbrev. EFT)	The earliest possible time by which an <i>activity</i> can finish within the logical and imposed constraints of the <i>network</i> .
10041	latest start time of an activity (abbrev. LST)	The latest possible time by which an <i>activity</i> has to start within the logical and imposed constraints of the <i>network</i> , without affecting the total project duration.
10042	latest finish time of an activity (abbrev. LFT)	The latest possible time by which an <i>activity</i> has to finish within the logical and imposed constraints of the <i>network</i> , without affecting the total project duration.
10043	forward pass	The procedure whereby the <i>earliest event times</i> or the earliest start and finish times for the <i>activities</i> of a <i>network</i> are calculated.
10044	backward pass	The procedure whereby the <i>latest event times</i> or the latest finish and start times for the <i>activities</i> of a <i>network</i> are calculated.
10045	float	The time available for an <i>activity</i> or <i>path</i> in addition to its <i>duration</i> . (It may be negative.)
10046	total float	The time by which an <i>activity</i> may be delayed or extended without affecting the total project duration.
10047	negative total float	The time by which the <i>duration</i> of an <i>activity</i> or <i>path</i> has to be reduced in order to permit a limiting <i>imposed date</i> to be achieved.
10048	free float early free float	The time by which an <i>activity</i> may be delayed or extended without delaying the start of any succeeding <i>activity</i> .
10049	independent float	The time by which an <i>activity</i> may be delayed or extended without affecting preceding or succeeding <i>activities</i> in any way.
10050	float cut-off	That value of <i>float</i> above which the associated <i>activities</i> would be excluded from a list of <i>activities</i> .
10051	critical path	A <i>path</i> with least <i>float</i> .
10052	critical activity	An <i>activity</i> on a <i>critical path</i> .

No.	Term	Definition
10053	precedence matrix	A table of activity identifications used to show the sequence and inter-relationship of <i>activities</i> in a <i>network</i> .
10054	ladder	A device for representing a set of overlapping <i>activities</i> wherein the start and finish of each succeeding <i>activity</i> are linked only to the start and finish of the preceding <i>activity</i> by lead and lag activities which consume only time.
10055	lead	The minimum necessary lapse of time between the start of one <i>activity</i> and the start of an overlapping <i>activity</i> .
10056	lag	The minimum necessary lapse of time between the finish of one <i>activity</i> and the finish of an overlapping <i>activity</i> .
10057	dangle	An <i>activity</i> represented in a <i>network</i> where its start or finish does not connect either with any other <i>activity</i> or to a <i>start</i> or <i>end event</i> or activity.
10058	loop	An error in a <i>network</i> which results in a later <i>activity</i> imposing a logical restraint on an earlier <i>activity</i> .

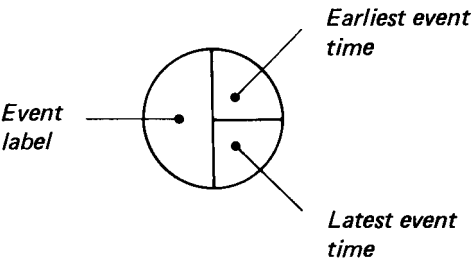
2 Activity-on-arrow networks

(10019) activity-on-arrow network arrow diagram	A <i>network</i> in which the <i>arrows</i> symbolize the <i>activities</i> .
(10030) activity	An operation or process consuming time and possibly other <i>resource</i> .



NOTE An *activity* is represented by an *arrow* in *activity-on-arrow networks*. The direction, length and shape of the *arrow* need have no significance in representing the *duration* (see BS 6046-3).

(10032) event	A state in the progress of a <i>project</i> after the completion of all preceding <i>activities</i> but before the start of any succeeding <i>activity</i> .
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NOTE The left-hand side of the symbol is used for the event label. (For a detailed guide on coding, see BS 6046-3).
In the right-hand side of the symbol the earliest *event time* is written above the latest *event time* calculated for the *event*.

20001 dummy	A logical link that requires neither time nor any other <i>resource</i> .
20002 real-time dummy transit time	A logical link that requires time, but no other <i>resources</i> .
(10052) critical activity	An <i>activity</i> on a <i>critical path</i> .

