

Glossary

- After Receipt of Order (ARO)** A number, usually expressed in days, weeks, or months, as a point after the official notification of the start of the project. Example: The PDR is due 90 days ARO. This technique allows the elements of a project schedule to move relative to the award or beginning of a project or program.
- AID** The Agency for International Development. Also USAID or U.S. Agency for International Development. An independent federal government agency that supports low-term and equitable economic growth, and advances U.S. foreign policy objectives.
- Alliance** A grouping of two or more companies for one project or program (a tactical alliance) or for all projects or programs (strategic alliance) that require a particular combination of products or services.
- Architecture** The structure established for the system as a whole or the structure established for a subsystem within the system.
- Arm's Length** A legitimate deal, open for view.
- Assertion** An affirmative statement.
- Award Fee (AF)** A fee arrangement where fee payment is based on some predetermined factors such as schedule, quality, and cost performance. Usually awarded unilaterally by the customer.
- Balanced Scorecard** A complex process that ties four distinct perspectives to strategies that drive and measure performance.
- Benchmark** Also referred to as Best Practices, Exemplary Practices, and Business Excellence. Usually a series of studies regarding business processes and practices among businesses in the same or sometimes disparate business areas. One can use the benchmarks to compare their performance to others. The benchmarks may or may not be the best measure of excellence.
- Best and Final** The absolute last opportunity to submit your most favorable position.
- Best-of-Breed** A term applied to a system or process that has singular or

limited application but is the best there is for that application. The highest level of achievement for that element.

Boilerplate Standard terminology, paragraph, page, or section used in all documents of the same type.

Brainstorming Method A method used to get every conceivable input from all participants. Usually conducted in a classroom environment with all attendees' participation. The idea is to get as much input as possible and then go back and eliminate, by consensus, those duplicated inputs and those that have no validity.

Brassboard Similar to **Breadboard** (see below) but usually with hard parts that are soldered or welded together. Not a deliverable.

Breadboard A table layout of the article being developed so that parts and wiring can be changed easily. Breadboards are usually many times the physical size of the final product. Not a deliverable.

Budget Review A review of the budget associated with all or part of a task or contract. Usually, but not always, budget reviews are conducted concurrently with schedule reviews and performance reviews in project, program, or division reviews.

Business Factors Having to do with the processes necessary to achieve and maintain business. May include the Research and Development (R&D) processes and the proposal processes.

Business Process Improvement A generalized term that includes such specific programs as Total Quality Management (TQM), Business Process Reengineering (BPR), Benchmarking, and Best Practices, as well as other less well-known programs aimed at improving the process of a business.

Buying In The act of bidding a project or program at cost or less than cost for any number of reasons.

Capability Matrix A matrix consisting of tasks up the side and previous projects across the top. An intersect is acknowledged whenever the project contained the task and was successfully completed. The purpose of the capability matrix is to determine whether or not to bid a program or to identify those capabilities in inventory and those needed to approach a program or project.

Capability Maturity Model (CMM) A model for judging the maturity of the software processes of an organization and for identifying the key practices that are required to increase the maturity of these processes.

Cellar Agency A government agency that is not known to the public and may not be known to anyone outside a carefully controlled ring of cleared persons.

Challenge (Tasking) A top-down application of budget and/or schedule and/or manpower that is less than requested. The Challenge (tasking) imposed upon a **Work Package** leader by the **Project Office** (project manager).

- Change Order (CO)** A formal change introduced into a project controlled by a Change Management process.
- Chomping at the Bit** Anxious to get started.
- Column of Mobs** An old Army expression indicating that the situation is total chaos.
- Communication** Meetings, reports, and verbal transfers between team members, between the team and the customer, and between the team and its subcontractors and other providers.
- Company** A corporation or partnership.
- Contract Data Requirements List (CDRL)** A list of documents that are contractually deliverable under the terms of a contract.
- Contract Line Item Number (CLIN)** An ordering or sequencing number assigned to functional or physical deliverables that are contractually required on a program.
- CONUS** Continental United States.
- Core Team** The management element of the team usually consisting of the project manager, the chief engineer, and others of the same ilk.
- Corporation** A legal entity composed of a number of people joined together for a common purpose. Such legal entities are formed under local, state, or federal laws. Some are public corporations, and some are private corporations. Some private corporations are organized for profit, and some are organized for nonprofit. Public corporations often issue stock to their owners in return for the money they invest.
- Cost** The direct cost of labor or the labor hours used on your project. Depending on your company financial procedures, it may include benefits, overhead, and **General and Administrative (G&A)** costs.
- Cost of Quality** A cost factor added to the basic bid cost by a subcontractor for labor and materials to bring the subcontractor's product up to the quality he should have produced, but didn't. The Cost of Quality is a consideration when evaluating bids by subcontractors. The amount bid by a subcontractor plus the quantified Cost of Quality is the true bid of that subcontractor.
- Cost Plus Contract** A contract that recognizes that profit is a necessary part of getting a job done. Cost plus contracts allow a profit over and above the cost involved.
- Cost Review** A review of the cost associated with all or part of a task or contract. Usually, but not always, cost reviews are conducted concurrently with schedule reviews and performance reviews in project, program, or division reviews.
- Cost Type Contract** A contract that includes cost plus provisions. The fee structure may be a percentage of cost, a fixed percentage or original bid cost, an award amount or an incentive amount. All structures are above the cost of getting the job done except that some Cost Plus Incentive Fee (CPIF) contracts have negative fee considerations as well as positive fee considerations.

- Customer Meeting** A meeting with the customer usually on a formal basis where an agenda and minutes are a part of the meeting. May be scheduled and required by the requirements document (contract) or may be quickly called by the customer.
- Customer Relations** The relations between a provider and all its customers.
- Data Item Description (DID)** A document consisting of a few sheets that outlines the format and requirements of a specific data report to be submitted as part of a contract. DIDs are assigned descriptive alphanumeric sequences. Originally issued to support federal government contracts, they are now more widely used.
- Data Trail** A documented trail that leads from a present point to a requirement point. Sometimes called a “Rabbit Trail” or “Audit Trail.”
- Design Review** A periodic review of the design and its requirements. Typically the performer (contractor) presents and defends the design together with all supporting data. Design reviews are typically performed on an ever more detailed basis and are frequently performed on an incremental basis.
- Design to Cost** The cost is fixed. The design must work and meet the cost parameters.
- Discrepancy Reports** A report initiated to document the fact that an item under test did not meet its requirements. A Discrepancy Report must be assigned and corrected and the discrepancy must be resolved before the process can proceed.
- Disposition** To quantify and assign a particular action to a person or group to be completed by a specified date.
- DOD** The Department of Defense of the United States. Most other countries refer to this agency as the Ministry of Defense or MOD.
- Dog and Pony Show** A formal presentation using a lot of visual aids. Sometimes the visual aids are more compelling than the data presented.
- Drop Ship** To purchase materials from a vendor and have them shipped to a third location (that is, installing location or direct to the customer) without being seen at the procuring location.
- Engineering Change Proposal (ECP)** A proposal presented to the customer during the progress of work when a change is evidenced by events happening on the program. An ECP usually contains all the technical and cost elements of a “full blown” proposal.
- Enterprise** The current term for an economic unit. An enterprise may be a corporation, a company, a profit center, or cost center within a company or corporation.
- Enterprise (Corporate/Company) Requirements** The policies, plans, processes, and procedures at the enterprise level that drive the content of project and technical plans and the conduct of project activities.
- Environment** The environment contains the programmatic factors involved in producing the product. This means the safety of the workplace, the security of the workplace, and so on. It does not include

product safety and security and such. These factors are technical factors.

Experience Window A tool to quickly evaluate whether or not you should bid or can perform a certain task. The principal variables are customer experience and product experience.

Farm Out To distribute with purpose.

Fast Track A method of conducting elements of a project in parallel, rather than in series, or by deleting a task, or truncating the elements of a task in terms of time or by taking a risk on one or more elements of the project to shorten the overall time involved in that element and ultimately, the project.

Fee As used in this document, fee is the same as profit—that is, the amount of money bid above cost and overhead or burden. In some specialties, such as architectural and engineering (A&E) firms and legal firms, fee has a different meaning. In these cases, fee means the money charged for doing a job. For example, an A&E firm manages the design and construction of a building. Their fee is the amount of money they charge for the service.

Financial Factors The financial policies your company has established based on law and accepted practices and dictate how your company does business.

Firm Fixed Price (FFP) A contract that is bid and awarded as a fixed amount. The customer pays a firm fixed price for some amount of work. The contractor's fee or profit is contained within that price.

First Article The first article produced by the production process. The first article is used not only to validate the design but to validate the production process as well. Sometimes the first article is delivered first, but most often, its delivery is held in abeyance, and it is used to try out improvements in design and processes. Frequently, the first article is delivered last.

Fixed Price Contract A contract in which the basic price is fixed but the fee structure can be of several different types such as Fixed Price/Incentive Fee (FP/IF), Fixed Price/Award Fee (FP/AF), and Firm Fixed Price (FFP).

Force Majeure French phrase, generally meaning an act of God, but now used as a legal term that allows recovery of costs or limits liability (depending on how written) when an act of war or superior force, such as a flood or fire, impacts the performance of the task.

Functional Manager A line manager in charge of a function such as software engineering, hardware engineering, and so on.

General and Administrative (G&A) An element of cost that generally includes the salaries of nonoperating personnel such as corporate management, human resources, finance, and so on, as well as Bid and Proposal (B&P) costs. Some companies include these costs as overhead or burden. The breakout of costs into different categories is an account-

ing function and is usually standardized within the type of industry in which you operate.

Give-Aways Trinkets, usually with a company logo or name, given away to advertise a product or company.

Hedge A protection against financial loss.

Hot Cutover Integrating a new element of a system into the existing system while both systems are operating.

ilities The indirect engineering disciplines that provide Reliability, Maintainability, Availability, and so on. Also included are Health, Safety, and Environment.

Incentive Fee (IF) A fee arrangement where fee payment is based on some predetermined factors, such as schedule, quality, and cost performance. Usually awarded by the customer with concurrence by the contractor.

Incremental Testing A concept of testing that creates finished increments, so if a problem occurs, you can return to the last completed increment to fix the problem.

Independent Research and Development (IR&D) Usually an in-house **Research and Development (R&D)** program funded by the company. When the company funds this research, all results are the property of the company and are usually patented.

In-Process Review A review, frequently informal, that is conducted while a project is in process and before a major, formal review.

International Standards Organization (ISO) A worldwide federation of national standards bodies whose mission is to promote the development of international agreements that are published as International Standards.

Jabberwocky Bird A mythical bird that flew backward just to see where he had been. Introduced in a song by Phil Harris on the "Phyllis' Boy-friend" show, October 17, 1948.

Legal Factors The legal conditions existing between the program (company) and the customer and the legal conditions between the program (company) and the subcontractors or materials providers as required by law or by contractual agreement.

Lessons Learned A conference or simply a report at the end of a project to review the situations that occurred during the project and their impact on the project and how the situations could be avoided or cured in future.

Liquidated Damages An amount of money agreed to in a contract that is an estimation of damages owed to one of the parties in the event that there has been a breach by the other.

Load List The routing of a particular pin or location on a terminal board.

Materials Items where the specification is determined by the vendor. You are buying to his specification, not yours.

MIL-HDBK Military Handbook.

MIL-SPEC Military Specification.

MIL-STD Military Standard.

Mission Statement A stated action to be taken by an organization and the intended outcome of this action contained in one sentence. As an example, Abraham Lincoln's mission: to preserve the Union.

Myers-Briggs Type Indicator (MBTI) A four-character designator derived from a four-pair, eight character set resulting in sixteen combinations that represent a type of person (or later a company). Originated by Peter B. Myers and Katherine Briggs. Example: An ENTJ is an Extrovert (as opposed to an Introvert), INTuitive (as opposed to Sensing), Think-ing (as opposed to Feeling), Judgmental (as opposed to Perceiving) type of person.

NASA National Aeronautics and Space Administration.

Negotiating Team An ad hoc group created to finalize the requirements for a program.

Negotiation Envelope Predetermined limit to which the Negotiating Team cannot exceed. Usually includes scope, schedule, cost, and manpower.

OCONUS Outside the Continental United States.

On-the-Job Training (OJT) Informal training provided on the job by others involved in the same category of work.

Out-of-tolerance A measured parameter that is beyond its nominal value, plus or minus a percentage of that value that is the allowable range in which that parameter may operate.

Parse To resolve or divide into component parts.

Personnel The "people" assigned to the project, the organization, and the role descriptions.

Pin Out A pin listing and its function on a terminal board, or a connector, etc.

Planning A process of intended actions that precede an event or events.

Procurement The purchasing of subcontracts and materials to be used in the output product.

Profit and Loss (P&L) The result of a contract beyond cost. A contract that returns money beyond all costs is a profit. A contract that costs more than its income is a loss.

Profit and Loss (P&L) Responsibility Responsibility assigned to a program manager for operating the program and returning a profit to the company.

Program A task external to an organization, under the aegis of a legal contract, requiring task enumeration, schedule, and cost. A program has a beginning and an ending.

Program Advisory Council A special purpose management team that advises, but does not manage, the project or program team. The Program Advisory Council acts as a transparent link between the project team and management and the customer.

Program Manager (PM) The same as a project manager, except a program

manager has P&L responsibility and manages a contract with a customer outside the parent organization.

Programmatic Those issues associated with the management of a project or program. Such issues include budget, schedule, and so on. Programmatic issues are separate and distinct from technical issues.

Project Management Office (PMO) A dual-use term. 1) A centralized staff function that establishes and maintains project management processes and procedures, which does not have a line function. The APM refers to this function as the Project Support Office or PSO. 2) A major project or program office (frequently called *Big PMO*) that has other projects or programs reporting to it. In this case, the PMO has line responsibility and authority.

Project A task internal to an organization requiring task enumeration, schedule, and cost. A project has a beginning and an ending.

Project Manager (PM) The individual responsible for managing the entire project internal to the parent company.

Project Meeting A meeting, usually somewhat informal, of the entire team, where project issues are discussed.

Project Office The group of people and functions that surround the management of a project or program. These functions are usually the project manager, the administrator, the scheduler, and the secretarial function. Sometimes the chief engineer is considered as a part of the project office.

Projectized A project or program that essentially stands alone within an organization. The projectized organization contains all the line functions necessary to meet the requirements of the task or contract. Staff functions such as finance and human resources are usually not included, although they may be in extremely large projects or programs.

Proposal A presentation of a specific approach to solve a problem. In the program context it is usually an offer to do business based on a specific approach.

Prototype A nonproduction build of hardware or software generally used to test concepts, content, and interfaces. Older terms, still in use in some places, are: **Breadboard** and **Brassboard**. This term is sometimes extended to include the **First Article** of a production run. Prototypes should not be deliverable.

Purchase Order (PO) A document used to commit project, program, or company funds to a certain purchase. The PO must contain the item, the vendor, the price, and the delivery date. Other contents are at the option of the company.

Quality The project quality program, including the Quality Assurance Plan and the Quality Control Program.

Rabbit Trail A documented trail that leads from a present point to a requirement point. Sometimes called a "Data Trail" or "Audit Trail."

Ramp-Up To get started on an incremental basis.

- Rapid Prototype** A methodology of “build a little, test a little” rather than building the entire system.
- Reengineering** The common form of Business Process Management (BPM) used to establish standards for process design, deployment, execution, maintenance, and optimization.
- Requirements** Webster’s defines requirements as something wanted or needed or something essential.
- Requirements Definition Team** An ad hoc group created to formalize the requirements for a project.
- Requirements Flow-Down Matrix (RFM)** A matrix created to track those requirements that must be flowed down to various **Work Packages**, sub-contracts, and purchases. Also includes how these requirements will be flowed down. Example: Buy American Clause in a contract.
- Requirements Traceability Matrix (RTM)** A matrix formed to track each requirement through the lifecycle of the project. The horizontal axis of the matrix begins at project start (program award) and ends with hand-over. The vertical axis lists each requirement.
- Research and Development (R&D)** A project or program on the leading edge of technology. R&D projects can be performed in-house (see **Independent Research and Development**) or for a customer as a Research and Development program.
- Resources** The indirect elements necessary to support a project such as facilities and equipment. Resources are normally provided by the company, rather than the project.
- Reverse Contract** To take a course of contractual action and advise your customer that you intend to incorporate this change unless otherwise directed. (Be careful—some customers take a dim view of this action.)
- Reverse Engineer** To make a change in the specification or design and advise the customer that you intend to incorporate this change unless otherwise directed. (Be careful—some customers take a dim view of this action.)
- Risk** The probability that the project (programmatic risk) or the product (technical risk) will not meet some requirement while conducting the project.
- Risk Mitigation Plan** A plan to recognize, evaluate, and provide an approach to eliminating, mitigating, or neutralizing a technical or programmatic risk.
- Root Cause** The essential heart or underlying reason.
- Safe Point** A point or place in a process that is known to be good.
- Schedule** A timeline that directly supports the scope of the project.
- Schedule Review** A review of the schedule associated with all or part of a task or contract. Usually, but not always, schedule reviews are conducted concurrently with cost reviews and performance reviews in project, program, or division reviews.
- Show Cause (Letter)** An order for a company (usually a contractor or sub-

contractor) to tell why they think the sender (usually the customer) should not take a certain action, such as cancellation of the contract. The letter also outlines the next step that will be taken should the Show Cause not be answered.

Software Engineering Institute (SEI) The Software Engineering Institute (SEI) is a federally funded research and development center sponsored by the U.S. Department of Defense for the purpose of establishing standards and assisting others to make improvements in their software engineering capabilities.

Software Kernel An element of completed software around which other software is built.

Specification (Spec) That part of the requirements document (contract) that establishes how the system, as a whole, will perform.

Standard Requirements Reference documents common to your business area or product, such as IEEE Standards, SEI Standards, and EIA Standards that are invoked by the requirements document (contract) or the enterprise policies, plans, processes, or procedures. These standards are usually referenced rather than being reprinted simply to save space.

Statement of Work (SOW) That part of the requirements document (contract) that describes what the task is and when the task will be accomplished.

Subcontract (S/C) A contract that delegates work to a third party that contains a Statement of Work (SOW) and usually a specification.

Subcontract Requirements Traceability Matrix (SRTM) A Requirements Traceability Matrix (RTM) used by a subcontractor.

Subprogram Office (SPO) The SPO has the same responsibilities as the Program Office except that the SPO is responsible for only a portion of the overall system and usually does not have contractual responsibility and may not have P&L responsibility.

System Engineering Management Plan (SEMP) A top-level plan that identifies and controls the overall engineering process. The SEMP is usually supported by a number of specialty engineering plans that contain much of the engineering detail.

Targeted Selection Process A behavioral approach introduced by Development Dimensions International (DDI) that improves hiring decisions by using five basic interview principles. All interviewers work in harmony to collect and share the interview data.

Task (Challenge) See **Challenge (Tasking)**.

Team A group of people, usually interdisciplinary, brought together to perform a task. A team has a casual relationship, as opposed to **Teaming**, which denotes a legal relationship.

Team Meeting A meeting, usually somewhat informal, of the entire team where project issues are discussed.

Teaming The legal association of two or more organizations (companies)

to perform a specific task. Teaming (between companies) is separate and distinct from a team (individuals).

Technical Interchange Meeting (TIM) A meeting wherein technical issues are discussed. Contractual issues are not discussed.

Tiger Team An ad hoc group formed to pursue a specific problem or issue. Their charter may be to study the issue or to find a fix or to fix it.

Total Quality Management (TQM) A structured system for meeting and exceeding internal and external customer needs and expectations by involving the entire organization in the planning and implementation of continuous and breakthrough processes improvement.

Trans Ship To purchase materials from an international location, have those materials received by your location, without import fees, and be included in the product to be shipped overseas, without export fees. This action requires considerable paperwork between all locations and governments but allows you to buy and sell materials that will be used out of your country without paying multiple import and export taxes on the materials.

Troika A Russian word meaning three. Originally intended to portray a three-horse wagon pull with the horses side-by-side. Now used in business to suggest a three-person leadership team.

Vendor A person or company that provides a product or line of products to a specification that is usually his own.

Version Description Document (VDD) A document that references and describes the changes included in this version of software.

Vision The highest view of what a company is and where it wants to go.

War Room A term first used by the military indicating a room where strategies, tactics, and general information are posted. Usually, the information is confidential, so the room is secured.

Water Cooler A common meeting place where information is exchanged. Taken from the days when every office had a water-dispensing location.

WBS See **Work Breakdown Structure**.

Work-Arounds Alternative approaches to avoid a problem or issue or situation.

Work Breakdown Structure (WBS) The presentation of the division of work to be accomplished on the project. Each element of the WBS must be costable and schedulable. The sum of the elements of the WBS is equal to the whole of the project.

Work Package (WP) The lowest level of the **WBS** that is the most efficient and cost-effective way of controlling schedule, cost, and technical performance consistent with the requirements of the customer and the performing agency (the company).