



# Ithuta JV

Holhuta Ka Tsebo  
Learning from Experience

## PROJECT MANAGEMENT GLOSSARY

### Acceptance Criteria

Those criteria, including performance requirements and essential conditions, which must be met before project deliverables are accepted.

### Activity

(1) A component of work performed during the course of a project. See also schedule activity.

(2) A task or set of tasks that are carried out in order to create an assignable deliverable. Task and activity are sometimes used interchangeably

### Actual Cost (AC)

Total costs actually incurred and recorded in accomplishing work performed during a given time period for a schedule activity or work breakdown structure component.

### Actual Finish Date (AF)

The point in time that work actually ended on a schedule 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 a schedule activity.

### Alignment

Building a common understanding of the project and developing a common view of what the solution will and will not address.

### Approved Change Request

A change request that has been processed through the integrated change control process and approved.

### **Assumptions**

Assumptions are factors that, for planning purposes, are considered to be true, real, or certain without proof or demonstration. Assumptions affect all aspects of project planning, and are part of the progressive elaboration of the project. Project teams frequently identify, document, and validate assumptions as part of their planning process. Assumptions generally involve a degree of risk.

### **Bar Chart**

See Gantt Chart

### **Baseline**

The approved time phased plan (for a project, a work breakdown structure component, a work package, or a schedule activity), plus or minus approved project scope, cost, schedule, and technical changes. Generally refers to the current baseline, but may refer to the original or some other baseline. Usually used with a modifier.

### **Bottom-up Estimating**

A method of estimating the cost of a task using first principles.

### **Budget**

The approved estimate for the project or any work breakdown structure component or any schedule activity.

### **Budget at Completion (BAC)**

The sum of all budget values established for the work to be performed on a project or a work breakdown structure component or a schedule activity. The total planned value of the project.

### **Change Control**

- (1) Identifying, documenting, approving, or rejecting, and controlling changes to the project baselines.
- (2) The process of accepting or rejecting changes to the project's baselines. Lack of change control is a common cause of scope creep

### **Change Control System**

A collection of formal, documented procedures that define how project deliverables and documentation will be controlled, changed, and approved.

### **Change Order**

A written document between the owner and the contractor signed by the owner and the contractor authorizing a change in the work or an adjustment in the contract sum or the contract time. A change order may be signed by the architect or engineer, provided they have written authority from the owner for such procedure and that a copy of such written authority is furnished to the contractor upon request. The contract sum and the contract time may be changed only by a change order. A change order may be in the form of additional compensation or time, or less compensation or time (known as a deduction from the contract); the amount deducted from the contract

### **Change Request**

Requests to expand or reduce the project scope, modify policies, processes, plans, or procedures, modify costs or budgets, or revise schedules. Requests for a change can be direct or indirect, externally or internally initiated, legally or contractually mandated, or optional. Only formal, documented, requested changes are processed and only approved change requests are implemented.

### **Claim**

A request, demand, or assertion of rights by a seller against a buyer, or vice versa, for consideration, compensation, or payment under the terms of a legally binding contract, such as for a disputed change.

### **Closure**

The process of finalizing all activities across all of the project process groups to formally close the project or phase.

### **Communication Management Plan**

The document that describes: the communications needs and expectations for the project; how and in what format information will be communicated; when and where each communication will be made; and who is responsible for providing each type of communication. A communication management plan can be formal or informal, highly detailed or broadly framed, based on the requirements of the project stakeholders. The communication management plan is contained in, or is a subsidiary plan of, the project management plan.

### **Configuration Management System**

A subsystem of the overall project management system. It is a collection of formal documented procedures used to apply technical and administrative direction and surveillance to: identify and document the functional and physical characteristics of a product, result, service, or component; control any changes to such characteristics; record and report each change and its implementation status; and support the audit of the products, results, or components to verify conformance to requirements. It includes the documentation, tracking systems, and defined approval levels necessary for authorizing and controlling changes. In most application areas, the configuration management includes the change control system.

### **Contingency Allowance**

As a result of risk analysis, money or time may be set aside as contingency, which may be used in the event of risks occurring. Contingency allowance provides for variations, which may occur in the expected values of elements of cost or schedule, but not scope or quality. (Note: contingency should not be shown in the plan as separate items and not hidden in activities as 'an extra 10%' on duration or cost.)

### **Contingency Plan**

A fallback position or workaround in the event of an adverse occurrence or risk event on a project.

### **Contract**

A contract is a mutually binding agreement, which obligates the seller to provide the specified product or service or result, and obligates the buyer to pay for it.

### **Contract Documents**

A term used to represent all executed agreements between the owner and contractor; any general, supplementary, or other contract conditions; the drawings and specifications; all bidding documents, less bidding information, plus pre-award addenda issued prior to execution of the contract and post-award Change Orders; and any other items specifically stipulated as being included in the contract documents, which collectively form the contract between the contractor and the owner.

### **Contract Management Plan**

The document that describes how a specific contract will be administered, and can include items such as required documentation delivery and performance requirements.

### **Corrective Action**

Documented direction for executing the project work to bring expected future performance of the project work in line with the project management plan.

### **Cost**

The monetary value or price of a project activity or component that includes the monetary worth of the resources required to perform and complete the activity or component, or to produce the component. A specific cost can be composed of a combination of cost components, including direct labor hours, other direct costs, indirect labor hours, other indirect costs, and purchased price. (However, in the earned value management methodology, in some instances, the term cost can represent only labor hours without conversion to monetary worth.) See also actual cost and estimate.

### **Cost/Benefit**

A criterion for comparing programs, projects, and alternatives when benefits or a given objective.

### **Cost Budgeting**

The process of aggregating the estimated cost estimates of individual activities or work packages to establish a cost baseline.

### **Cost Control**

The process of influencing the factors that creates variances, and controlling changes to the project budget.

### **Cost Estimating**

The process of developing an approximation of the cost of the resources needed to complete project activities.

### **Cost Management Plan**

The document that sets out the format and establishes the activities and criteria for planning, structuring, and controlling the project costs. A cost management plan can be formal or informal, highly detailed or broadly framed, based on the requirements of the project stakeholders. The cost management plan is contained in, or is a subsidiary plan of, the project management plan.

### **Cost Variance (CV)**

A measurement of cost performance on a project. It is the algebraic difference between the earned value (EV) and actual cost (AC).  $CV = EV - AC$ . A positive value indicates a favorable condition and a negative value indicates an unfavorable condition.

### **Critical Activity**

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

### **Critical Chain Method ]**

A schedule network analysis technique that modifies the project schedule to account for limited resources. The critical chain method mixes deterministic and probabilistic approaches to schedule network analysis.

### **Critical Path**

Generally, but not always, the sequence of schedule activities that determines the duration of the project. Generally, it is the longest path through the project. However, a critical path can end, for example, on a schedule milestone that is in the middle of the project schedule and that has a finish-no-later-than imposed date schedule constraint. See also critical path method.

### **Critical Path Method (CPM)**

A schedule network analysis technique used to determine the amount of scheduling flexibility (the least amount of float) on various logical network paths in the project schedule network, and to determine the minimum total project duration. Early start and finish date are calculated by means of a forward pass using a specified start date. Late start and finish dates are calculated by means of a backward pass, starting from a specified completion date, which sometimes is the project early finish date determined during the forward pass calculation.

### **Dependency**

A relation between activities, such that one requires input from the other.

### **Direct Costs**

The costs directly attributed to a work-scope, such as labor, material, equipment, and subcontracts, but not the cost of operations overhead and the labor, material, equipment, and subcontracts expended in support of the undertaking. Direct Costs, Hard Costs, and Construction Costs are synonymous.

### **Direct Labor Costs**

Costs accruing from expended labor excluding the bonus portion of overtime, insurances, and payroll taxes.

### **Direct Material Costs**

Costs accruing from material acquisition, including purchase price, freight, and taxes.

### **Duration (DU or DUR)**

The number of work periods (not including holidays or other nonworking periods) required to complete a schedule activity or work breakdown structure component. Usually expressed as workdays or workweeks. Sometimes incorrectly equated with elapsed time. Contrast

### **Earned Value (EV)**

The value of completed work expressed in terms of the approved budget assigned to that work for a schedule activity or work breakdown structure component. Also referred to as the budgeted cost of work performed.

### **Earned Value Management (EVM)**

A management methodology for integrating scope, schedule, and resources, and for objectively measuring project performance and progress. Performance is measured by determining the budgeted cost of work performed (i.e., earned value) and comparing it to the actual cost of work performed (i.e., actual cost). Progress is measured by comparing the earned value to the planned value.

## **Estimate**

A quantitative assessment of the likely amount or outcome. Usually applied to project costs, resources, effort, and durations and is usually preceded by a modifier (i.e., preliminary, conceptual, feasibility, order-of-magnitude, definitive). It should always include some indication of accuracy (e.g., ±x percent).

## **Estimate At Completion (EAC)**

The expected total cost of a schedule activity, a work breakdown structure component, or project when the defined scope of work will be completed. EAC is equal to the actual cost (AC) plus the estimate to complete (ETC) for all of the remaining work.  $EAC = AC + ETC$ . The EAC may be calculated based on performance to date or estimated by the project team based on other factors, in which case it is often referred to as the latest revised estimate. See also earned value technique and estimate to complete.

## **Estimate To Complete (ETC)**

The expected additional cost needed to complete all the remaining work for a schedule activity, work breakdown structure component, or the project. See also earned value technique and estimate at completion.

## **Finish Date**

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

## **Float**

Also called slack.

## **Free Float (FF)**

(1) The amount of time that a schedule activity can be delayed without delaying the early start of any immediately following schedule activities.

(2) Time an *activity* can be delayed beyond its early dates without delaying any *successor activity* beyond its early dates.

(3) Free float =  $[(ES \text{ of following activity}) - (ES \text{ of present activity})] - (Duration \text{ of present activity})$ .

## **Independent Float**

Degree of flexibility, which an activity has, that does not affect the float available on any preceding or succeeding activities.

## **Negative Float**

Time by which the start or finish date of an activity exceeds a required or late date.

**Positive Float**

Time available to complete non-critical activities or work items without affecting total project duration.

**Total Float (TF)**

The total amount of time that a schedule activity may be delayed from its early start date without delaying the project finish date, or violating a schedule constraint. Calculated using the critical path method technique and determining the difference between the early finish dates and late finish dates.

**Zero Float**

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.

**Flowcharting**

The depiction in a diagram format of the inputs, process actions, and outputs of one or more processes within a system.

**Forecasts**

Estimates or predictions of conditions and events in the project's future based on information and knowledge available at the time of the forecast. Forecasts are updated and reissued based on work performance information provided as the project is executed. The information is based on the project's past performance and expected future performance, and includes information that could impact the project in the future, such as estimate at completion and estimate to complete.

**Gantt Chart**

A chart using timelines and other symbols that illustrate multiple time-based activities or projects on a horizontal time scale. Also referred to as a bar chart. Activities are listed, with other tabular information, on the left side. Activity durations are shown in the form of horizontal bars. Invented by Henry Gantt. See also bar chart.

**Initiate**

The process of formally recognizing that a new project exists, which includes transition of projects from one phase to another such as Scoping to Design or PS&E to Construction.

**Input [Process Input]**

Any item, whether internal or external to the project, that is required by a process before that process proceeds. May be an output from a predecessor process

### **Knowledge**

Knowing something with the familiarity gained through experience, education, observation, or investigation; it is also understanding a process, practice, or technique, or how to use a tool

### **Lessons Learned**

The learning gained from the process of performing the project. Lessons learned may be identified at any point. Also considered a project record, to be included in the lessons learned knowledge base.

### **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 persons assigned to the project.

### **Methodology**

A system of practices, techniques, procedures, and rules used by those who work in a discipline.

### **Milestone**

A significant point or event in the project. See also schedule milestone.

### **Mission Statement**

Derived from the project vision, an action statement that is feasible in time and place and compatible with the pursuit of the vision. A brief summary, approximately one or two sentences, that sums up the background, purposes, and benefits of the project. A statement that answers three questions: (1) What do we do? (2) For whom do we do it? (3) How do we go about it?

### **Monitor**

Collect project performance data with respect to a plan, produce performance measures, and report and disseminate performance information.

### **Monitor and Control Project Work**

The process of monitoring and controlling the processes required to initiate, plan, execute, and close a project to meet the performance objectives defined in the project management plan and project scope statement.

### **Monitoring and Controlling Processes**

Those processes performed to measure and monitor project execution so that corrective action can be taken when necessary to control the execution of the phase or project.

### **Monte Carlo Analysis**

A technique that computes, or iterates, the project cost or project schedule many times using input values selected at random from probability distributions of possible costs or durations, to calculate a distribution of possible total project cost or completion dates.

### **Network Diagram**

A schematic display of the sequential and logical relationships of the activities that comprise the project. One popular drawing convention is called precedence diagramming. A view of project data in which the project logic is depicted graphically. Frequently called a flowchart, PERT chart, or logic diagram.

### **Network Logic**

The collection of schedule activity dependencies that makes up a project schedule network diagram.

### **Network Loop**

A schedule network path that passes the same node twice. Network loops cannot be analyzed using traditional schedule network analysis techniques such as the critical path method.

### **Node**

One of the defining points of a schedule network; a junction point joined to some or all of the other dependency lines. See precedence diagramming method.

### **Objective**

Something toward which work is to be directed; a strategic position to be attained or purpose to be achieved; a result to be obtained; a product to be produced; or a service to be performed.

### **Organization Chart (Organogram)**

A method for depicting interrelationships among a group of persons working together toward a common objective.

### **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 for activity parameters, such as scope, cost, budget, and duration. This technique can produce higher levels of accuracy depending upon the sophistication and the underlying data built into the model. An example for the cost parameter is multiplying the planned quantity of work to be performed by the historical cost per unit to obtain the

### **Performance Reporting**

The process of collecting and distributing performance information. This includes status reporting, progress measurement, and forecasting.

### **Planned Value (PV)**

The authorized budget assigned to the scheduled work to be accomplished for a schedule activity or work breakdown structure component. Also referred to as the budgeted cost of work scheduled.

### **Planning Processes [Process Group]**

Those processes performed to define and mature the project scope, develop the project management plan, and identify and schedule the project activities that occur within the project.

### **Portfolio Management [Technique]**

The centralized management of one or more portfolios, which includes identifying, prioritizing, authorizing, managing, and controlling projects, programs, and other related work, to achieve specific strategic business objectives.

### **Precedence Diagramming Method (PDM)**

A schedule network diagramming technique in which schedule activities are represented by boxes (or nodes). Schedule activities are graphically linked by one or more logical relationships to show the sequence in which the activities are to be performed.

### **Precedence Relationship**

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

### **Predecessor Activity**

The schedule activity that determines when the logical successor activity can begin or end.

### **Probability**

The likelihood of occurrence. In the context of project risk, a measure of the likelihood of a risk occurring.

**Probability and Impact Matrix**

A common way to determine whether a risk is considered low, moderate, or high by combining the two dimensions of a risk: its probability of occurrence, and its impact on objectives if it occurs.

**Procurement Documents**

Those documents utilized in bid and proposal activities, which include buyer's Invitation for Bid, Invitation for Negotiations, Request for Information, Request for Quotation, Request for Proposal, and seller's responses.

**Procurement Management Plan**

The document that describes how procurement (the processes from developing procurement documentation through contract closure) will be managed.

**Program**

A group of related projects managed in a coordinated way to obtain benefits and control not available from managing them individually. Programs may include elements of related work outside the scope of the discrete projects in the program.

**Program Evaluation and Review Technique ("PERT")**

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 time estimate. These are used to determine the average completion time, which is used to figure the critical path and completion time for the project.

**Program Management**

The management of a series of related projects designed to accomplish broad goals, to which the individual projects contribute, which are typically executed over an extended period of time (i.e., a biennium).

**Program Management Office (PMO)**

The centralized management of a particular program or programs such that corporate benefit is realized by the sharing of resources, methodologies, tools, and techniques, and related high-level project management focus. See also project management office.

**Progress Milestones**

Those milestones identified as the basis for making progress payments

**Progress Payment**

Partial payments on a contractor's contract amount, periodically paid by the owner for work accomplished by the contractor to date, determined by calculating the difference between the completed work and materials stored and a predetermined schedule of values or unit costs.

**Progress Schedule**

A line diagram showing proposed and actual starting and completion times of the respective project activities.

**Project**

A temporary endeavor undertaken to create a unique product, service, or result.

**Project Budget**

The amount and distribution of money allocated to a project.

**Project Calendar**

A calendar of working days or shifts that establishes those dates on which schedule activities are worked, and nonworking days that determine those dates on which schedule activities are idle. Typically defines holidays, weekends, and shift hours. See also resource calendar.

**Project Charter**

A document issued by the project initiator or sponsor that formally authorizes the existence of a project, and provides the project manager with the authority to apply organizational resources to project activities.

**Project Communication Plan**

A plan, which may range from a formal Contract/Responsibility Chart with detailed instructions on a large project, to an informal list of contact names, telephone numbers, and schedule of meetings on a small project.

**Project Communications Management**

A subset of project management that includes the processes required to ensure timely and appropriate generation, collection and dissemination, storage and ultimate disposition of project information. It consists of communications planning, information distribution, performance reporting, and administrative closure.

**Project Cost**

All costs for a specific project, including costs for land, professionals, construction, furnishings, fixtures, equipment, financing, and any other project-related costs.

### **Project Cost Management**

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

### **Project Cost Management**

The process of placing responsibility on the designers and implementers to perform within established budgets. Actual and budget project costs are compared. Two principles apply: (1) There must be a basis for comparison; and (2) Only future costs can be controlled.

### **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**

Launching a process that can result in the authorization and scope definition of a new 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 integrated change control.

### **Project Life Cycle**

A collection of generally sequential project phases whose names and numbers are determined by the control needs of the organization or organizations involved in the project. A life cycle can be documented with a methodology.

### **Project Management (PM)**

The application of knowledge, skills, tools, and techniques to project activities to meet the project requirements.

### **Project Management Body of Knowledge (PMBOK®)**

An inclusive term that describes the sum of knowledge within the profession of project management. As with other professions, such as law, medicine, and accounting, the body of knowledge rests with the practitioners and academics that apply and advance it. The complete project management body of knowledge includes proven traditional practices that are widely applied and innovative practices that are emerging in the profession. The body of knowledge includes both published and unpublished material. The PMBOK is constantly evolving.

### **Project Management Information System (PMIS)**

An information system consisting of the tools and techniques used to gather, integrate, and disseminate the outputs of project management processes. It is used to support all aspects of the project from initiating through closing, and can include both manual and automated systems.

### **Project Management Knowledge Area**

An identified area of project management defined by its knowledge requirements and described in terms of its component processes, practices, inputs, outputs, tools, and techniques.

### **Project Management Office (PMO)**

An organizational body or entity assigned various responsibilities related to the centralized and coordinated management of those projects under its domain. The responsibilities of a PMO can range from providing project management support functions to actually being responsible for the direct management of a project. See also program management office.

### **Project Management Plan**

A formal, approved document that defines how the project is executed, monitored, and controlled. It may be summary or detailed and may be composed of one or more subsidiary management plans and other planning documents.

### **Project Management Process**

One of the 44 processes, unique to project management and described in the PMBOK® Guide.

### **Project Management Process Group**

A logical grouping of the project management processes described in the PMBOK® Guide. The project management process groups include initiating processes; planning processes; executing processes; monitoring and controlling processes; and closing processes. Collectively, these five groups are required for any project, have clear internal dependencies, and must be performed in the same sequence on each project, independent of the application area or the specifics of the applied project life cycle. Project management process groups are not project phases.

**Project Management Professional (PMP®)**

A person certified as a PMP® by the Project Management Institute (PMI®).

**Project Management Software**

A class of computer software applications specifically designed to aid the project management team with planning, monitoring, and controlling the project, including: cost estimating, scheduling, communications, collaboration, configuration management, document control, records management, and risk analysis.

**Project Management System**

The aggregation of the processes, tools, techniques, methodologies, resources, and procedures to manage a project. The system is documented in the project management plan and its content will vary depending upon the application area, organizational influence, complexity of the project, and the availability of existing systems. A project management system, which can be formal or informal, aids a project manager in effectively guiding a project to completion. A project management system is a set of processes and the related monitoring and control functions that are consolidated and combined into a functioning, unified whole.

**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)**

- (1) The person assigned by the performing organization to achieve the project objectives.
- (2) Any person assigned to lead a team toward completion of a project. A project manager applies specialized knowledge, skills, tools, and techniques in order to meet customer expectations of a project.
- (3) The person who heads up the project team and has the authority and responsibility for conducting the project and meeting project objectives through project management.
- (4) A qualified individual or firm authorized by the owner to be directly responsible for the day-to-day management and administration, and for coordinating time, equipment, money, tasks, and people for all or specified portions of a specific project.

**Project Network Diagram**

Any schematic display of the logical relationship of project activities. (See precedence diagram.)

**Project Organization Chart**

A document that graphically depicts the project team members and their interrelationships for a specific project.

### **Project Plan**

A management summary document giving the essentials of a project in terms of its objectives, justification, and how the objectives are to be achieved. It should describe how all the major activities under each project management function are to be accomplished, including overall project control.

### **Project Phase**

A collection of logically-related project activities, usually culminating in the completion of a major deliverable. Project phases (also called phases) are mainly completed sequentially, but can overlap in some project situations. Phases can be subdivided into subphases and then components; this hierarchy, if the project or portions of the project are divided into phases, is contained in the work breakdown structure. A project phase is a component of a project life cycle. A project phase is not a project management process group

### **Project Process Groups**

The five process groups required for any project that have clear dependencies and that are required to be performed in the same sequence on each project, independent of the application area or the specifics of the applied project life cycle. The process groups are initiating, planning, executing, monitoring and controlling, and closing.

### **Project Procurement Management**

A subset of project management that includes the processes required to acquire goods and services to attain project scope from outside the performing organization. It consists of procurement, planning, solicitation planning, solicitation, source selection, contract administration, and contract closeout.

### **Project Quality Management**

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

### **Project Risk Management**

The process of identification, assessment, allocation, and management of project risks.

### **Project Risk Management**

Risk Management is the systematic process of identifying, analyzing, and responding to project risk. It includes maximizing the probability and consequences of positive events and minimizing the probability and consequences of events adverse to project objectives. It includes the processes of risk management planning, risk identification, qualitative risk analysis, quantitative risk analysis, risk response planning, and risk monitoring and control.

### **Project Risks**

Factors that may cause a failure to meet the project's objectives. Risks may be associated with opportunities. Risk is the product of the probability of an event occurring, times its impact if it did. Risks exist as a consequence of uncertainty.

### **Project Schedule**

The planned dates for performing schedule activities and the planned dates for meeting schedule milestones.

### **Project Scope**

The work that must be performed to deliver a product, service, or result with the specified features and functions.

### **Project Scope Management**

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

### **Project Scope Management Plan**

The document that describes how the project scope will be defined, developed, and verified; how the work breakdown structure will be created and defined; and provides guidance on how the project scope will be managed and controlled by the project management team. It is contained in or is a subsidiary plan of the project management plan. The project scope management plan can be informal and broadly framed, or formal and highly detailed, based on the needs of the project

### **Project Scope Statement**

The narrative description of the project scope, including major deliverables, project objectives, project assumptions, project constraints, and a statement of work, that provides a documented basis for making future project decisions and for confirming or developing a common understanding of project scope among the stakeholders. The definition of the project scope — what needs to be accomplished.

### **Project Summary Work Breakdown Structure (PSWBS)**

A work breakdown structure for the project that is only developed down to the subproject level of detail within some legs of the WBS, and where the detail of those subprojects are provided by use of contract work breakdown structures.

### **Project Sponsor**

The owner of the project business case, representing the funder's interests.

### **Project Team**

All the project team members, including the project management team, the project manager and, for some projects, the project sponsor.

### **Project Team Directory**

A documented list of project team members, and their project roles and communication information.

### **Project Team Members**

The persons who report either directly or indirectly to the project manager, and who are responsible for performing project work as a regular part of their assigned duties.

### **Project Time Management**

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

### **Project Vision**

The picturing of the project's deliverable as the solution of the stated need or problem. A "word picture" describing the Project Vision.

(1) The degree to which a set of inherent characteristics fulfills requirements.

(2) The totality of features and characteristics of a product or service that bear on its ability to satisfy stated or implied needs.

### **Quality Assurance (QA)**

All those planned and systematic actions necessary to provide adequate confidence that a product or service will satisfy given requirements for quality.

### **Quality Assurance (QA)**

The process of applying the planned, systematic quality activities (such as audits or peer reviews) to ensure that the project employs all processes needed to meet requirements.

**Quality Control (QC)**

The process of monitoring specific project results to determine whether they comply with relevant quality standards, and identifying ways to eliminate causes of unsatisfactory performance.

**Quality Management Plan**

The quality management plan describes how the project management team will implement the performing organization's quality policy. The quality management plan is a component or a subsidiary plan of the project management plan. The quality management plan may be formal or informal, highly detailed, or broadly framed, based on the requirements of the project.

**Request for Information (RFI)**

A type of procurement document whereby the buyer requests a potential seller to provide various pieces of information related to a product or service or seller capability.

**Request for Proposal (RFP)**

A type of procurement document used to request proposals from prospective sellers of products or services. In some application areas, it may have a narrower or more specific meaning.

**Residual Risk**

A risk that remains after risk responses have been implemented.

**Resource**

Skilled human resources (specific disciplines either individually or in crews or teams), equipment, services, supplies, commodities, material, budgets, or funds.

**Resource Breakdown Structure (RBS)**

A hierarchical structure of resources by resource category and resource type used in resource leveling schedules and to develop resource-limited schedules, and which may be used to identify and analyze project human resource assignments.

**Resource Leveling**

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

**Resource-Limited Schedule**

A project schedule whose schedule activity, scheduled start dates and scheduled finish dates reflect expected resource availability. A resource-limited schedule does not have any early or late start or finish dates. The resource-limited schedule total float is determined by calculating the difference between the critical path method late finish date and the resource-limited scheduled finish date. Sometimes called resource constrained schedule. See also resource leveling.

### **Resource Planning**

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

### **Responsibility**

The duties, assignments, and accountability for results associated with a designated position in the organization.

### **Responsibility Assignment Matrix (RAM)**

A structure that relates the project organizational breakdown structure to the work breakdown structure to help ensure that each component of the project's scope of work is assigned to a responsible person

### **Risk**

An uncertain event or condition that, if it occurs, has a positive or negative effect on a project's objectives. See also risk category and risk breakdown structure.

### **Risk Analysis**

An examination of risk areas or events to assess the probable consequences for each event (or combination of events in the analysis), and determine possible options for avoidance.

### **Risk Avoidance**

A risk response planning technique for a threat that creates changes to the project management plan that are meant to either eliminate the risk or to protect the project objectives from its impact. Generally, risk avoidance involves relaxing the time, cost, scope, or quality

### **Risk Breakdown Structure (RBS)**

A hierarchically-organized depiction of the identified project risks arranged by risk category and subcategory that identifies the various areas and causes of potential risks. The risk breakdown structure is often tailored to specific project types.

### **Risk Category**

A group of potential causes of risk. Risk causes may be grouped into categories such as technical, external, organizational, environmental, or project management. A category may include subcategories such as technical maturity, weather, or aggressive estimating. See also risk breakdown structure.

### **Risk Database**

A repository that provides for collection, maintenance, and analysis of data gathered and used in the risk management processes.

### **Risk Identification**

The process of determining which risks might affect the project and documenting their characteristics.

### **Risk Management**

An organized assessment and control of project risks.

### **Risk Management Plan**

The document describing how project risk management will be structured and performed on the project. It is contained in or is a subsidiary plan of the project management plan. The risk management plan can be informal and broadly framed, or formal and highly detailed, based on the needs of the project. Information in the risk management plan varies by application area and project size. The risk management plan is different from the risk register that contains the list of project risks, the results of risk analysis, and the risk responses.

### **Risk Management Planning**

The process of deciding how to approach, plan, and execute risk management activities for a project.

### **Risk Mitigation**

A risk response planning technique associated with threats that seeks to reduce the probability of occurrence or impact of a risk to below an acceptable threshold

### **Risk Monitoring and Control**

The process of tracking identified risks, monitoring residual risks, identifying new risks, executing risk response plans, and evaluating their effectiveness throughout the project life cycle.

### **Risk Register**

The document containing the results of the qualitative risk analysis, quantitative risk analysis, and risk response planning. The risk register details all identified risks, including description, category, cause, probability of occurring, impact (s) on objectives, proposed responses, owners, and current status. The risk register is a component of the project management plan.

### **Risk Response Planning**

The process of developing options and actions to enhance opportunities and to reduce threats to project objectives.

### **Schedule Activity**

A discrete scheduled component of work performed during the course of a project. A schedule activity normally has an estimated duration, an estimated cost, and estimated resource requirements. Schedule activities are connected to other schedule activities or schedule milestones with logical relationships, and are decomposed from work packages.

### **Schedule Control**

The process of controlling changes to the project schedule.

### **Schedule Development**

The process of analyzing schedule activity sequences, schedule activity durations, resource requirements, and schedule constraints to create the project schedule.

### **Schedule Management Plan**

The document that establishes criteria and the activities for developing and controlling the project schedule. It is contained in, or is a subsidiary plan of, the project management plan. The schedule management plan may be formal or informal, highly detailed or broadly framed, based on the needs of the project.

### **Schedule Milestone**

A significant event in the project schedule, such as an event restraining future work or marking the completion of a major deliverable. A schedule milestone has zero duration. Sometimes called a milestone activity. See also milestone.

### **Schedule Performance Index (SPI)**

A measure of schedule efficiency on a project. It is the ratio of earned value (EV) to planned value (PV). The SPI = EV divided by PV. An SPI equal to or greater than one indicates a favorable condition, and a value of less than one indicates an unfavorable condition. See also earned value management.

**Schedule Variance (SV)**

A measure of schedule performance on a project. It is the algebraic difference between the earned value (EV) and the planned value (PV).  
SV = EV minus PV. See also earned value management.

**Scheduling**

The process of converting a general or outline plan for a project into a time-based schedule based on the available resources and time constraints.

**Scope**

The sum of the products, services, and results to be provided as a project. See also project scope and product scope.

**Scope Change**

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

**Scope Creep**

Adding features and functionality (project scope) without addressing the effects on time, costs, and resources, or without customer

**Scope Definition**

The process of developing a detailed project scope statement as the basis for future project decisions.

**Scope Management**

The function of controlling a project in terms of its goals and objectives through the processes of conceptual development; full definition or scope statement; execution; and termination.

**Scope Planning**

The process of creating a project scope management plan.

**Scope Statement**

A documented description of the project's output or deliverables.

**Scope Verification**

The process of formalizing acceptance of the completed project deliverables.

## **S-Curve**

Graphic display of cumulative costs, labor hours, percentage of work, 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 trails off. Also a term for the cumulative likelihood distribution that is a result of a simulation, a tool of quantitative risk analysis.

## **Simulation**

A simulation uses a project model that translates the uncertainties specified at a detailed level into their potential impact on objectives that are expressed at the level of the total project. Project simulations use computer models and estimates of risk, usually expressed as a probability distribution of possible costs or durations at a detailed work level, and are typically performed using the Monte Carlo analysis.

## **Specification**

A document that specifies, in a complete, precise, verifiable manner, the requirements, design, behavior, or other characteristics of a system, component, product, result, or service and, often, the procedures for determining whether these provisions have been satisfied. Examples are: requirement specification, design specification, product specification, and test specification.

## **Sponsor**

- (1) The person or group that provides the financial resources, in cash or in kind, for the project and is responsible for the overall project delivery.
- (2) The person assigning the project manager the responsibility to conduct the project's effort and deliver the end product.
- (3) The executive who manages, administers, monitors, funds, and is responsible for the overall project delivery.

## **Stakeholder**

Those with a particularly significant interest in the project's outcome, including those providing funding or right of way for the project and property owners who are affected by the project. Stakeholders are unique for each project.

## **System**

An integrated set of regularly interacting or interdependent components created to accomplish a defined objective, with defined and maintained relationships among its components, and the whole producing or operating better than the simple sum of its components. Systems may be either physically process-based or management process based, or more commonly a combination of both. Systems for project management are composed of project management processes, techniques, methodologies, and tools operated by the project management team

## **Task**

A term for work whose meaning and placement within a structured plan for project work varies by the application area, industry, and brand of project management software.

### **User**

The person or organization that will use the project's product or service. See also customer.

### **Value Engineering (VE)**

(1) A creative approach used to optimize project life cycle costs, save time, increase profits, improve quality, expand market share, solve problems, and/or use resources more effectively.

(2) An organized effort to analyze the functions of a system, equipment, facilities, services, and supplies, for the purpose of achieving the essential functions at the lowest life-cycle cost consistent with required performance, reliability, quality, and safety

### **Work Breakdown Structure (WBS) [Output/Input]**

A deliverable -oriented hierarchical decomposition of the work to be executed by the project team to accomplish the project objectives and create the required deliverables. It organizes and defines the total scope of the project. Each descending level represents an increasingly detailed definition of the project work. The WBS is decomposed into work packages. The deliverable orientation of the hierarchy includes both internal and external deliverables. See also work package

### **Work Order (WO)**

A written order, signed by the owner or his representative, of a contractual status requiring performance by the contractor without negotiation of any sort.

### **Work Package**

A deliverable or project work component at the lowest level of each branch of the work breakdown structure. The work package includes the schedule activities and schedule milestones required to complete the work package deliverable or project work component.

### **Work Performance Information [Output/Input]**

Information and data on the status of the project schedule activities being performed to accomplish the project work, collected as part of the direct and manage project execution processes Information includes: status of deliverables; implementation status for change requests, corrective actions, preventive actions, and defect repairs; forecasted estimates to complete; reported percent of work physically completed; achieved value of technical performance measures; and start and finish dates of schedule activities.

### **Work Plan**

A comprehensive, realistic, and deliverable plan to accomplish the team mission and deliver the project. It includes Initiate and Align and Plan the Work elements, including a schedule and a budget.