

PMBOK GLOSSARY

Accountability Matrix. See *responsibility assignment matrix*.

Activity. An element of work performed during the course of a project. An activity normally has an expected duration, an expected cost, and expected resource requirements. Activities are often subdivided into tasks.

Activity Definition. Identifying the specific activities that must be performed in order to produce the various project deliverables.

Activity Description (AD). A short phrase or label used in a project network diagram. The activity description normally describes the scope of work of the activity.

Activity Duration Estimating. Estimating the number of work periods which will be needed to complete individual activities.

Activity-On-Arrow (AOA). See *arrow diagramming method*.

Activity-On-Node (AON). See *precedence diagramming method*.

Actual Cost of Work Performed (ACWP). Total costs incurred (direct and indirect) in accomplishing work during a given time period. See also *earned value*.

Actual Finish Date (AF). The point in time that work actually ended on an activity. (Note: in some application areas, the activity is considered "finished" when work is "substantially complete.") Actual Start Date (As). The point in time that work actually started on an activity.

Administrative Closure. Generating, gathering, and disseminating information to formalize project completion.

Application Area. A category of projects that have common elements not present in all projects. Application areas are usually defined in terms of either the product of the project (i.e., by similar technologies or industry sectors) or the type of customer (e.g., internal vs. external, government vs. commercial). Application areas often overlap.

Arrow. The graphic presentation of an activity. See also *arrow diagramming method*.

Arrow Diagramming Method (ADM). A network diagramming technique in which activities are represented by arrows. The tail of the arrow represents the start and the head represents the finish of the activity (the length of the arrow does *not* represent the expected duration of the activity). Activities are connected at points called nodes (usually drawn as small circles) to illustrate the sequence in which the activities are expected to be performed. See also *precedence diagramming method*.

As-of Date. See *data date*.

Backward Pass. The calculation of late finish dates and late start dates for the uncompleted portions of all network activities. Determined by working backwards through the network logic from the project's end date. The end date may be calculated in a *forward pass* or set by the customer or sponsor. See also *network analysis*.

Bar Chart. A graphic display of schedule-related information. In the typical bar chart, activities or other project elements are listed down the left side of the chart, dates are shown across the top, and activity durations are shown as date-placed horizontal bars. Also called a *Gantt chart*.

Baseline. The original plan (for a project, a work package, or an activity), plus or minus approved changes. Usually used with a modifier (e.g., cost baseline, schedule baseline, performance measurement baseline).

Baseline Finish Date. See *scheduled finish date*.

Baseline Start Date. See *scheduled start date*.

Budget At Completion (BAC). The estimated total cost of the project when done.

Budget Estimate. See *estimate*.

Budgeted Cost of Work Performed (BCWP). The sum of the approved cost estimates (including any overhead allocation) for activities (or portions of activities) completed during a given period (usually project-to-date). See also *earned value*.

Budgeted Cost of Work Scheduled (BCWS). The sum of the approved cost estimates (including any overhead allocation) for activities (or portions of activities) scheduled to be performed during a given period (usually project-to-date). See also *earned value*.

Calendar unit. The smallest unit of time used in scheduling the project. Calendar units are generally in hours, days, or weeks, but can also be in shifts or even in minutes. Used primarily in relation to *project management software*.

Change Control Board (CCB). A formally constituted group of stakeholders responsible for approving or rejecting changes to the project *baselines*.

Change in Scope. See *scope change*.

Chart of Accounts. Any numbering system used to monitor project costs by category (e.g., labor, supplies, materials). The project chart of accounts is usually based upon the corporate chart of accounts of the primary performing organization. See also *code of accounts*.

Charter. See *project charter*.

Code of Accounts. Any numbering system used to uniquely identify each element of the *work breakdown structure*. See also *chart of accounts*.

Communications Planning. Determining the information and communications needs of the project stakeholders.

Concurrent Engineering. An approach to project staffing that, in its most general form, calls for implementors to be involved in the design phase. Sometimes confused with *fast tracking*.

Contingencies. See *reserve* and *contingency planning*.

Contingency Allowance. See *reserve*.

Contingency Planning. The development of a management plan that identifies alternative strategies to be used to ensure project success if specified risk events occur.

Contingency Reserve. A separately planned quantity used to allow for future situations which may be planned for only in part (sometimes called "known unknowns"). For example, rework is certain, the amount of rework is not. Contingency reserves may involve cost, schedule, or both. Contingency reserves

are intended to reduce the impact of missing cost or schedule objectives. Contingency reserves are normally included in the project's cost and schedule baselines.

Contract. A contract is a mutually binding agreement which obligates the seller to provide the specified product and obligates the buyer to pay for it. Contracts generally fall into one of three broad categories:

- ?? Fixed price or lump sum contracts--this category of contract involves a fixed total price for a well-defined product. Fixed price contracts may also include incentives for meeting or exceeding selected project objectives such as schedule targets.
- ?? Cost reimbursable contracts--this category of contract involves payment (reimbursement) to the contractor for its actual costs. Costs are usually classified as direct costs (costs incurred directly by the project, such as wages for members of the project team) and indirect costs (costs allocated to the project by the performing organization as a cost of doing business, such as salaries for corporate executives). Indirect costs are usually calculated as a percentage of direct costs. Cost reimbursable contracts often include incentives for meeting or exceeding selected project objectives such as schedule targets or total cost.
- ?? Unit price contracts--the contractor is paid a preset amount per unit of service (e.g., \$70 per hour for professional services or \$1.08 per cubic yard of earth removed) and the total value of the contract is a function of the quantities needed to complete the work.

Contract Administration. Managing the relationship with the seller.

Contract Close-out. Completion and settlement of the contract, including resolution of all outstanding items.

Control. The process of comparing actual performance with planned performance, analyzing variances, evaluating possible alternatives, and taking appropriate *corrective action* as needed.

Control Charts. Control charts are a graphic display of the results, over time and against established control limits, of a process. They are used to determine if the process is "in control" or in need of adjustment.

Corrective Action. Changes made to bring expected future performance of the project into line with the plan.

Cost Budgeting. Allocating the cost estimates to individual project components.

Cost Control. Controlling changes to the project budget.

Cost Estimating. Estimating the cost of the resources needed to complete project activities.

Cost of Quality. The costs incurred to ensure quality. The cost of quality includes quality planning, quality control, quality assurance, and rework.

Cost Performance Index (CPI). The ratio of budgeted costs to actual costs (BCWP/ACWP). CPI is often used to predict the magnitude of a possible cost overrun using the following formula: $\text{original cost estimate}/\text{CPI} = \text{projected cost at completion}$. See also *earned value*.

Cost Plus Fixed Fee (CPFF) Contract. A type of *contract* where the buyer reimburses the seller for the seller's allowable costs (allowable costs are defined by the contract) plus a fixed amount of profit (fee).

Cost Plus Incentive Fee (CPIF) Contract. A type of *contract* where the buyer reimburses the seller for the seller's allowable costs (allowable costs are defined by the contract), and the seller earns its profit if it meets defined performance criteria.

Cost Variance (CV). (1) Any difference between the estimated cost of an activity and the actual cost of that activity. (2) In *earned value*, BCWP less ACWP

Crashing. Taking action to decrease the total project duration after analyzing a number of alternatives to determine how to get the maximum duration compression for the least Cost.

Critical Activity. Any activity on a *critical path*. Most commonly determined by using the *critical path method*. Although some activities are "critical" in the dictionary sense without being on the critical path, this meaning is seldom used in the project context.

Critical Path. In a *project network diagram*, the series of activities which determines the earliest completion of the project. The critical path will generally change from time to time as activities are completed ahead of or behind schedule. Although normally calculated for the entire project, the critical path can also be determined for a *milestone* or *subproject*. The critical path is usually defined as those activities with float less than or equal to a specified value, often zero. See *critical path method*.

Critical Path Method (CPM). A *network analysis* technique used to predict project duration by analyzing which sequence of activities (which *path*) has the least amount of scheduling flexibility (the least amount of *float*). Early dates are calculated by means of a *forward pass* using a specified start date. Late dates are calculated by means of a *backward pass* starting from a specified completion date (usually the forward pass's calculated project early *finish* date).

Current Finish Date. The current estimate of the point in time when an activity will be completed.

Current Start Date. The current estimate of the point in time when an activity will begin.

Data Date (DD). The point in time that separates actual (historical) data from future (scheduled) data. Also called as-of date.

Definitive Estimate. See *estimate*.

Deliverable. Any measurable, tangible, verifiable outcome, result, or item that must be produced to complete a project or part of a project. Often used more narrowly in reference to an external *deliverable*, which is a deliverable that is subject to approval by the project sponsor or customer.

Dependency. See *logical relationship*.

Dummy Activity. An activity of zero duration used to show a *logical relationship* in the arrow *diagramming method*. Dummy activities are used when logical relationships cannot be completely or correctly described with regular activity arrows. Dummies are shown graphically as a dashed line headed by an arrow.

Duration (DU). The number of work periods (not including holidays or other non-working periods) required to complete an activity or other project element. Usually expressed as workdays or workweeks. Sometimes incorrectly equated with elapsed time. See also *effort*.

Duration Compression. Shortening the project schedule without reducing the project scope. Duration compression is not always possible and often requires an increase in project cost.

Early Finish Date (EF). In the *critical path method*, the earliest possible point in time on which the uncompleted portions of an activity (or the project) can finish based on the network logic and any schedule constraints. Early finish dates can change as the project progresses and changes are made to the project plan.

Early Start Date (ES). In the *critical path method*, the earliest possible point in time on which the uncompleted portions of an activity (or the project) can start, based on the network logic and any schedule constraints. Early start dates can change as the project progresses and changes are made to the project plan.

Earned Value (EV). (1) A method for measuring project performance. It compares the amount of work that was planned with what was actually accomplished to determine if cost and schedule performance is as planned. See also *actual cost of work performed, budgeted cost of work scheduled, budgeted cost of work performed, cost variance, cost performance index, schedule variance, and schedule performance index*. (2) The *budgeted cost of work performed* for an activity or group of activities.

Earned Value Analysis. See definition (1) under *earned value*.

Effort. The number of labor units required to complete an activity or other project element. Usually expressed as staffhours, staffdays, or staffweeks. Should not be confused with *duration*.

Estimate. An assessment of the likely quantitative result. Usually applied to project costs and durations and should always include some indication of accuracy (e.g., $\pm x$ percent). Usually used with a modifier (e.g., preliminary, conceptual, feasibility). Some application areas have specific modifiers that imply particular accuracy ranges (e.g., order-of-magnitude estimate, budget estimate, and definitive estimate in engineering and construction projects).

Estimate At Completion (EAC). The expected total cost of an activity, a group of activities, or of the project when the defined scope of work has been completed. Most techniques for forecasting EAC include some adjustment of the original cost estimate based on project performance to date. Also shown as "estimated at completion." Often shown as $EAC = \text{Actuals-to-date} + ETC$. See also *earned value* and *estimate to complete*.

Estimate To Complete (ETC). The expected additional cost needed to complete an activity, a group of activities, or the project. Most techniques for forecasting ETC include some adjustment to the original estimate based on project performance to date. Also called "estimated to complete." See also *earned value* and *estimate at completion*.

Event-on-Node. A network diagramming technique in which events are represented by boxes (or nodes) connected by arrows to show the sequence in which the events are to occur. Used in the original *Program Evaluation and Review Technique*.

Exception Report. Document that includes only major variations from plan (rather than all variations).

Expected Monetary Value. The product of an event's probability of occurrence and the gain or loss that will result. For example, if there is a 50 percent probability that it will rain, and rain will result in a \$100 loss, the expected monetary value of the rain event is \$50 ($.5 \times \100).

Fast Tracking. Compressing the project schedule by overlapping activities that would normally be done in sequence, such as design and construction. Sometimes confused with *concurrent engineering*.

Finish Date. A point in time associated with an activity's completion. Usually qualified by one of the following: actual, planned, estimated, scheduled, early, late, baseline, target or current.

Finish-to-Finish (FF). See *logical relationship*.

Finish-to-Start (FS). See *logical relationship*.

Firm Fixed Price (FFP) Contract. A type of *contract* where the buyer pays the seller a set amount (as defined by the contract) regardless of the seller's costs.

Fixed Price Contract. See *firm fixed price contract*.

Fixed Price Incentive Fee (FPIF) Contract. A type of *contract* where the buyer pays the seller a set amount (as defined by the contract), and the seller can earn an additional amount if it meets defined performance criteria.

Float. The amount of time that an activity may be delayed from its early start without delaying the project finish date. Float is a mathematical calculation and can change as the project progresses and changes are made to the project plan. Also called slack, total float, and path float. See also *Free float*.

Forecast Final Cost. See *estimate at completion*.

Forward Pass. The calculation of the early start and early finish dates for the uncompleted portions of all network activities. See also *network analysis* and *backward pass*.

Fragnet. See *subnet*.

Free Float (FF). The amount of time an activity can be delayed without delaying the *early start* of any immediately following activities. See also *float*.

Functional Manager. A manager responsible for activities in a specialized department or function (e.g., engineering, manufacturing, marketing).

Functional Organization. An organization structure in which staff are grouped hierarchically by specialty (e.g., production, marketing, engineering, and accounting at the top level; with engineering, further divided into mechanical, electrical, and others).

Gantt Chart. See *bar chart*.

Grade. A category or rank used to distinguish items that have the same functional use (e.g., "hammer") but do not share the same requirements for quality (e.g., different hammers may need to withstand different amounts of force).

Graphical Evaluation and Review Technique (GERT). A *network analysis* technique that allows for conditional and probabilistic treatment of *logical relationships* (i.e., some activities may not be performed).

Hammock. An aggregate or summary activity (a group of related activities is shown as one and reported at a summary level). A hammock may or may not have an internal sequence. See also *subproject* and *subnet*.

Hanger. An unintended break in a *network path*. Hangers are usually caused by missing *activities* or missing *logical relationships*.

Information Distribution. Making needed information available to project stakeholders in a timely manner.

Initiation. Committing the organization to begin a project phase.

Integrated Cost/Schedule Reporting. See *earned value*.

Invitation for Bid (IFB). Generally, this term is equivalent to *request for proposal*. However, in some application areas it may have a narrower or more specific meaning.

Key Event Schedule. See *master schedule*.

Lag. A modification of a *logical relationship* which directs a delay in the successor task. For example, in a finish-to-start dependency with a 10-day lag, the successor activity cannot start until 10 days after the predecessor has finished. See also *lead*.

Late Finish Date (LF). In the *critical path method*, the latest possible point in time that an activity may be completed without delaying a specified milestone (usually the project finish date).

Late Start Date (LS). In the *critical path method*, the latest possible point in time that an activity may begin

without delaying a specified milestone (usually the project finish date).

Lead. A modification of a *logical relationship* which allows an acceleration of the successor task. For example, in a finish-to-start dependency with a 10-day lead, the successor activity can start 10 days before the predecessor has finished. See also *lag*.

Level of Effort (LOE). Support-type activity (e.g., vendor or customer liaison) that does not readily lend itself to measurement of discrete accomplishment. It is generally characterized by a uniform rate of activity over a specific period of time.

Leveling. See *resource leveling*.

Life-cycle Costing. The concept of including acquisition, operating, and disposal costs when evaluating various alternatives.

Line Manager. (1) The manager of any group that actually makes a product or performs a service. (2) A *functional manager*.

Link. See *logical relationship*.

Logic. See *network logic*.

Logic Diagram. See *project network diagram*.

Logical Relationship. A dependency between two project activities, or between a project activity and a milestone. See also *precedence relationship*. The four possible types of logical relationships are:

- Finish-to-start--the "from" activity must finish before the "to" activity can start.
- Finish-to-finish--the "from" activity must finish before the "to" activity can finish.
- Start-to-start--the "from" activity must start before the "to" activity can start.
- Start-to-finish--the "from" activity must start before the "to" activity can finish.

Loop. A *network path* that passes the same node twice. Loops cannot be analyzed using traditional *network analysis* techniques such as *CPM* and *PERT*. Loops are allowed in *GERT*.

Management Reserve. A separately planned quantity used to allow for future situations which are impossible to predict (sometimes called "unknown unknowns"). Management reserves may involve cost or schedule. Management reserves are intended to reduce the risk of missing cost or schedule objectives. Use of management reserve requires a change to the project's cost baseline.

Master Schedule. A *summary-level schedule* which identifies the major activities and key milestones. See also *milestone schedule*.

Mathematical Analysis. See *network analysis*.

Matrix Organization. Any organizational structure in which the project manager shares responsibility with the functional managers for assigning priorities and for directing the work of individuals assigned to the project.

Milestone. A significant event in the project, usually completion of a major deliverable.

Milestone Schedule. A summary-level schedule which identifies the major milestones. See also *master schedule*.

Mitigation. Taking steps to lessen risk by lowering the probability of a risk event's occurrence or reducing its effect should it occur.

Modern Project Management (MPM). A term used to distinguish the current broad range of project management (scope, cost, time, quality, risk, etc.) from narrower, traditional use that focused on cost and time.

Monitoring. The capture, analysis, and reporting of project performance, usually as compared to plan.

Monte Carlo Analysis. A schedule risk assessment technique that performs a project simulation many times in order to calculate a distribution of likely results.

Near-Critical Activity. An *activity* that has low total *float*.

Network. See *project network diagram*.

Network Analysis. The process of identifying early and late start and finish dates for the uncompleted portions of project activities. See also *Critical Path Method*, *Program Evaluation and Review Technique*, and *Graphical Evaluation and Review Technique*.

Network logic. The collection of activity dependencies that make up a *project network diagram*.

Network Path. Any continuous series of connected activities in a *project network diagram*.

Node. One of the defining points of a network; a junction point joined to some or all of the other dependency lines. See also *arrow diagramming method* and *precedence diagramming method*.

Order of Magnitude Estimate. See *estimate*.

Organizational Breakdown Structure (OBS). A depiction of the project organization arranged so as to relate *work packages* to organizational units.

Organizational Planning. Identifying, documenting, and assigning project roles, responsibilities, and reporting relationships.

Overall Change Control. Coordinating changes across the entire project. Overlap. See *lead*.

Parametric Estimating. An estimating technique that uses a statistical relationship between historical data and other variables (e.g., square footage in construction, lines of code in software development) to calculate an estimate.

Pareto Diagram. A histogram, ordered by frequency of occurrence, that shows how many re-suits were generated by each identified cause.

Path. A set of sequentially connected activities in a *project network diagram*.

Path Convergence. In mathematical analysis, the tendency of parallel paths of approximately equal duration to delay the completion of the milestone where they meet.

Path Float. See *float*.

Percent Complete (PC). An estimate, expressed as a percent, of the amount of work which has been completed on an activity or group of activities.

Performance Reporting. Collecting and disseminating information about project performance to help ensure project progress.

Performing Organization. The enterprise whose employees are most directly involved in doing the work of the project.

PERT Chart. A specific type of *project network diagram*. See *Program Evaluation and Review Technique*.

Phase. See *project phase*.

Planned Finish Date (PF). See *scheduled finish date*.

Planned Start Date (PS). See *scheduled start date*.

Precedence Diagramming Method (PDM). A network diagramming technique in which activities are represented by boxes (or nodes). Activities are linked by *precedence relationships* to show the sequence in which the activities are to be performed.

Precedence Relationship. The term used in the *precedence diagramming method* for a *logical relationship*. In current usage, however, precedence relationship, logical relationship, and dependency are widely used interchangeably regardless of the diagramming method in use.

Predecessor Activity. (1) In the *arrow diagramming method*, the activity which enters a *node*.
(2) In the *precedence diagramming method*, the "from" activity.

Procurement Planning. Determining what to procure and when.

Program. A group of related projects managed in a coordinated way. Programs usually include an element of ongoing activity.

Program Evaluation and Review Technique (PERT). An event-oriented *network analysis* technique used to estimate project duration when there is a high degree of uncertainty with the individual activity duration estimates. PERT applies the *critical path method* to a weighted average duration estimate. Also given as *Program Evaluation and Review Technique*. Project. A temporary endeavor undertaken to create a unique product or service.

Project Charter. A document issued by senior management that provides the project manager with the authority to apply organizational resources to project activities.

Project Communications Management. A subset of project management that includes the processes required to ensure proper collection and dissemination of project information. It consists of *communications planning, information distribution, performance reporting, and administrative closure*.

Project Cost Management. A subset of project management that includes the processes required to ensure that the project is completed within the approved budget. It consists of *resource planning, cost estimating, cost budgeting, and cost control*.

Project Human Resource Management. A subset of project management that includes the processes required to make the most effective use of the people involved with the project. It consists of *organizational planning, staff acquisition, and team development*.

Project Integration Management. A subset of project management that includes the processes required to ensure that the various elements of the project are properly coordinated. It consists of *project plan development, project plan execution, and overall change control*.

Project Life Cycle. A collection of generally sequential *project phases* whose name and number are determined by the control needs of the organization or organizations involved in the project.

Project Management (PM). The application of knowledge, skills, tools, and techniques to project activities in order to meet or exceed stakeholder needs and expectations from a project.

Project Management Body of Knowledge (PMBOK). An inclusive term that describes the sum of knowledge within the profession of project management. As with other professions such as law, medicine, and accounting, the body of knowledge rests with the practitioners and academics who apply and advance it. The PMBOK includes proven, traditional practices which are widely applied as well as innovative and advanced ones which have seen more limited use.

Project Management Professional (PMP). An individual certified as such by the Project Management Institute.

Project Management Software. A class of computer applications specifically designed to aid with planning and controlling project costs and schedules.

Project Management Team. The members of the project team who are directly involved in project management activities. On some smaller projects, the project management team may include virtually all of the *project team members*.

Project Manager (PM). The individual responsible for managing a project.

Project Network Diagram. Any schematic display of the logical relationships of project activities. Always drawn from left to right to reflect project chronology. Often incorrectly referred to as a "PERT chart."

Project Phase. A collection of logically related project activities, usually culminating in the completion of a major *deliverable*.

Project Plan. A formal, approved document used to guide both project execution and project control. The primary uses of the project plan are to document planning assumptions and decisions, to facilitate communication among stakeholders, and to document approved scope, cost, and schedule baselines. A project plan may be summary or detailed.

Project Plan Development. Taking the results of other planning processes and putting them into a consistent, coherent document.

Project Plan Execution. Carrying out the project plan by performing the activities included therein.

Project Planning. The development and maintenance of the *project plan*.

Project Procurement Management. A subset of project management that includes the processes required to acquire goods and services from outside the performing organization. It consists of *procurement planning, solicitation planning, solicitation, source selection, contract administration, and contract close-out*.

Project Quality Management. A subset of project management that includes the processes required to ensure that the project will satisfy the needs for which it was undertaken. It consists of *quality planning, quality assurance, and quality control*.

Project Risk Management. A subset of project management that includes the processes concerned with identifying, analyzing, and responding to project risk. It consists of *risk identification, risk quantification, risk response development, and risk response control*.

Project Schedule. The planned dates for performing activities and the planned dates for meeting milestones.

Project Scope Management. A subset of project management that includes the processes required to ensure that the project includes all of the work required, and only the work required, to complete the project successfully. It consists of *initiation, scope planning, scope definition, scope verification, and scope change control*.

Project Team Members. The people who report either directly or indirectly to the project manager.

Project Time Management. A subset of project management that includes the processes required to ensure timely completion of the project. It consists of *activity definition, activity sequencing, activity duration estimating, schedule development, and schedule control*.

Projectized Organization. Any organizational structure in which the project manager has full authority to assign priorities and to direct the work of individuals assigned to the project.

Quality Assurance (QA). (1) The process of evaluating overall project performance on a regular basis to provide confidence that the project will satisfy the relevant quality standards. (2) The organizational unit that is assigned responsibility for quality assurance.

Quality Control (QC). (1) The process of monitoring specific project results to determine if they comply with relevant quality standards and identifying ways to eliminate causes of unsatisfactory performance. (2) The organizational unit that is assigned responsibility for quality control.

Quality Planning. Identifying which quality standards are relevant to the project and determining how to satisfy them.

Remaining Duration (RDU). The time needed to complete an activity.

Request for Proposal (RFP). A type of bid document used to solicit proposals from prospective sellers of products or services. In some application areas it may have a narrower or more specific meaning.

Request for Quotation (RFQ). Generally, this term is equivalent to *request for proposal*. However, in some application areas it may have a narrower or more specific meaning.

Reserve. A provision in the project plan to mitigate cost and/or schedule risk. Often used with a modifier (e.g., *management reserve*, *contingency reserve*) to provide further detail on what types of risk are meant to be mitigated. The specific meaning of the modified term varies by *application area*.

Resource Leveling. Any form of network *analysis* in which scheduling decisions (start and finish dates) are driven by resource management concerns (e.g., limited resource availability or difficult-to-manage changes in resource levels).

Resource-Limited Schedule. A project schedule whose start and finish dates reflect expected resource availability. The final project schedule should always be resource-limited.

Resource Planning. Determining what resources (people, equipment, materials) are needed in what quantities to perform project activities.

Responsibility Assignment Matrix (RAM). A structure which relates the project organization structure to the work *breakdown structure* to help ensure that each element of the project's scope of work is assigned to a responsible individual.

Responsibility Chart. See *responsibility assignment matrix*.

Responsibility Matrix. See *responsibility assignment matrix*.

Retainage. A portion of a contract payment that is held until contract completion in order to ensure full performance of the contract terms.

Risk Event. A discrete occurrence that may affect the project for better or worse.

Risk Identification. Determining which risk events are likely to affect the project.

Risk Quantification. Evaluating the probability of risk event occurrence and effect.

Risk Response Control. Responding to changes in risk over the course of the project.

Risk Response Development. Defining enhancement steps for opportunities and mitigation steps for threats.

S-Curve. Graphic display of cumulative costs, labor hours, or other quantities, plotted against time. The name derives from the Spike shape of the curve (flatter at the beginning and end, steeper in the middle) produced on a project that starts slowly, accelerates, and then tails off.

Schedule. See *project schedule*.

Schedule Analysis. See *network analysis*.

Schedule Compression. See *duration compression*.

Schedule Control. Controlling changes to the project schedule.

Schedule Development. Analyzing activity sequences, activity durations, and resource requirements to create the project schedule.

Schedule Performance Index (SPI). The ratio of work performed to work scheduled (BCWP/BCWS). See *earned value*.

Schedule Variance (SV). (1) Any difference between the scheduled completion of an activity and the actual completion of that activity. (2) In *earned value*, BCWP less BCWS.

Scheduled Finish Date (SF). The point in time work was scheduled to finish on an activity.

The scheduled finish date is normally within the range of dates delimited by the *early finish date* and the *late finish date*.

Scheduled Start Date (SS). The point in time work was scheduled to start on an activity. The scheduled start date is normally within the range of dates delimited by the *early start date* and the *late start date*.

Scope. The sum of the products and services to be provided as a project.

Scope Baseline. See *baseline*.

Scope Change. Any change to the project scope. A scope change almost always requires an adjustment to the project cost or schedule.

Scope Change Control. Controlling changes to project scope.

Scope Definition. Decomposing the major deliverables into smaller, more manageable components to provide better control.

Scope Planning. Developing a written scope statement that includes the project justification, the major deliverables, and the project objectives.

Scope Verification. Ensuring that all identified project deliverables have been completed satisfactorily.

Should-Cost Estimates. An *estimate* of the cost of a product or service used to provide an assessment of the reasonableness of a prospective contractor's proposed cost. Slack. Term used in *PERT* for *float*.

Solicitation. Obtaining quotations, bids, offers, or proposals as appropriate.

Solicitation Planning. Documenting product requirements and identifying potential sources.

Source Selection. Choosing from among potential contractors.

Staff Acquisition. Getting the human resources needed assigned to and working on the project.

Stakeholder. Individuals and organizations who are involved in or may be affected by project activities.

Start Date. A point in time associated with an activity's start, usually qualified by one of the following: actual, planned, estimated, scheduled, early, late, target, baseline, or current.

Start-to-Finish. See *logical relationship*.

Start-to-Start. See *logical relationship*.

Statement of Work (SOW). A narrative description of products or services to be supplied under contract.

Subnet. A subdivision of a *project network diagram* usually representing some form of subproject.

Subnetwork. See *subnet*.

Successor Activity. (1) In the *arrow diagramming method*, the activity which departs a node. (2) In the *precedence diagramming method*, the "to" activity.

Target Completion Date (TC). An imposed date which constrains or otherwise modifies the *network analysis*.

Target Schedule. See *baseline*.

Task. See *activity*.

Team Development. Developing individual and group skills to enhance project performance.

Team Members. See *project team members*.

Time-Scaled Network Diagram. Any *project network diagram* drawn in such a way that the positioning and length of the activity represents its duration. Essentially, it is a bar chart that includes *network logic*.

Target Finish Date (TF). The date work is planned (targeted) to finish on an activity.

Target Start Date (TS). The date work is planned (targeted) to start on an activity.

Total Float (TF). See *float*.

Total Quality Management (TQM). A common approach to implementing a quality improvement program within an organization.

Workaround. A response to a negative risk event. Distinguished from *contingency plan* in that a workaround is not planned in advance of the occurrence of the risk event.

Work Breakdown Structure (WBS). A deliverable-oriented grouping of project elements which organizes and defines the total scope of the project. Each descending level represents an increasingly detailed definition of a project component. Project components may be products or services.

Work Item. See *activity*.

Work Package. A deliverable at the lowest level of the *work breakdown structure*. A work package may be divided into activities.