BCWP and Earned Value in particular, while not wrong, certainly in my professional opinion, are not the "best" definitions.

Same with Zero Float above- What you are describing is more correctly known as FREE FLOAT. Zero Float is a condition where a delay to any activity with zero float results in a delay to the completion date of the project by the same amount of time. (I would suggest that Zero Float is synonymous with Critical Activity.)

**PMO and Project Management Dictionary**

**Abstract resource -** imaginary resource introduced so its availability and activity requirement gives an extra means of control. (For example, two jobs not being worked upon simultaneously in order to obviate an accident hazard)

**Acceptance -** the formal process of accepting delivery of a product or a deliverable.

**Acceptance criteria -** performance requirements and essential conditions that have to be achieved before project deliverables are accepted.

**Acceptance test -** formal, pre-defined test conducted to determine the compliance of the deliverable item(s) with the acceptance criteria.

**Accountability Matrix -** See *responsibility assignment matrix.*

**Accrued costs -** earmarked for the project and for which payment is due, but has not been made.

**Acquisition strategy -** determining the most appropriate means of procuring the component parts or services of a project

**Action Item –** Something agreed to be done by a person as a result of a discussion at a meeting and usually recorded in the minutes or log of the meeting.

**Active** – Project status describing an approved initiative or project with applied resource and management activities.

**Activity -** task, job, operation or process consuming time and possibly other resources. (The smallest self-contained unit of work used to define the logic of a project. In general, activities share the following characteristics: a definite duration, logic relationships to other activities in a project, use resources such as people, materials or facilities, and have an associated cost. They should be defined in terms of start and end dates and the person or organization responsible for their completion.)

**Activity Definition -** Identifying the specific activities to 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 -** specifies the length of time (hours, days, weeks, months) that it takes to complete an activity.

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

**Activity file -** a file containing all data related to the definition of activities on a particular project.

**Activities ID -** a unique code identifying each activity in a project.

**Activity-on-arrow network** arrow diagram, network in which the arrows symbolize the activities.

**Activity on node network** precedence diagram, a network in which the nodes symbolize the activities.

**Activity status** the state of completion of an activity. A planned activity has not yet started. A started activity is in progress. A finished activity is complete.

**Actual Cost (AC)** - Total costs incurred that must relate to whatever cost was budgeted within the planned value and earned value in accomplishing work during a given time period.

**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 dates** actual dates are entered as the project progresses. These are the dates that activities really started and finished as opposed to planned or projected dates.

**Actual direct costs** those costs specifically identified with a contract or project. See also direct costs.

**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.

**ACWP** Actual Cost of Work Performed

**AD** Activity Description

**AD** Active Directory

**Adjourning** the last stage of team building where the team disbands

**ADM** Arrow Diagramming Method

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

**Advanced material release** a document used by organizations to initiate the purchase of long lead-time or time-critical materials prior to the final release of a design.

**AF** Actual Finish date

**AND relationship** logical relationship between two or more activities that converge on or diverge from an event. Note: the AND relationship indicates that every one of the activities has to be undertaken.

**AOA** Activity-On-Arrow

**AON** Activity-On-Node

**Approved** – Project status describing Governance or Steering Committee approval prior to the start of project activities.

**AS** Actual Start date

**Assumption** – Factors, for planning purposes, considered to be true, real, or certain. Assumptions generally involve a degree of risk.

**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. **APIs** - Application Programming Interface

**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.

**Approval** the term used when an individual accepts a deliverable as fit for purpose so that the project can continue.

**Approval to proceed** approval given to the project at initiation or prior to the beginning of the next stage.

**Arrow** The graphic presentation of an activity. See also *arrow diagramming method*. A connecting line between two nodes in a network.

**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*.

**Arrow diagram** See 'activity-on-arrow network'.

**Arrow diagram method** one of two conventions used to represent an activity in a project. Also known as activity-on-arrow.

**AS** Actual Start date

**As late as possible (ALAP)** an activity for which the early start date is set as late as possible without delaying the early dates of any successor.

**As-of Date.** See *data date*. **Associated revenue** that part of a project cost that is of a revenue nature and therefore charged as incurred to the profit and loss account. Note: associated revenue differs from the capital element of the project in that the capital element is taken as an asset to the balance sheet and depreciated over future accounting periods.

**As soon as possible (ASAP)** an activity for which the early start date is set to be as soon as possible. This is the default activity type in most project management systems.

**Assumptions** - Assumptions are factors that, for planning purposes, are considered to be true, real, or certain. Assumptions generally involve a degree of risk.

**Audit** systematic retrospective examination of the whole, or part, of a project or function to measure conformance with predetermined standards. Note: audit is usually qualified, for example financial audit, quality audit, design audit, project audit, health and safety audit.

**Authorization** the decision that triggers the allocation of funding needed to carry on the project

**Authorized un-priced work** any scope change for which authorization to proceed has been given, but for which the estimated costs are not yet settled.

**Authorized work** the effort which has been defined, plus that work for which authorization has been given, but for which defined contract costs have not been agreed upon.

**Automatic decision event** decision event where the decision depends only on the outcome of the preceding activities and that can be programmed or made automatic.

**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*. **BAC** Budget At Completion

**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*.

**Balanced matrix** an organizational matrix where functions and projects have the same priority.

**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 cost** the amount of money an activity was intended to cost when the schedule was baselined.

**Baseline dates** original planned start and finish dates for an activity. Used to compare with current planned dates to determine any delays. Also used to calculate budgeted cost of work scheduled for earned-valued analysis.

**Baseline Finish Date.** See *scheduled finish date*.

**Baseline review** a customer review conducted to determine that a contractor is continuing to use the previously accepted performance system and is properly implementing a baseline on the contract or option under review.

**Baseline schedule** the baseline schedule is a fixed project schedule. It is the standard by which project performance is measured. The current schedule is copied into the baseline schedule which remains frozen until it is reset. Resetting the baseline is done when the scope of the project has been changed significantly, for example after a negotiated change. At that point, the original or current baseline becomes invalid and should not be compared with the current schedule.

**Baseline Start Date.** See *scheduled start date*.

**BCWP** Budgeted Cost of Work Performed

**BCWS** Budgeted Cost of Work Scheduled

**Benefits** the enhanced efficiency, economy and effectiveness of future business or other operations to be delivered by a project or program.

**Benefits framework** an outline of the expected benefits of the project or program, the business operations affected and current and target performance measures.

**Benefits management** combined with project or program management, Benefits Management is the process for planning, managing, delivering and measuring the project or program benefits.

**Benefits management plan** specifies who is responsible for achieving the benefits set out in the benefit profiles and how achievement of the benefits is to be measured, managed and monitored.

**Bid** a tender, quotation or any offer to enter into a contract

**Bid analysis** an analysis of bids or tenders.

**Bottom up cost estimating** this is the method of making estimates for every activity in the work breakdown structure and summarizing them to provide a total project cost estimate.

**Brainstorming** the unstructured generation of ideas by a group of people.

**Breakdown structure** a hierarchical structure by which project elements are broken down, or decomposed. See also product breakdown structure (PBS), organizational breakdown structure (OBS) and work breakdown structure (WBS).

**Budget** quantification of resources needed to achieve a task by a set time, within which the task owners are required to work. Note: a budget 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. (The planned cost for an activity or project.)

**Budget at completion (BAC)** The sum total of the time-phased budgets. The estimated total cost of the project when done.

 **Budget cost** the cost anticipated at the start of a project.

**Budget Estimate.** See *estimate*. **Budgetary control** system of creating budgets, monitoring progress and taking appropriate action to achieve budgeted performance.
Note: a budget should provide the information necessary to enable approval, authorization and policy-making bodies to assess a project proposal and reach a rational decision.

**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*.The planned cost of work that should have been achieved according to the project baseline dates

**Budget element** budget elements are the same as resources - the people, materials, or other entities needed to do the work budget elements can be validated against a resource breakdown structure (RBS). They are typically assigned to a work package, but can also be defined at the cost account level.

**Budget estimate** an approximate estimate prepared in the early stages of a project to establish financial viability or secure resources.

**Budgeting** time phased financial requirements.

**Budget unit** the budget unit is the base unit for the calculation. For example, the engineer budget element might have a budget unit of hours. Since budget units are user defined, they can be any appropriate unit of measure. For example, a budget unit might be hours, pounds sterling, linear meters, or tons.

**Burden** overhead expenses distributed over appropriate direct labor and/or material base.

**Business case** information necessary to enable approval, authorization and policy making bodies to assess a project proposal and reach a reasoned decision

 **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*.

**Calendars** a project calendar lists time intervals in which activities or resources can or cannot be scheduled. A project usually has one default calendar for the normal workweek (for example Monday to Friday), but may have other calendars as well. Each calendar can be customized with its own holidays and extra work days. Resources and activities can be attached to any of the calendars that are defined.

**Cancelled** – Project status given to a cancelled project.

**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'.

**Capital employed** amount of investment in an organization or project, normally the sum of fixed and current assets, less current liabilities at a particular date.

**Cascade chart** bar chart on which the vertical order of activities is such that each activity is dependent only on activities higher in the list.

**Cash flow** cash receipts and payments in a specified period.

**Cash flow, net** difference between cash received and payments made during a specific period.

**CCB** Change Control Board

**Champion** an end user representative often seconded into a project team. Someone who acts as an advocate for a proposal or project.

**Change control** process that ensures potential changes to the deliverables of a project or the sequence of work in a project, are recorded, evaluated, authorized, and managed.

**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*.

**Change log** a record of all project changes, proposed, authorized, or rejected.

**Change management** the formal process where changes to the project are introduced and approved.

**Change Request** – A request submitted to obtain formal approval for project changes (see Project Change Control). Change requests may arise through changes in the business or because of issues in the project. Change requests should be documented, logged, analyzed, and approved before a change to the project can be made.

**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*.

**Child activity** subordinate task belonging to a 'parent' task existing at a higher level in the work breakdown structure.

**Client or Customer -** the party to a contract who commissions the work and pays for it on completion. The client or customer also functions as a representative for the users and is a project stakeholder.

**Close out** the completion of work on a project.

**Closure** the formal end point of a project, either because it has been completed or because it has been terminated early.

**CMM** - Capability Maturity Model

**Code of Accounts.** Any numbering system used to uniquely identify each element of the *work breakdown structure*. See also *chart of accounts*. **Commissioning** advancement of an installation from the stage of static completion to full working order and achievement of the specified operational requirements.

**Commitment** A binding financial obligation, typically in the form of a purchase order or contract.

**Committed costs -** costs legally committed even if delivery has not taken place with invoices neither raised nor paid.

**Communication -** the transmission of information so that the recipient understands clearly what the sender intends.

**Communications planning -** determining project stakeholders’ communication and information needs.

**Completed** – Project status describing work that has moved through the full project lifecycle and has been accepted as complete by the customer or client.

 **Completion date** the date calculated by which the project could finish following careful estimating.

**Compound risk** a risk made up of a number of inter-related risks.

**Conception phase** the phase that triggers and captures new ideas or opportunities and identifies potential candidates for further development in the feasibility phase

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

**Configuration** functional and physical characteristics of a product as defined in technical documents and achieved in the product. Note: in a project this should contain all items that can be identified as being relevant to the project and that should only be modified after authorization by the relevant manager (This includes documentation).

**Configurations audit** a check to ensure that all deliverable items on a project conform with one another and to the current specification. It ensures that relevant quality assurance procedures have been implemented and that there is consistency throughout project documentation.

**Configurations control** a system through which changes may be made to configuration items.

**Configuration identification** identifies uniquely all items within the configuration.

**Configuration item** a part of configuration that has a set function and is designated for configuration management. It identifies uniquely all items within the configuration.

**Configuration management** technical and administrative activities concerned with the creation, maintenance and controlled change of configuration throughout the life of the product.

**Configuration status accounting** records and reports the current status and history of all changes to the configuration. Provides a complete record of what happened to the configuration to date

**Conflict management** the ability to manage conflict creatively and effectively.

**Constraint –** Applicable restriction affecting the performance of the project. Any factor affecting when an activity can be scheduled.

**Consumable resource** a type of resource that only remains available until consumed (for example, a material).

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

**Contingency** a contingency is the planned allotment of time and cost or other resources for unforeseeable elements with a project.

**Contingency Allowance.** See *reserve*. **Contingency plan -** Alternative course(s) of action devised to cope with project risks. Note: See risk plan.

**Contingency planning** the development of a management plan using alternative strategies to minimize or negate the adverse effects of a risk, should it 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 budget base** the negotiated contract cost value plus the estimated value of authorized but unpriced work.

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

**Contractor** a person, company, or firm who holds a contract for carrying out the works and/or the supply of goods or services in connection with the project

**Contract target cost** the negotiated costs for the original defined contract and all contractual changes that have been agreed and approved, but excluding the estimated cost of any authorized, unpriced changes. The contract target cost equals the value of the budget at completion plus management or contingency reserve.

**Contract target price** the negotiated estimated costs plus profit or fee.

**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.

**Coordination** the act of ensuring that work carried out by different organizations and in different places fits together effectively. It involves technical matters, time, content, and cost in order to achieve the project objectives effectively.

**Coordinated matrix** an organizational structure where the project leader reports to the functional manager and doesn’t have authority over team members from other departments.

 **Corrective Action.** Changes made to bring expected future performance of the project into line with the plan. **Cost account** defines what work is to be performed who will perform it and who is to pay for it. Cost accounts are the focal point for the integration of scope, cost, and schedule. Another term for cost account is control account.

**Cost account manager** a member of a functional organization responsible for cost account performance, and for the management of resources to accomplish such tasks.

**Cost benefit analysis** an analysis of the relationship between the costs of undertaking a task or project, 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. (Allows comparison of the returns from alternative forms of investment.)

**Cost breakdown structure** hierarchical breakdown of a project into cost elements.

**Cost budgeting** allocating cost estimates to individual project components.

**Cost center** location, person, activity or project in respect of which costs may be ascertained and related to cost units.

**Cost code** unique identity for a specified element of work. (Code assigned to activities that allow costs to be consolidated according to the elements of a code structure.)

**Cost Control.** Controlling changes to the project budget.

**Cost control point** the point within a program at which costs are entered and controlled. Frequently, the cost control point for a project is either the cost account or the work package.

**Cost control system** any system of keeping costs within the bounds of budgets or standards based upon work actually performed.

**Cost curve** a graph plotted against a horizontal time scale and cumulative cost vertical scale.

**Cost element**
a unit of costs to perform a task or to acquire an item. The cost estimated may be a single value or a range of values.

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

**Cost incurred** costs identified through the use of the accrued method of accounting or costs actually paid. Costs include direct labor, direct materials, and all allowable indirect costs.

**Cost management** the effective financial control of the project through evaluating, estimating, budgeting, monitoring, analyzing, forecasting and reporting the cost information.

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

**Cost overrun** the amount by which a contractor exceeds or expects to exceed the estimated costs, and/or the final limitations (the ceiling) of a contract.

**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: original cost estimate/CPI = projected cost at completion. See also *earned value*.The cost efficiency ratio of earned value to actual costs. CPI is often used to predict the magnitude of a possible cost overrun. See also *earned value*.

**Cost performance report** a regular cost report to reflect cost and schedule status information for management.

**Cost plan** A budget which shows the amounts and expected dates of incurring costs on the project or on a contract.

**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 reimbursement type contracts** a category of contracts based on payments to a contractor for allowable estimated costs, normally requiring only a 'best efforts' performance standard from the contractor. Risk for all growth over the estimated value rests with the project owner.

**Cost-time resource sheet (CTR)** a document that describes each major element in the work breakdown structure, including a statement of work (SOW) describing the work content, resources required, the time frame of the work element and a cost estimate.

**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.

**CPFF** Cost Plus Fixed Fee

**CPIF** Cost Plus Incentive Fee

**CPI** Cost Performance Index

**CPM** Critical Path Method

**Crashing.** A specific type of project schedule compression technique performed by taking action to decrease the total project schedule duration after analyzing a number of alternatives to determine how to get the maximum schedule duration compression for the least cost. Typical approaches for crashing a schedule include reducing schedule activity durations and increasing the assignment of resources on schedule activities.

**Credited resource** created by an activity or event and can then be used by the project.

**Critical Activity.** Any activity on a critical path with zero or negative float. 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.

**Criticality index** used in risk analysis, the criticality index represents the percentage of simulation trails that resulted in the activity being placed on the critical path.

**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 analysis -** procedure for calculating the critical path and floats in a network.

**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*).

**Critical performance indicator** a critical factor against which aspects of project performance may be assessed

**Critical success factor** a factor considered to be most conducive to the achievement of a successful project

 **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.

**Customer** any person who defines needs or wants, justifies or pays for part or the entire project, or evaluates or uses the results. Could be the project promoter, client, owner or employer

**Cut-off date** the ending date of a reporting period.

**CV** Cost Variance

**Dangle** an activity or network which has either no predecessors or no successors. If neither, it is referred to as an isolated activity.

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

**DD** Data Date

**Decision –** The removal of [uncertainty](http://www.maxwideman.com/pmglossary/PMG_U00.htm#Uncertainty) with respect to a course of [action](http://www.maxwideman.com/pmglossary/PMG_A01.htm#Action).

**Decision event** state in the progress of a project when a decision is required before the start of any succeeding activity. Note: the decision determines which of a number of alternative paths is to be followed.

**Definitive Estimate.** See *estimate*. **Delaying resource** in resource scheduling, inadequate availability of one or more resources may require that the completion of an activity be delayed beyond the date on which it could otherwise be completed. The delaying resource is the first resource on an activity that causes the activity to be delayed.

**Delegation** the practice of effectively getting others to perform work which one chooses not to do oneself. The process by which authority and responsibility is distributed from project manager to subordinates.

**Deliberate decision event** decision event where the decision is made as a result of the outcomes of the preceding activities and possibly other information. A deliberate decision event cannot be made automatically

**Deliverables** end products of a project or the measurable results of intermediate activities within the project organization. Note: deliverables may be in the form of hardware, software, services, processes, documents, or any combination thereof.

**Delphi technique** a process where a consensus view is reached by consultation with experts. Often used as an estimating technique.

**Denied** – Project status describing proposed project work that will not be considered.

**Dependency -** precedence relationship. Restriction that one activity has to precede, either in part or in total, another activity. (Dependencies are relationships between products or tasks. For example, one product may be made up of several other ‘dependent’ products or a task may not begin until a ‘dependent’ task is complete.) See *logical relationship*

**Dependency arrow** A link arrow used in an activity on a node network to represent the interrelationships of activities in a project.

**Design authority** the person or organization with overall design responsibility for the products of the project

**Design and development phase** The time period in which facility and production processes are developed and designed.

**Deterministic network** contains paths, all of which have to be followed and whose durations are fixed. Note: deterministic network is a term used to distinguish traditional networking from probabilistic networking.

**Direct costs** are specifically attributable to an activity or group of activities without apportionment. (Direct costs are best contrasted with indirect costs that cannot be identified to a specific project.)

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

**Discrete milestone** a milestone that has a definite scheduled occurrence in time.
Logical link that may require time but no other resource.

**Dummy activity in activity on arrow network** an activity representing no actual work to be done but required for reasons of logic or nomenclature. Note: there are three uses for a dummy activity in 'activity-on-arrow network': logic, time delay, and Uniqueness.

**DU** Duration

**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.

**EAC** Estimate At Completion **Earliest feasible date** The earliest date on which the activity could be scheduled to start based on the scheduled dates of all its predecessors, but in the absence of any resource constraints on the activity itself. This date is calculated by resource scheduling.

**Early dates** calculated in the forward pass of time analysis, early dates are the earliest dates on which an activity can start and finish.

**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 hours** the time in standard hours credited as a result of the completion of a given task or a group of tasks.

The value of completed work expressed in terms of the approved budget assigned to the work for a useful work done at any given point in a project expressed as the authorized budget for the physical work accomplished. The sum of the [budget](http://www.maxwideman.com/pmglossary/PMG_B03.htm#Budget#Budget)s for [complete](http://www.maxwideman.com/pmglossary/PMG_C04.htm#Complete)d portions of in-[process](http://www.maxwideman.com/pmglossary/PMG_P05.htm#Process) [work](http://www.maxwideman.com/pmglossary/PMG_W00.htm#Work), plus the appropriate portion of the [budget](http://www.maxwideman.com/pmglossary/PMG_B03.htm#Budget#Budget)s for [level of effort](http://www.maxwideman.com/pmglossary/PMG_L01.htm#Level%20of%20Effort) and [apportioned effort](http://www.maxwideman.com/pmglossary/PMG_A03.htm#Apportioned%20Effort) for the relevant [time](http://www.maxwideman.com/pmglossary/PMG_T02.htm#Time) [period](http://www.maxwideman.com/pmglossary/PMG_P01.htm#Period). [BCWP](http://www.maxwideman.com/pmglossary/PMG_B01.htm#BCWP) is commonly referred to as [Earned Value](http://www.maxwideman.com/pmglossary/PMG_E00.htm#Earned%20Value)

**Earned value analysis -** analysis of project progress where the actual money, hours (or other measure) budgeted and spent is compared to the value of the work achieved.

**Earned value cost control** the quantification of the overall progress of a project in financial terms so as to provide a realistic yardstick against which to compare the actual cost to date.

**EF** Early Finish date

**Effort** the number of labor units necessary to complete the work. Effort is usually expressed in staff-hours, staff-days or staff-weeks and should not be confused with duration.

**Effort-driven activity** an activity whose duration is governed by resource usage and availability. The resource requiring the greatest time to complete the specified amount of work on the activity will determine its duration.

**Effort remaining** the estimate of effort remaining to complete an activity.

**Elapsed time** elapsed time is the total number of calendar days (excluding non-work days such as weekends or holidays) that is needed to complete an activity. It gives a realistic view of how long an activity is scheduled to take for completion.

**End activity** an activity with no logical successors.

**End event (of a project)** event with proceeding, but no succeeding activities. Note: there may be more than one end event.

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

**Equivalent activity** activity that is equivalent, in the probabilistic sense, to any combination of series and parallel activities.

**ES** Early Start date

**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., ± 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)** a value expressed in either money and/or hours, to represent the projected final costs of work when completed. The EAC is calculated as ETC + ACWP.

**Estimate to complete (ETC)** the value expressed in either money or hours developed to represent the cost of the work required to complete a task.

**Estimating** the act of combining the results of post project reviews, metrics, consultation and informed assessment to arrive at time and resource requirements for an activity.

**ETC** Estimate (or Estimated) To Complete (or Completion)

**EV** Earned Value

**Event** state in the progress of a project after the completion of all preceding activities, but before the start of any succeeding activity. (A defined point that is the beginning or end of an activity)

**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** focused report drawing attention to instances where planned and actual results are expected to be, or are already, significantly different. Note: an exception report is usually triggered when actual values are expected to cross a predetermined threshold that is set with reference to the project plan. The actual values may be trending better or worse than plan.

 **Exclusive OR relationship** Logical relationship indicating that only one of the possible activities can be undertaken.

**Execution phase** the phase of a project in which work towards direct achievement of the project’s objectives and the production of the project’s deliverables occurs. Sometimes called the implementation phase

**Expenditure** a charge against available funds, evidenced by a voucher, claim, or other documents. Expenditures represent the actual payment of funds.

**Exceptions** occurrences causing deviation from a plan, such as issues, change requests and risks. Exceptions can also refer to items where the cost variance and schedule variance exceed predefined thresholds.

**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 x $100).

**External constraint** a constraint from outside the project network.

**Fast–tracking** Reducing the duration of a project usually by overlapping phases or activities originally planned to be to done sequentially. (The process of reducing the number of sequential relationships and replacing them typically with parallel relationships, usually to achieve shorter overall durations but often with increased risk).

**Fallback plan** a plan for an alternative course of action that can be adopted to overcome the consequences of a risk, should it occur (including carrying out any advance activities that may be required to render the plan practical).

**Feasibility phase** the project phase that demonstrates that the client's requirement can be achieved, this phase identifies and evaluates the options to determine the one preferred solution.

**Feasibility study** analysis to determine if a course of action is possible within the terms of reference of the project.

**Feasible schedule** any schedule capable of implementation within the externally determined constraints of time and/or resource limits.

**FF** Free Float or Finish-to-Finish

**FFP** Firm Fixed Price

**Final report** post-implementation report. Normally a retrospective report that formally closes the project having handed over the project deliverables for operational use. Note: the report should draw attention to experiences that may be of benefit to future projects and may form part of the accountability of the project team

**Finish date** the actual or estimated time associated with an activity’s completion.

**Finishing activity** a finishing activity is the last activity that must be completed before a project can be considered finished. This activity is not a predecessor to any other activity-it has no successors.

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

**Finish-To-finish lag** the finish-to-finish lag is the minimum amount of time that must pass between the finish of one activity and the finish of its successor(s).

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

**Finish-to-start lag** the finish-to-start lag is the minimum amount of time that must pass between the finish of one activity and the start of its successor(s). The default finish-to-start lag is zero.

**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 date** a calendar date (associated with a plan) that cannot be moved or changed during the schedule.

**Fixed-duration scheduling** a scheduling method in which, regardless of the number of resources assigned to the task, the duration remains the same.

**Fixed finish** See imposed finish.

 **Fixed-price contracts** a generic category of contracts based on the establishment of firm legal commitments to complete the required work. A performing contractor is legally obligated to finish the job, no matter how much it costs to complete. Risks of all cost growth rest on the performing contractor.

**Fixed start** See imposed start.

 **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 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 at completion** scheduled cost for a task.

**Forecast final cost** See estimate at completion.

**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*.

**FPIF** Fixed Price Incentive Fee **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*.

**FS** Finish-to-Start **Functional Manager -** A manager responsible for activities in a specialized department or functional group (e.g., engineering, manufacturing, marketing).

**Functional matrix** an organization type where the project has a team leader in each functional department and the products are passed from one team to the next.

**Functional organization** management structure where specific functions of an organization are grouped into specialist departments providing dedicated services. Examples of functional organization are finance, marketing and design departments.

**Functional specification** a document specifying in some detail the functions that is required of a system and the constraints that will apply

 **Funding profile** an estimate of funding requirements over time.

**Gantt chart** particular type of bar chart showing planned activity against time. Note: 'Gantt chart', although named for a particular type of bar chart, is in current usage as a name for bar charts in general.
(A Gantt chart is a time-phased graphic display of activity durations. Activities are listed with other tabular information on the left side with time intervals over the bars. Activity durations are shown in the form of horizontal bars.)

**GERT** Graphical Evaluation and Review Technique **Goal** a one-sentence definition of specifically what will be accomplished, while incorporating an event signifying completion.

**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*.

**Hammock activity** - joining two specified points, that span two or more activities. (Note: its duration is initially unspecified and is only determined by the durations of the specified activities. Hammocks are usually used to collect time-dependent information, e.g. overheads. A group of activities, milestones, or other hammocks aggregated together for analysis or reporting purposes. Sometimes used to describe an activity such as management support that has no duration of its own but derives one from the time difference between the two points to which it is connected.)

 **Handover** The formal process of transferring responsibility for and ownership of the products of a project to the operator or owner.

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

**hierarchical coding structure** a coding system that can be represented as a multi-level tree structure in which every code except those at the top of the tree has a parent code.

**Hierarchy of networks** Range of networks at different levels of detail, from summary down to working levels, showing the relationships between those networks.

**Histogram** a graphic display of planned and or actual resource usage over a period of time. It is in the form of a vertical bar chart, the height of each bar representing the quantity of resource usage in a given time unit. Bars may be single, multiple, or show stacked resources.

**Holiday** an otherwise valid working day that has been designated as exempt from work.

**Host organization** - organization providing the administrative and logistical support for the project.

**Hypercritical activities -** activities on the critical path with negative float.

**IFB** Invitation For Bid

**Impact** the assessment of the adverse effects of an occurring risk.

**Impact analysis** assessing the merits of pursuing a particular course of action.

**Implementation phase** the project phase that develops the chosen solution into a completed deliverable.
(Note: realization is the internationally accepted and preferred term for implementation).

**Imposed date** point in time determined by circumstances outside the network.
Note: a 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.

**Imposed finish** a finished date imposed on an activity by external constraints.

**Imposed start** a start date imposed on an activity by external constraints.

**Inclusive OR relationship** logical relationship indicating that at least one but not necessarily all of the activities have to be undertaken.

**Incurred costs** sum of actual and committed costs, whether invoiced/paid or not, at a specified time.

**Indirect cost** Costs associated with a project that cannot be directly attributed to an activity or group of activities. (Resources expended which are not directly identified to any specific contract, project, product or service, such as overheads and general administration).

**Information Distribution.** Making needed information available to project stakeholders in a timely manner. **In-house project** a project commissioned and carried out entirely within a single organization

**Initiation.** Committing the organization to begin a project or phase. **In progress** an activity that has been started, but not yet completed.

**Integrated Cost/Schedule Reporting.** See *earned value*. **Integrated logistics support** disciplined approach to activities necessary to a) cause support considerations to be integrated into product design, b) develop support arrangements that are consistently related to design and to each other, and c) provide the necessary support at the beginning and during customer use at optimum cost.

**Integration** the process of bringing people, activities and other things together to perform effectively.

**Internal rate of return (IRR)** discount rate at which the net present value of a future cash flow is zero.
Note: IRR is a special case of the ‘discounted cash flow’ procedures.

**Inverted matrix** a project oriented organization structure that employs permanent specialists to support projects.

**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.

**Issue –** An immediate problem requiring resolution. If a risk (see Risk) does occur, it may turn into an issue or issues and be managed as an issue.

 **Key events** major events, the achievement of which that are deemed to be critical to the execution of the project.

**Key Event Schedule.** See *master schedule*.

**Key performance indicators** measurable indicators used to report progress chosen to reflect the critical success factors of the project.

 **Labor rate variances** difference between planned labor rates and actual labor rates.

**Ladder** device for representing a set of overlapping activities in a network diagram. Note: The start and finish of each succeeding activity are linked only to the start and finish of the preceding activity by lead and lag activities, which consume only time.

**Lag -** a) In a network diagram, the minimum necessary lapse of time between the finish of one activity and the finish of an overlapping activity or b) delay incurred between two specified activities. 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 dates** calculated in the backward pass of time analysis, late dates are the latest dates by which an activity can be allowed to start or finish.

**Latest event time** Latest time by which an event has to occur within the logical and imposed constraints of the network, without affecting the total project duration.

**Late event date** calculated from backward pass, it is the latest date an event can occur.

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

**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).

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

 **Lead -** in a network diagram, the minimum necessary lapse of time between the start of one activity and the start of an overlapping activity. 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*.

 **Lead contractor** the contractor who has responsibility for overall project management and quality assurance

**Leadership** getting others to follow.

**Letter of intent** a letter indicating intent to sign a contract, usually so that work can commence prior to signing that contract.

**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*.

**LF** Late Finish date

**Life cycle** a sequence of defined stages over the full duration of a project.

**Life-cycle Costing -** The concept of including acquisition, operating, and disposal costs when evaluating various alternatives. **Likelihood** Assessment of the probability that a risk will occur.

**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*.

**Linked bar chart** a bar chart that shows the dependency links between activities

**LOE** Level Of Effort **Logic -** See *network logic*. **Logic diagram -** a diagram that displays the logical relationships between project activities. 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 and are treated as errors.

**LS** Late Start date

**Management by project -** a term used to describe normal management processes that are being project managed.

**Management development -** all aspects of staff planning, recruitment, development, training and assessment.

**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.  **Mandate** – A document that defines the goals and constraints of a project and functions as a working agreement or contract between the client and the project manager.

**Master network -** network showing the complete project, from which more detailed networks are derived

**Master Schedule.** A *summary-level schedule* which identifies the major activities and key milestones. See also *milestone schedule*. **Material -** property which may be incorporated into or attached to an end item to be delivered under a contract, or which may be consumed or expended in the performance of a contract. It includes, but is not limited to, raw and processed material, parts, components, assemblies, fuels and lubricants, and small tools and supplies which may be consumed in normal use in the performance of a contract.

**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. **Methodology** – A documented process for management of projects containing the process, definitions, and roles and responsibilities. An organization may have multiple methodologies for various types of activities, initiatives, or projects.

**Mid-stage assessment -** an assessment in the middle of a project that can be held for several reasons: 1) At the request of the project board, 2) to authorize work on the next stage before current one is completed, 3) to allow for a formal review in the middle of a long project, or 4) to review exception plans.

**Milestone -** a key event. An event selected for its importance in the project. Note: milestones are commonly used in relation to progress. (A milestone is often chosen to represent the start of a new phase or the completion of a major deliverable. They are used to monitor progress at summary level. Milestones are activities of zero duration).

**Milestone plan -** a plan containing only milestones which highlight key points of the project.

 **Milestone schedule -** a schedule that identifies the major milestones. See also master schedule.

 **Mission statement -** brief summary, approximately one or two sentences, that sums up the background, purposes and benefits of the project.

**Mitigation -** working to reduce risk by lowering its chances of occurring or by reducing its effect if it occurs.

**Mobilization -** the bringing together of project personnel and securing equipment and facilities. carried out during project start-up phases.

**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 carol simulation -** A schedule risk assessment technique used to estimate the likely range of outcomes from a complex process by simulating the process under randomly selected conditions a large number of times.

**MPM** Modern Project Management

**Multi-project -** a project consisting of multiple sub-projects.

**Multi-project analysis -** multi-project analysis is used to analyze the impact and interaction of activities and resources whose progress affects the progress of a group of projects or for projects with shared resources or both. Multi-project analysis can also be used for composite reporting on projects having no dependencies or resources in common.

**Multi-project management -** managing multiple projects that are interconnected either logically or by shared resources.

**Multi-project scheduling -** use of the techniques of resource allocation to schedule more than one project concurrently.

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

**Negative total float -** time by which the duration of an activity or path has to be reduced in order to permit a limiting imposed date to be achieved.

**Negotiated contract cost -** the estimated cost negotiated in a cost-plus-fixed-fee contract or the negotiated contract target cost in either a fixed price-incentive contract or a cost-plus-incentive-fee contract. See also contract target cost.

**Negotiation -** the art of satisfying needs by reaching agreement or compromise with other parties.

**Net present value -** aggregate of future net cash flows discounted back to a common base date, usually the present.

 **Network -** a pictorial presentation of project data in which the project logic is the main determinant of the placements of the activities in the drawing. Frequently called a flowchart, PERT chart, logic drawing, or logic diagram. 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 G*raphical Evaluation and Review Technique*.

**Network interface -** activity or event common to two or more network diagrams.

 **Network Logic -** The collection of activity dependencies making 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*.

**Nodes -** points in a network at which arrows start and finish.

**Non-recurring costs -** expenditures against specific tasks that are expected to occur only once on a given project.

**Non-Splittable activity -** an activity that, once started, has to be completed to plan without interruption.
Note: resources should not be diverted from a non-splittable activity to another activity.

**No earlier than -** a restriction on an activity that indicates that it may not start or end earlier than a specified date.

**No later than -** a restriction on an activity that indicates that it may not start or end later than a specified date.

**Objectives -** predetermined results towards which effort is directed.

**OBS** Organization(al) Breakdown Structure **On-hold** – Status describing a change from Active (see Active) to being held, generally due to other work demands or priorities.

**Operation phase -** period when the completed deliverable is used and maintained in service for its intended purpose.

**Opportunity -** the opposite of a risk. The chance to enhance the project benefits.

**Order of magnitude estimate -** an estimate carried out to give very approximate indication of likely out-turn costs. See *estimate*. **Organizational breakdown structure (OBS) -** hierarchical way in which the organization may be divided into management levels and groups, for planning and control purposes and to relate *work packages* to organizational units. **Organization designs -** the design of the most appropriate organizational design for a project.

**Organizational Planning -** Identifying, documenting, and assigning project roles, responsibilities, and reporting relationships. **Original budget -** the initial budget established at or near the time a contract was signed or a project authorized, based on the negotiated contract cost or management’s authorization.

**Original duration -** the duration of activities or groups of activities as recorded in the baseline schedule.

**Other direct costs (ODC) -** a group of accounting elements which can be isolated to specific tasks, other than labor and material. Included in ODC are such items as travel, computer time, and services.

**Out-of-sequence progress -** progress that has been reported even though activities that have been deemed predecessors in project logic have not been completed.

**Output format -** information that governs the final appearance of a report or drawing. (Usually refers to computer–generated documents).

**Outsourcing -** contracting-out, buying in facilities or work (as opposed to using in-house resources).

**Overall change control -** coordinating and controlling changes across an entire project.

 **Overlap.** See *lead*.

**Overhead -** costs incurred in the operation of a business that cannot be directly related to the individual products or services being produced. See also indirect cost.

**Overrun -** costs incurred in excess of the contract target costs on an incentive type contract or the estimated costs on a fixed-price contract. An overrun is that value of costs which are needed to complete a project, over that value originally authorized by management.

**Parallel activities -** parallel activities are two or more activities than can be done at the same time. This allows a project to be completed faster than if the activities were arranged serially.

**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.

**Parent activity -** task within the work breakdown structure that embodies several subordinate 'child' tasks.

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

**Parties (to a contract) -** the persons or companies who sign a contract with one another.

**Path –** A set of sequentially connected activities in a project network diagram. (Refer to critical path method for information on critical and non-critical paths).

**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*.

**PC** Percent Complete

**PDM** Precedence Diagramming Method

**Pending** – Status describing project work submitted for review but not yet discussed.

**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. May be aggregated to sections of a project or the whole project.

**Performance measurement techniques -** performance measurement techniques are the methods used to estimate earned value. Different methods are appropriate to different work packages, either due to the nature of the work or to the planned duration of the work package.

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

**Performance specification -** statement of the totality of needs expressed by the benefits, features, characteristics, process conditions, boundaries and constraints that together define the expected performance of a deliverable. Note: a performance specification should provide for innovation and alternative solutions, by not defining or unduly constraining the technical attributes of the intended deliverable.

**Performing -** a team building stage where the emphasis is on the work currently being performed.

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

**PERT** Program Evaluation and Review Technique

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

**PF** Planned Finish date

**Phase (of a project) -** that part of a project during which a set of related and interlinked activities are performed. Note: a project consists of a series of phases that together constitute the whole project life cycle. See *project phase*. **Physical percent complete -** the percentage of the work content of an activity that has been achieved.

**Pilot -** a form of testing a new development and its implementation prior to committing to its full release.

**Plan -** an intended future course of action. It is owned by the project manager, it is the basis of the project controls and includes the ‘what’, ‘how’, ‘when’, and ‘who’.

**Planned activity -** an activity not yet started.

**Planned cost -** estimated cost of achieving a specified objective.

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

**Planner -** a member of a project team or project support office with the responsibility for planning, scheduling and tracking of projects. They are often primarily concerned with schedule, progress and manpower resources.

**Planning -** the process of identifying the means, resources and actions necessary to accomplish an objective.

**Planning stage -** the stage prior to the implementation stage when product activity, resource and quality plans are produced.

**PM** Project Management or Project Manager

**PMBOK** Project Management Body of Knowledge

**PMP** Project Management Professional

**Portfolio –** A grouping of projects and programs for management convenience. They may or may not have a common objective and are often related only by the use of common resources, funding, or by company departments.

**Portfolio management -** the management of a number of projects that do not share a common objective

**Positive float -** positive float is defined as the amount of time that an activity's start can be delayed without affecting the project completion date. An activity with positive float is not on the critical path and is called a non-critical activity. The difference between early and late dates (start or finish) determines the amount of float.

**Post implementation review -** a review between 6-12 months after a system in a project has met its objectives to verify that it continues to meet user requirements.

**Post project appraisal -** an evaluation that provides feedback in order to learn for the future.

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

**Precedence network -** a multiple dependency network. An activity-on-node network in which a sequence arrow represents one of four forms of precedence relationship, depending on the positioning of the head and the tail of the sequence arrow. The relationships are:

1. Start of activity depends on finish of preceding activity, either immediately or after a lapse of time
2. Finish of activity depends on finish of preceding activity, either immediately or after a lapse of time
3. Start of activity depends on start of preceding activity, either immediately or after a lapse of time
4. Finish of activity depends on start of preceding activity, either immediately or after a lapse of time.

**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. **Preceding event-** in an activity-on-arrow network, an event at the beginning of an activity

**Pre-commissioning-** that work which is carried out prior to commissioning in order to demonstrate that commissioning may be safely undertaken.

**Predecessor -** an activity that must be completed (or be partially completed) before a specified activity can begin.

**Predecessor Activity.** (1) In the *arrow diagramming method*, the activity which logically precedes the current activity and enters a *node*. (2) In the *precedence diagramming method*, the "from" activity. **Prime or lead contractor -** a main supplier who has a contract for much or all of the work on a contract

**Probabilistic network -** network containing alternative paths with which probabilities are associated

**Probability -** likelihood of a risk occurring.

**Process -** set of interrelated resources and activities which transform inputs into outputs

**Procurement -** the securing of goods or services

**Procurement Planning -** Determining what to procure and when.

**Product breakdown structure -** a hierarchy of deliverable products which are required to be produced on the project. It forms the base document from which the execution strategy and product-based work breakdown structure may be derived. It provides a guide for configuration control documentation.

**Product description -** the description of the purpose form and components of a product. It should always be used as a basis for acceptance of the product by the customer.

**Product flow diagram -** represents how the products are produced by identifying their derivation and the dependencies between them.

 **Program –** A portfolio of projects selected, planned, and managed in a coordinated way to achieve a set of defined objectives; a single, large or very complex project with phases managed as separate projects; or a set of otherwise unrelated projects bounded by a business cycle.

**Program benefits review-** a review to assess if targets have been reached and to measure the performance levels in the resulting business operations.

**Program Evaluation and Review Technique (PERT).** An event-oriented *network analysis* technique used to estimate project duration when there is a high degree of uncer-tainty 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*. **Program director-** the senior manager with the responsibility for the overall success of the program.

**Program directorate -** a committee that directs the program when circumstances arise where there is no individual to direct the program.

**Program evaluation and review technique (PERT) -** PERT is a project management technique for determining how much time a project needs before it is completed. Each activity is assigned a best, worst, and most probable completion time estimate. These estimates are used to determine the average completion time. The average times are used to calculate the critical path and the standard deviation of completion times for the entire project.

**Program management -** the effective management of several individual but related projects or functional activities in order to produce an overall system that works effectively.

**Program management Office -** the office responsible for the business and technical management of a specific contract or program.

**Program manager -** individual or body with responsibility for managing a group of projects.

**Program support office -** a group that gives administrative support to the program manager and the program executive.

**Progress -** the partial completion of a project, or a measure of the same.

**Progress payments -** payments made to a contractor during the life of a fixed-price type contract, on the basis of some agreed-to formula, for example, budget cost of work performed or simply costs incurred.

**Progress report -** a regular report to senior personnel, sponsors or stakeholders summarizing the progress of a project including key events, milestones, costs and other issues.

**Project** – The application of resources to a unique set of coordinated activities, with a defined start and finish, undertaken to meet specific objectives within defined cost and performance parameters.

**Project appraisal -** the discipline of calculating the viability of a project.

**Project base date -** reference date used as a basis for the start of a project calendar.

**Project board -** a project board is the body to which the project manager is accountable for achieving the project objectives.

**Project brief -** statement that describes the purpose, cost, time and performance requirements/constraints for a project. (A statement of reference terms for a project. A written statement of the client’s goals and requirements in relation to the project.)

**Project calendar -** a calendar that defines global project working and non-working periods.

**Project Change Control –** The process ensuring potential changes to a project including scope, cost, resources, time (schedule), deliverables, design, methods, costs, or any other planned aspects of a project are recorded, evaluated, authorized, and managed.

**Project Change Control Board (PCCB)** – a formally constituted group of stakeholders responsible for approving or rejecting project change requests. In some cases, the project Steering Committee may serve as the PCCB.

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

 **Project coordination procedure -** defines the parties relevant to the project and the approved means of communicating between them.

**Project champion -** person within the parent organization who promotes and defends a project.

**Project closure -** formal termination of a project at any point during its life.

**Project Cost Management -** a subset of project management including resource planning, cost estimating, cost control and cost budgeting in an effort to complete the project within its approved budget.

**Project culture -** the general attitude toward projects within the business.

**Project definition -** a report defining a project, i.e. Why it is required? What will be done? How when and where it will be delivered? The organization and resources required the standards and procedures to be followed.

**Project director -** the manager of a very large project that demands senior level responsibility or the person at the board level in an organization who has the overall responsibility for the management of projects.

**Project environment -** the project environment is the context within which the project is formulated, assessed and realized. This includes all external factors that have an impact on the project.

**Project evaluation -** a documented review of the project’s performance, produced at project closure. It ensures that the experience of the project is recorded for the benefit of others.

**Project file -** a file containing the overall plans of a project and any other important documents.

**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 initiation -** the beginning of a project at which point certain management activities are required to ensure that the project is established with clear reference terms and adequate management structure.

**Project initiation document -** a document approved by the project board at project initiation that defines the terms of reference for the project.

**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 issue report -** a report that raises either technical or managerial issues in a project.

 **Project life cycle -** all phases or stages between a project's conception and its termination.
Note: the project life cycle may include the operation and disposal of project deliverables. This is usually known as an 'extended life cycle'.

**Project life cycle cost -** cumulative cost of a project over its whole life cycle

**Project log -** a project diary. A chronological record of significant occurrences throughout the project

**Project logic -** the relationships between the various activities in a project.

**Project logic drawing** - a representation of the logical relationships of a project.

 **Project Management Body of Knowledge (PMBOK) -** An inclusive term describing 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 Plan -** a plan for carrying out a project, to meet specific objectives, that is prepared by or for the project manager

**Project Management Office** **–** The office or department responsible for establishing, maintaining and enforcing project delivery and management processes, procedures, and standards. It provides services, support, and training for project managers.

**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 person responsible for all elements of planning, managing, executing, and controlling the project and who is responsible for bringing the project in on time, cost, to specifications, and to a given quality with agreed upon resources

**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 matrix -** an organization matrix that is project based, in which the functional structures are duplicated in each project.

**Project monitoring -** comparison of current project status with what was planned to be done to identify and report any deviations.

**Project network -** representation of activities and/or events with their inter-relationships and dependencies.

**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 network techniques -** group of techniques that, for the description, analysis, planning, and control of projects, considers the logical inter-relationships of all project activities The group includes techniques concerned with time, resources, costs, and other influencing factors, e.g. uncertainty.
Note: the terms ‘program evaluation and review technique’ (PERT) 'critical path analysis' (CPA), 'critical path method' (CPM) and 'precedence method' refer to particular techniques and should not be used as synonyms for project network.

**Project organization -** structure that is created or evolves to serve the project and its participants. (A term which refers to the structure, roles, and responsibilities of the project team and its interfaces to the outside world.)

**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 Portfolio -** the constituent projects within a program.

**Project Portfolio Management (PPM)** – The organization of projects and programs into a single portfolio to allow prioritization based on factors such as alignment with corporate strategy, ROI, risk, applied resource levels, and technology focus. Used wisely, it will increase the company's value by exposing redundant or risky projects, while revealing how to shift funds from low-value investments to high-value, strategic ones. The process also allows the corporate strategy to be communicated throughout the organization, better equipping it to choose and execute those projects and initiatives that support the strategy, while eliminating those that do not.

**Project procedures manual -** a collected set of the management and administrative procedures needed for the project.

**project procurement management -** a subset of project management that includes procurement planning, source selection, enquiry, tender assessment, placement of purchase orders and contracts for goods and services, contract and purchase order administration and close-out in an effort to obtain goods and services from outside organizations.

**Project progress report -** formal statement that compares the project progress, achievements and expectations with the project plan.

**Project Quality Management.** A subset of project management including 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 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 closeout*.

**Project review calendar-** calendar of project review dates, meetings and issues of reports set against project week numbers or dates.

**Project Risk Management -** A subset of project management including 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 meeting milestones.

**Project Scope Management -** A subset of project management including 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 s*cope change control.*

**Project sponsor -** (1) The individual or body for whom the project is undertaken, the primary risk taker; (2) The individual representing the sponsoring body and to whom the project manager reports; or (3) A person or organization providing funds for the project.

**Project start-up -** the creation of the project team.

**Project Status Indicators**

* **Green =** On Track
* **Yellow =** Caution, at risk, behind schedule, over budget, action needed by project manager or by the steering committee.
* **Red =** Alert, project in serious trouble and almost certain to miss the target date or other project objectives. Immediate action needs to be taken and senior management needs to be involved to save the project.

**Project status report -** a report on the status of accomplishments and any variances to spending and schedule plans.

**Project strategy -** a comprehensive definition of how a project will be developed and managed.

**Project success/failure criteria -** the criteria by which the success or failure of a project may be judged.

**Project support office -** the central location of planning and project support functions. Often provides personnel and facilities for centralized planning, cost management, estimating, documentation control and sometimes procurement to a number of projects.

**Project team -** Set of individuals, groups and/or organizations that are responsible to the project manager for undertaking project tasks (this includes all contractors and consultants).

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

**Project technical plan -** a plan produced at the beginning of a project that addresses technical issues and strategic issues related to quality control and configuration management.

 **Project Time Management.** A subset of project management including 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.

**PS** Planned Start date

**Public relations -** an activity meant to improve the project organization’s environment in order to improve project performance and reception.

**QA** Quality Assurance

 **QC** Quality Control

**Qualitative risk analysis -** a generic term for subjective methods of assessing risks.

**Quality -** a trait or characteristic used to measure the degree of excellence of a product or service. Meeting customer’s needs.

**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 assurance plan -** a plan that guarantees a quality approach and conformance to all customer requirements for all activities in a project.

**Quality audit -** an official examination to determine whether practices conform to specified standards or a critical analysis of whether a deliverable meets quality criteria

**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 criteria -** the characteristics of a product that determines whether it meets certain requirements.

**Quality guide -** the quality guide describes quality and configuration management procedures and is aimed at people directly involved with quality reviews, configuration management and technical exceptions.

**Quality plan (for a project) -** the part of the project plan that concerns quality management and quality assurance strategies.

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

**Quality review -** a review of a product against an established set of quality criteria.

**RAM** Responsibility Assignment Matrix

**RDU** Remaining Duration

**Recurring costs -** expenditures against specific tasks that would occur on a repetitive basis. Examples are hire of computer equipment, tool maintenance, etc.

**Relationship -** a logical connection between two activities.

**Remaining Duration (RDU) -** The time needed to complete an activity or project. **Re-planning -** actions performed for any remaining effort within project scope. Often the cost and/or schedule variances are zeroed out at this time for history items.

**Request for change -** a proposal by the project manager for a change to the project as a result of a project issue report.

**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, but with more* specific application areas. **Requirements -** a negotiated set of measurable customer wants and needs.

**Requirements definition -** statement of the needs that a project has to satisfy.

**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** – Any personnel, material or equipment required for the performance of an activity.

**Resource aggregation -** summation of the requirements for each resource, and for each time period. Note: where the earliest start time of an activity is used alone, it is often termed an ‘early start’ aggregation. Similarly a ‘late start’ aggregation uses the latest start times.

**Resource allocation -** scheduling of activities and the resources required by those activities, so that predetermined constraints of resource availability and/or project time are not exceeded.

**Resource analysis -** the process of analyzing and optimizing the use of resources on a project. Often uses resource leveling and resource smoothing techniques.

**Resource assignment -** the work on an activity related to a specific resource.

**Resource availability -** the level of availability of a resource, which may vary over time.

**Resource breakdown structure -** a hierarchical structure of resources that enables scheduling at the detailed requirements level, and roll up of both requirements and availabilities to a higher level.

**Resource calendar -** a calendar that defines the working and non-working patterns for specific resources.

**Resource constraint -** limitation due to the availability of a resource.

**Resource accumulation -** process of accumulating the requirements for each resource to give the total required to date at all times throughout the project.

**Resource driven task durations -** task durations that are driven by the need for scarce resources.

**Resource histogram -** a view of project data in which resource requirements, usage, and availability are shown using vertical bars against a horizontal time scale.

**Resource level -** a specified level of resource units required by an activity per time unit.

**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 so predetermined resource levels are never exceeded. The final project schedule should always be resource-limited. Note: this may cause the minimum overall or specified project duration to be exceeded **Resource optimization -** a term for resource leveling and resource smoothing.

**Resource plan -** part of the definition statement stating how the program will be resource loaded and what supporting services, infrastructure and third party services are required.

**Resource Planning -** Determining what resources (people, equipment, materials) are needed in what quantities to perform project activities. **Resource requirement -** the requirement for a particular resource by a particular activity.

**Resource scheduling -** the process of determining dates on which activities should be performed in order to smooth the demand for resources, or to avoid exceeding stated constraints on these restraints.

**Resource smoothing -** scheduling of activities, within the limits of their float, so that fluctuations in individual resource requirements are minimized. (In smoothing, as opposed to resource leveling, the project completion date may not be delayed)

**Responsibility matrix -** a document correlating the work required by a work breakdown structure element to the functional organizations responsible for accomplishing the assigned tasks.

**Responsible organization -** a defined unit within the organization structure which is assigned responsibility for accomplishing specific tasks, or cost accounts.

**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.

**Retention -** a part of payment withheld until the project is completed in order to ensure satisfactory performance or completion of contract terms.

**Revenue cost -** expenditure charged to the profit and loss account as incurred or accrued due.

**RFP** Request For Proposal

**RFQ** Request For Quotation

**Risk –** The likelihood of the occurrence of an event expressed in terms of probability, impact, and a triggering event.

**Risk analysis -** systematic use of available information to determine how often specified events may occur and the magnitude of their likely consequences. (A technique designed to quantify the impact of uncertainty)

**Risk assessment -** the process of identifying potential risks, quantifying their likelihood of occurrence and assessing their likely impact on the project

**Risk avoidance -** planning activities to avoid risks that have been identified.

**Risk Evaluation -** process used to determine risk management priorities.

**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 management -** systematic application of policies, procedures, methods and practices to the tasks of identifying, analyzing, evaluating, treating and monitoring risk. (The process whereby decisions are made to accept known or assessed risks and /or the implementation of actions to reduce the consequences or probability of occurrence.)

**Risk management plan -** A document defining how project risk analysis and management is to be implemented in the context of a particular project.

**Risk matrix -** a matrix with risks located in rows and with impact and likelihood in columns.

**Risk prioritizing-** ordering of risks according first to their risk value, and then by which risks need to be considered for risk reduction, risk avoidance, and risk transfer.

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

**Risk Ranking -** allocating a classification to the impact and likelihood of a risk.

**Risk Reduction -** action taken to reduce the likelihood and impact of a risk.

**Risk Register -** formal record of identified risks (a body of information listing all the risks identified for the project, explaining the nature of each risk and recording information relevant to its assessment and management).

 **Risk response -** contingency plans to manage a risk should it materialize (action to reduce the probability of the risk arising, or to reduce the significance of its detrimental impact if it does arise).

**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.

**Risk, secondary -** risk that can occur as a result of treating a risk.

**Risk sharing -** diminution of a risk by sharing it with others, usually for some consideration.

**Risk transfer -** a contractual arrangement between two parties for delivery and acceptance of a product where the liability for the costs of a risk is transferred from one party to the other.

**Risk treatment -** selection and implementation of appropriate options for dealing with risk.

**Safety plan -** the standards and methods which minimize to an acceptable level the likelihood of accident or damage to people or equipment

**Schedule -** the timetable for a project. It shows how project tasks and milestones are planned out over a period of time.

**Schedule control -** controlling schedule changes.

**Schedule dates -** start and finish dates calculated with regard to resource or external constraints as well as project logic.

**Schedule performance index (SPI) -** ratio of work accomplished versus work planned, for a specified time period. The SPI is an efficiency rating for work accomplishment, comparing work accomplished to what should have been accomplished.

**Schedule variance (cost) -** the difference between the budgeted cost of work performed and the budgeted cost of work scheduled at any point in time.

**Scheduled finish -** the earliest date on which an activity can finish, having regard to resource or external constraints as well as project logic.

**Scheduled start -** the earliest date on which an activity can start, having regard to resource or external constraints as well as project logic.

**Scheduling -** scheduling is the process of determining when project activities will take place depending on defined durations and precedent activities. Schedule constraints specify when an activity should start or end based on duration, predecessors, external predecessor relationships, resource availability, or target dates.

**Scope -** the scope is the sum of work content of a project.

**Scope change -** any change in a project scope that requires a change in the project’s cost or schedule.

**Scope change control -** controlling changes to the scope.

**Scope verification -** ensuring all identified project deliverables have been completed satisfactorily.

**Scope of work -** a description of the work to be accomplished or resources to be supplied.

**Secondary risk -** the risk that may occur as a result of invoking a risk response or fall-back plan.

**S-Curve.** Graphic display of cumulative costs, labor hours, or other quantities, plotted against time. The name derives from the S-like 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 –** A time sequence of activities and events representing an operating timetable for performing activities and meeting milestones. 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)** – ratio of work accomplished versus work planned (BCWP/BCWS), for a specified time period. The SPI is an efficiency rating for work accomplishment, comparing work accomplished to what should have been accomplished. 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.

**Sequence -** sequence is the order in which activities will occur with respect to one another.

**SF** Scheduled Finish date or Start-to-Finish

**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 -** calculated time span during which an event has to occur within the logical and imposed constraints of the network, without affecting the total project duration. Note 1: it may be made negative by an imposed date. Note 2. the term slack is used as referring only to an event. See *PERT*.

**Slip chart -** a pictorial representation of the predicted completion dates of milestones (also referred to as trend chart)

**Slippage -** the amount of slack or float time used up by the current activity due to a delayed start or increased duration.

**Soft project -** a project that is intended to bring about change and does not have a physical end product.

**Soft skills -** soft skills include team building, conflict management and negotiation.

**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.

**SOW** Statement Of Work

**SPI** Schedule Performance Index

 **Splittable Activity -** activity that can be interrupted in order to allow its resources to be transferred temporarily to another activity.

**Sponsor** – The executive responsible for the overall project delivery including management, monitoring, and funding. They must be in a position to solve problems at a higher level when necessary for a project manager.

**SS** Scheduled Start date or Start-to-Start

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

**Stage -** a natural high level subsection of a project that has its own organizational structure, lifespan and manager.

**Stage payment -** payment part way through a project at some predetermined milestone.

 **Stakeholder -** Individuals and organizations involved in or affected by project activities. Project managers, sponsors, and clients/customers are all stakeholders.

**Start Date** – The date project work is officially scheduled to begin.

**Start event of a project -** event with succeeding, but no preceding activities.
Note: there may be more than one start event.

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

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

**Start-to-start lag -** start-to-start lag is the minimum amount of time that must pass between the start of one activity and the start of its successor(s). This may be expressed in terms of duration or percentage.

**Starting activity -** a starting activity has no predecessors. It does not have to wait for any other activity to start.

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

**Status** – The comparison of actual against planned progress to determine variance and corrective action. Possible statuses are: Active, Approved, Cancelled, Completed, On-hold, and Pending.

**Status Report** – A report completed and distributed to all stakeholders describing the project status. Status reports should be used to control the project and to keep management informed of project status.

**Steering Committee** – A group of high-level stakeholders responsible for providing guidance on overall strategic direction and represent the goals of the customer/client.

 **Steering group -** a body established to monitor the project and give guidance to the project sponsor or project manager.

**Subcontract -** a contractual document which legally transfers the responsibility and effort of providing goods, services, data, or other hardware, from one firm to another.

**Subcontractor -** an organization that supplies goods or services to a supplier.

**Subnet or Subnetwork -** a division of a project network diagram representing a subproject.

**Subproject -** a group of activities represented as a single activity within a higher level of the overall project.

**Success criteria -** criteria to be used for judging if the project is successful.

**Success factors -** critical factors that will ensure achievement of success criteria.

**Successor -** a successor is an activity whose start or finish depends on the start or finish of a predecessor activity.

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

**Sunk costs -** unavoidable costs (even if the project were to be terminated)

**Super-critical activity -** an activity that is behind schedule is considered to be super-critical. If it has been delayed to a point where its float is calculated to be a negative value.

**Supplier -** includes contractors, consultants and any organization that supplies services or goods to the customer.

**SV** Schedule Variance

**System -** the complete technical output of the project including technical products.

**Systems and procedures -** Systems and procedure detail the standard methods, practices, and procedures of handling frequently occurring events within the project.

**Systems management -** management that includes the prime activities of systems analysis, systems design and engineering and systems development.

 **Target Completion Date (TC).** An imposed date which constrains or otherwise modifies the *network analysis*. **Target finish Date** – The date planned to finish work on a project, initiative, or activity.

 **Target Schedule.** See *baseline*.

**Target start date** – The planned date for start of work on a project, initiative, or activity.

 **Task.** See *activity*.

**TC** Target Completion date **Team Development.** Developing individual and group skills to enhance project performance. **Team Members.** See *project team members*. **TF** Total Float or Target Finish date

**Time-Scaled Network Diagram.** Any *project network diagram* drawn in such a way that thepositioning and length of the activity represents its duration. Essentially, it is a bar chart that includes *network logic*. **Target Completion Date -** a date which contractors strive towards for completion of the activity.

**Target Date -** date imposed on an activity or project by the user. There are two types of target dates; target start dates, and target finish dates.

**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.

**Target start date -** the date planned to start work on an activity.

**Task -** the smallest indivisible part of an activity when it is broken down to a level best understood and performed by a specific person or organization.

**Team -** a team is made up of two or more people working interdependently towards a common goal and a shared reward.

**Team building -** the ability to gather the right people to join a project team and get them working together for the benefit of a project.

**Team development -** developing skills, as a group and individually, that enhance project performance.

**Team leader -** person responsible for leading a team.

**Technical assurance -** the monitoring of the technical integrity of products.

**Technical guide -** a document that guides managers, team leaders and technical assurance coordinators on planning the production of products.

**Technical products -** products produced by a project for an end user.

**Tender -** a document proposing to meet a specification in a certain way and at a stated price (or on a particular financial basis), an offer of price and conditions under which the tenderer is willing to undertake work for the client.

**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

**Terms of reference -** a specification of a team member’s responsibilities and authorities within the project.

**Tied activities -** activities that have to be performed sequentially or within a predetermined time of each other

**Time analysis -** the process of calculating the early and late dates for each activity on a project, based on the duration of the activities and the logical relations between them.

**Time based network -** a linked bar chart, a bar chart that shows the logical and time relationships between activities.

**Time limited scheduling -** scheduling of activities, so that the specified project duration, or any imposed dates, are not exceeded.
Note: this may cause the envisaged resource levels to be exceeded.

**Time-limited resource scheduling -** the production of scheduled dates in which resource constraints may be relaxed in order to avoid any delay in project completion.

**Time now -** specified date from which the forward analysis is deemed to commence (The date to which current progress is reported. Sometimes referred to as the status date because all progress information entered for a project should be correct as of this date)

**Time recording -** the recording of effort expended on each activity in order to update a project plan.

**Time-scaled logic drawing -** a drawing that displays the logical connection between activities in the context of a timescale in which each horizontal position represents a point in time.

**Time-scaled network diagram -** a project network diagram drawn so that the positioning of the activity represents the schedule.

**Time sheet -** a means of recording the actual effort expended against project and non-project activities.

**Top down cost estimating -** the total project cost is estimated based on historical costs and other project variables and then subdivided down to individual activities.

**Total Float (TF) -** time by which an activity may be delayed or extended without affecting the total project duration (or violating a target finish date). See *float*

**Total Quality Management (TQM) -** a strategic, integrated management systems for customer satisfaction that guides all employees in every aspect of their work.

**TQM** Total Quality Management

**Transit time -** dependency link that requires time and no other resources. It may be a negative time

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

**TS** Target Start date

**Turnaround Report -** a report created specially for the various responsible managers to enter their progress status against a list of activities that are scheduled to be in progress during a particular time window.

**Unlimited schedule -** infinite schedule, schedule produced without resource constraint.

**Users -** the group of people who are intended to benefit from the project.

**Value -** a standard, principle, or quality considered worthwhile or desirable.

**Value management -** a structured means of improving business effectiveness that includes the use of management techniques such as value engineering and value analysis.

**Value engineering -** a technique for analyzing qualitative and quantitative costs and benefits of component parts of a proposed system.

**Value planning -** a technique for assessing, before significant investment is made, the desirability of a proposal based on the value that will accrue to the organization from that proposal.

**Variance -** a discrepancy between the actual and planned performance on a project, either in terms of schedule or cost.

**Variance at completion -** the difference between budget at completion and estimate at completion.

**Variation -** a change in scope or timing of work which a supplier is obliged to do under a contract.

**Variation orders -** the document authorizing an approved technical change or variation.

 **WBS** Work Breakdown Structure

**What-if analysis -** the process of evaluating alternative strategies.

**What-if simulation - c**hanging the value of the parameters of the project network to study its behavior under various conditions of its operation.

**Work -** the total number of hours, people or effort required to complete a task.

**Work breakdown code -** a code that represents the ‘family tree’ of an element in a work breakdown structure.

**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 that organizes and defines the total work scope of the project. Each descending level represents an increasingly detailed definition of the project work.

 **Work Item –** See *activity*.

**Workload -** workload is the amount of work units assigned to a resource over a period of time.

 **Work Package -** A group of related tasks that are defined at the same level within a work breakdown structure. (In traditional cost/schedule systems, the criteria for defining work packages is as follows: 1) Each work package is clearly distinguishable from all other work packages, 2) Each work package has a scheduled start and finish date, 3) Each work package has an assigned budget that is time-phased over the duration of the work package, 4) Each work package either has a relatively short duration, or can be divided into a series of milestones whose status can be objectively measured, or 5) Each work package has a schedule that is integrated with higher-level schedules).

**Work Units -** work units provide the measurement units for resources. For example, people as a resource can be measured by the number of hours they work.

**Earned Value (EV) –** A measure of the value of completed work. Earned value uses original estimates and progress-to-date to show whether the actual costs incurred are on budget and whether the tasks are ahead or behind the baseline schedule.

**Zero Float -** zero float is a condition where there is no excess time between activities. An activity with zero float is considered a critical activity. If the duration of any critical activity is increased (the activity slips), the project finish date will slip