KEY:
(VQ) Vocational Qualification term
(R) Risk Term

Account
Grouping of costs for administration and control purposes

Account Code
Unique identifier for a cost account, the code can be alpha, numeric or a combination

Accounts Payable
Value of goods and services received and yet to be paid for

Accountability
The point of budget authority and control responsibility – usually an individual will have authority for control within the defined scope.

Accounts Receivable
Value of goods and services executed and for which payment is yet to be received

Accreditation (VQ)
The acceptance of qualifications by QCA and SQA as meeting the criteria specified for NVQs and SVQs. Organisations can also be accredited to carry out assessment.

Actuals
Recording of actual achievements for cost/revenue/time against planned elements

Actual Cost of Work Performed (ACWP)
Recorded cost or value of work or service actually completed.

Accrual Basis
Accounting records for costs incurred and income earned

Accrued Cost
Total spends to date plus accruals.

Accrued Income
Total recorded income plus income associated with accrued work.

Accuracy Factor
Factor expressing the range or the level of accuracy of an estimate

A Cost E
Association of Cost Engineers.

Activity
An operation or process with defined a defined duration. May have an associated cost, a number of these logic linked will underpin the lowest level in a Work Breakdown Structure.

Activity-On-Arrow Network Diagram
A network presentation where the arrows represent network activities, the nodes represent end events.

Activity-On-Node Network Precedence Diagram
A network presentation where the nodes symbolise the network activities.

Activity Relationship
Logical link between two activities (direction represented by arrow): Four common relationships are:
- F.S. Finish to Start.
- S.S. Start to Start.
- F.F. Finish to Finish.
- S.F. Start to Finish.

Activity Sampling
A method of recording work activity in a statistical manner in order to allow an analysis of the total activity.

Advanced Funding
Funds made available prior to formal funding/contract to cover payment for goods or services contracted or delivered prior to formal funding/contract.

AFC
1) Approved for construction.
2) Anticipated final cost.

AFD
Approved for design.
Ageing Rate
Pre-determined level of depreciation expense or capital cost for given unit of time.

Allowances
Provision made for work which it is known by experience will occur, but for which there is no information at the time of estimate preparation. See also Growth.

Ancillaries
Needed auxiliary items/materials, usually unspecified, particularly of plant and equipment.

Anticipated Final Cost
See Forecast Final Cost.

APL(VQ)
Accreditation of prior learning. A process which enables individuals to gain credit on the basis of past achievements, learning and experience.

APM
Association of Project Management

Appropriation
Authorised allocation of funds for specific future work.

Appropriation Estimate
Early cost estimate, for budget purposes, usually by Client, based on preliminary but largely fixed design data to an accuracy of – 15% to +25%, to establish viability of proposed project and secure necessary advanced funding approval to generate a class II estimate, also known as class III, evaluation, outline definition, pre sanction and study or scope estimate.

Appropriation Request
Formal request for management approval of funding for a future project.

Approved Budget
See Authorised Budget

Approved Centre (VQ)
An organisation accredited by an Awarding Body to carry out the assessment of candidates and to recommend the award of an NVQ or SVQ.

Approved Change
See Authorised Change.

As-Sold Estimate
Final purchase or contract sales estimate, inclusive of all pre-contract changes and adjustments to reflect the actual as sold scope of supply or scope of work.

As-Sold Price
Actual value of purchase order or contract as sold, inclusive of all escalation and other price variation conditions.

Assessment(VQ)
The judgement of performance and knowledge evidence to decide whether competence has been achieved.

Assessment Plan(VQ)
A plan detailing the methods and opportunities by which evidence covering each element of competence is to be generated, collected and evaluated.

Assessor(VQ)
A person registered and approved as competent to assess candidates in a particular range of occupations.

Assets
Current value of property, investments, stock and cash.

Asset Reference Plan
Plan setting out the main elements of how an asset will be developed and operated from inception through to disposal.

Assets Register
See Fixed Assets Register.

Audit
Independent verification of a projects current status against the target cost schedule and/or codes of practise.

Authorised Budget
Any budget duly approved by pre-defined level of authority.

**Authorised Change**
Approved change to a previously authorised cost/scope/time by the appropriate authority.

**Authorised Cost**
Any cost: actual, estimated or budgeted, approved by the appropriate authority.

**Authorised Estimate**
Estimate approved by the appropriate authority.

**Authorised Manhours**
Estimate of budgeted manhours approved by the appropriate authority.

**Authorised Variation (Cost, time, scope)**
Client or buyer approved change to previously issued contract or purchase order.

**Auxiliary Facilities**
Non-productive supporting elements, particularly in factory or plant, such as administrative buildings, utilities, services, etc.

**Available Capital**
Value of funds available for capital investment, purchase of goods or services, etc.

**Average Annual Cost**
Conversion of all capital and operating costs to a series of equivalent annual expenses.

**Average Cost**
Arithmetical mean cost = total expense divided by total quantity

**Average Investment Return**
Summation of fixed and variable dividends or profits normally expressed as a percentage of the capital cost employed.

**Average Overhead Rate**
Ratio of indirect to direct expenses normally expressed as a percentage per annum.

**Awarding Body (VQ)**
A body approved by the Qualifications and Curriculum Authority (QCA) and/or the Scottish Qualification Authority (SQA) for the purpose of awarding an NVQ or SVQ.

**B**

**Back charge**
Claim made against supplier, contractor or sub contractor for remedial work, loss or damage suffered in respect of goods or services not received to agreed standard/timing.

**Backward Pass (Backward Plan)**
Critical path calculation process which having calculated earliest date for activities on the network. Works backwards to find activities latest start and finish dates/float

**Ballpark Estimate**
See Order of Magnitude Estimate.

**Bar Chart**
A chart on which activities and their durations are represented by lines to a time scale.

**Bar Chart Schedule**
Graphical representation of project activities or resources drawn as horizontal lines against a common time scale.

**Base Cost**
Cost (estimate or estimate item) established as a basis for calculating escalation, changes, provisions or other related variance.

**Base Line**
A set of dates and costs frozen at the start of the project and used as a basis for comparison as the project progresses.

**Base Date**
Date set as a programme/estimate base for calculating price variations, forward escalation, currency differentials or other time-based cost data.

**Base Estimate**
An estimate generated against a defined scope of work and established as a basis for evaluating subsequent adjustments, modifications or changes.

**Base Exchange Rate**
A currency exchange rate used in preparation of a cost estimate or budget and established as a basis for calculating subsequent actual currency differentials or variances.

**Base Rate**
Rate used as a basis for evaluation of the effect of future changes in interest charges.

**Basic Price**
Standard rate or value adjustable by discount, escalation or variation to suit specific circumstances applications and/or arrangements.

**Basic Time**
A term used in Work Study to define the time taken to achieve a task by a normally motivated and skilled operative, net of all allowances for relaxation, remedial works and other non-productive time.

**Battery Limits**
The boundary/maximum extent of a contract scope, area or system often used to manage interfaces between contract or commissioning of systems

**Benchmark**
A comparable standard for a generic group.

**Benefit (R)**
Assessed chance and impact of a potentially advantageous occurrence.

**Benefit of Finance**
Interest calculation based on the net cash flow and calculated on an average weekly basis.

**Bid Analysis (Tender Analysis)**
Activity of analysing suppliers’ quotations or contractors’ tenders.

**Bid Bond**
Sum provided by bidder as guarantee that the bid will be submitted, and if accepted, the bidder will proceed into the contract.

**Bid Check**
Review of suppliers’ quotations or contractors’ tenders for compliance with the bid instructions.

**Bid Comparison**
Document for comparison of suppliers’ quotations or contractors’ tenders, as part of the selection process.

**Bid Estimate**
See **Tender Estimate**.

**Bid Evaluation**
See **Bid Analysis**.

**Bid Quantities**
Material or construction quantities issued to suppliers or contractors for bidding purposes.

**Bid Tabulation**
Process of summarising the results of Bid Analysis for comparison purposes.

**Bill of Materials**
List of material quantities estimated or measured from drawings for estimating or procurement purposes.

**Bill of Quantities**
List of construction quantities estimated or measured from drawings for tender pricing and contract payment purposes.

**Bill of Quantities Contract**
Contract awarded against a Bill of Quantities for which payment is made in accordance with the unit prices contained in the bill of quantities.

**Bond**
Sum of money, securities or a guarantee of a third party to guarantee completion of the work and/or recovery of sums payable if owed by the contractor under the terms of the contract.

**Bonus**
Incentive payment over and above agreed wage or contractual reimbursement, usually relating to achievement targets.

**Bonus Incentive/Bonus Scheme**
Payment framework agreement, to increase output from work force, by paying for achievement against a range of targets.

**Bonus/Penalty Clause**
Contractual incentive placed on supplier or contractor to achieve certain completion targets for which a bonus payment is earned or a financial penalty incurred.

**Book Value**
Asset as recorded in the books of a business.

**Brainstorming**
Structural collection of ideas/solutions against a particular issue/topic. Often done in a workshop environment

**Budget**
(1) Authorised target for project achievement, or part thereof usually expressed in terms of quantities, manhours or costs.
(2) An approved financial or quantitative plan against financial periods, and used as a benchmark against which achievements can be compared/referenced

**Budget Centre**
A Financial Centre that owns and controls its own budget.

**Budget Cost**
The target cost for completion of the work package.

**Budget Cost of Work Performed (BCWP)**
Budget value for work completed or services rendered, at cut off date.

**Budget Cost of Work Scheduled (BCWS)**
Budget value for work or service planned (scheduled) to be completed or rendered at the cut off date.

**Budget Estimate**
See Class II Estimate.

**Budget Transfer**
Authorised adjustment to budget targets which do not increase or decrease the total budget.

**Budget Unit Cost**
Unit cost applied to budget item quantities to calculate the item budget cost.

**Budget Variance**
Variance between budget and actual/forecast: quantities, manhours or costs.

**Budgetary Control**
The continuous comparison of actual with the budget values in order to maintain costs in line with the budget or to provide a basis for its revision.

**Building Services**
Mechanical, electrical or other specialised utilities within a building or plant.

**Bulk Factors (1)**
Multipliers applied to manufactured equipment costs to calculate erected plant or total installation costs, including associated bulk materials and ancillaries.

**Bulk Factors (2)**
Index for granular and earthworks materials, to allow for the increase in volume of an excavated material removed from its original state – needing more provision for transporting, storing and disposal than its net volume.

**Bulk Materials**
Any material purchased in bulk.

**Burden**
Overhead expenses distributed as an add-on cost to direct cost.

**Buying Gain/Loss**
The difference between the budget provision for a material or service and the contracted cost paid by the contractor.

**C**

**Cancellation Charges**
Contract charges submitted by a supplier or contractor in the event of cancellation of purchase order or termination of contract by client or others

**Cancellation Costs**
Costs incurred on a project due to cancellation or termination of an issued purchase order or contract.

**Capacity Factor**
Term used in Estimating in respect of the capacity ratio between two similar plants.

**Capital**
Money invested or available for investment against which earnings and dividends are assessed.

**Capital Budgeting**
Defined allocation of capital resources for approved future investment.

**Capital Cost Estimate**
A proposed fixed asset cost estimate, covering design, supply and installation costs, but excluding any financing or operating costs.

**Capital Expenditure**
Expenditure arising from the implementation of a fixed asset or improvement of an existing asset.

**Capital Recovery**
Recovery of capital invested in a project over its operating, including allowed depreciation.

**Cascade Chart**
A bar chart where the vertical presentation shows each activity as dependent on activities higher in the list.

**Cash**
Monies in hand or available for immediate use.

**Cash Basis**
Method of recording cost and income data based on actual cash payments and receipts.

**Cash Call**
Projection and request for future cash requirements at specific points in time.

**Cash Flow**
Forecast cash balance against time based on the net flow of actual or anticipated cash payments ie receipts less actual costs against the same timescale. (Sometimes used to express forecast/actual cumulative cash receipts).

**Cash Forecasts**
See Cash Call.

**Cash Generation**
Net increase in cash flow from an investment.

**CBS**
Cost Break Down Structure.- Generic coding hierarchy for companies cost code, cost unit and cost items enabling compilation of norms and project estimating ratios, and Benchmarking

**CEP**
Capital Expenditure Proposal (generally a client document), and usually underpinned by a class II estimate.

**Change Alert**
Advanced notice of potential change.

**Change Control**
The process of tracking and monitoring, for early detection, evaluation and approval of project change.

**Change Estimate**
Estimate evaluating a potential change to the project.

**Change Impact**
Effect of change on project cost and schedule.

**Change Management**
The monitoring, recording and assessment of changes to the scope and/or timing of a project and the management of the implementation of approved changes.

**Change Order**
Authorised Change Order Request.

**Change Order Request**
Request for authorisation to implement a change to the current project/contract scope.

**Change of Scope**
Change to the previously contracted scope of supply or work.

**Charge Out-rate**
Price charged for manhours, etc.

**CIF**
Carriage, Insurance and Freight.

**Claim**
Demand made for compensation or additional remuneration for which one of the contracted parties considers he has a contractual right.

**Class I Estimate**
Detailed estimate prepared for control purposes from well-defined design data to an accuracy of +1/-5%. (Also known as Definitive Estimate, Detailed Estimate, Control Estimate or Final Estimate).

**Class II Estimate**
Semi-detailed estimate prepared for initial budget purposes from preliminary but largely fixed design data to an accuracy of +1/-10%. (Also known as Budget Estimate, Sanction Estimate, Scope Estimate or Semi-Detailed Estimate).

**Class III Estimate**
Pre-budget estimate prepared from very preliminary design data to an accuracy of +1/-20%. (Also known as Evaluation Estimate, Pre-Design Estimate, Preliminary Estimate).

**Clients**
Those to whom a person or business has responsibility. That responsibility may be direct and defined contractually or it may be indirect and implied through the person’s accountability for achievements and resources. In some industry sectors other terms, such as ‘customer’, may be more commonly used.

**Clocked Time**
Total hours recorded by employees between clocking on and off.

**Close-out Report (aka Project de-brief)**
Final end of project or end of assignment report to capture lessons learnt and out-turns for project memory.

**Code of Accounts**
A complete set of Account Codes for collation, analysis and allocation as part of cost control or for future estimating purposes. (i.e. Project Memory).

**Collateral Warranty**
A binding legal contract alongside of, but separate from, the head contract between the parties of the provider and the beneficiary. The beneficiary is able to instigate legal proceedings against the provider in the event of certain specified defaults. The liability of the provider under the a collateral warranty is in addition to the head contract and potentially an onerous burden on the provider. Typically the beneficiary will be a funder, purchaser or tenant, sub-contractor or consultant who has carried out work in connection with it.

**Commercial**
Relating to trading activities and considerations.

**Commissioning Phase**
The period following completion of construction and installation work of an area/system when commissioning of some/all of the works takes place.

**Commitment**
**Broken down into the following:**

1. **Gross Commitment**
   Total value of all orders placed to date, including letters and telexes of intent, and including allowances for all additional cost anticipated in respect of those orders.

2. **Outstanding Commitment**
   The current Gross Commitment less payments plus accruals for work/services completed against the contracted scope.

3. **Still to be Committed**
   The difference between current Gross Commitment and the total planned commitment to complete the Project/Contract

**Community**
The public in general and those that represent the public interest in particular.

**Competence (VQ)**
The ability to perform work activities to the national standards required in employment.

**Comply**
Meet all the specified conditions.

**Conditions of Contract**
Terms agreed by the parties to the contract for delivery and/or cessation of the contract.

**Condition Money**
Additional money paid to site labour/staff to compensate for working in difficult or unusual conditions i.e. height, confined spaces, etc.

**Confidence Limit (R)**
A project cost or schedule, percentage probability of achievement, or the value for a predefined maximum or acceptable limits. (Usually a product of the risk process).

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

**Construction Area**
An Area within a construction site allocated for construction purposes.

**Construction Indirects**
Term commonly used to describe all indirect field expenses, such as non-productive labour, field staff, field office staff, construction tools, etc.

**Construction Management Contract (CM)**
A contract where the contractor will be reimbursed a defined fee and preliminaries for undertaking the works, (or just the fee, with a prelims package placed elsewhere). The package sub-contractors are in direct contract with the employer and their turnover does not pass through the contractors’ accounts.

**Construction Philosophy**
Overall strategy for construction work, defining proposed methods of execution, sequence and timings of key activities, utilisation of direct or sub-contract labour resources, etc.

**Construction Quantities**
Measured and quantified construction work.

**Consumables**
Material consumed or construction aids permanently incorporated into a construction project, including non-recoverable formwork, shims and packings, welding electrodes, industrial gases, fuel, etc.

**Contingency**
Estimate provision to fund unforeseeable occurrences within the defined scope.

**Contingency Drawdown**
The transfer from contingency to authorised estimate, in order to fund in scope deviations/risks that have arisen, during project/contract.

**Contingency Management**
The monitoring and maintenance of remaining contingency in terms of fund transfers and remaining risk.

**Contingent Reserve**
The current budgetary provision, to cover potential risk occurrences, associated with the remaining project scope.

**Contract**
Legal and binding agreement usually in writing between two or more parties, defining scope of work or services to be delivered, and the terms and conditions for implementation, cessation and payments.

**Contractors Area**
Area on a construction site set aside for contractors site establishments.

**Contract Price Adjustment (CPA)**
A provision in the contract to adjust the contract sum, in respect of escalation.

**Contract Programme**
The agreed logic schedule for the contract showing the major deliverables and their relationships/key dates against which the contract report is prepared and any justification for extensions of time or acceleration are evaluated.
Control Budget
A budget used for high level control of the project/contract, and against which actual performance is measured.

Control Code
See Cost Code.

Control Estimate
An estimate used as the reference estimate for cost control of the project/contract.

Control Programme
The agreed logic schedule for the project showing the major deliverables and their relationships/key dates against which the project report is prepared and any justification for extensions of time or acceleration are evaluated.

Control Tool
Any cost/schedule control aid e.g. An estimate, programme budget, cost code, norms computer system, control procedure, cost report, etc.

Cost Analysis
Systematic segregation and manipulation of cost data into elements or categories for detail examination.

Cost Blackout
Prolonged absence of verified actual and forecast cost status, this is often caused by failing to understand the impact of migration of internal scope arising during front-end design development on the construction and commissioning costs.

Cost Breakdown Structure (CBS)
Systematic breakdown of costs into pre-defined elements in order to summate cost of like items/develop ratios for comparison between projects and project memory estimating for future projects.

Cost Budget
Cost target for completion.

Cost Centre
A business area with authority to manage its cost within its authorised annual budget, cost are collected against the centres budget items as part of the management/feedback process.

Cost Classification – Application of Indices
Framework different types of costs into defined groups and sub-groups to develop norms for comparison between projects and input to project memory for estimating of future projects.

Cost Code
A unique code within a hierarchy, assigned to a specific cost item with an attribute(category), which needs collating for management of the project or development of norms/project memory.

Cost Control
Systematic monitor of expenditure to track/manage completion within pre-determined budgets and targets.

Cost Deviation
Variance from the current control base or basis.

Cost Element
Classified component of larger cost item.

Cost Engineer
An engineer who as a consequence of his training and experience is competent, in the use and development of the principles of cost engineering.

Cost Engineering
The engineering practise devoted to the project cost management, involving such activities as estimating, cost control, cost forecasting, investment appraisal and risk analysis.

Cost Estimate/Forecast
Any considered prediction of future or final project costs.

Cost History
Record of previously incurred costs or cost movements against estimate items or areas of expenditure.

Cost Impact (R)
The effect of some event, often a risk occurrence or change, on an existing cost budget or forecast.
**Provoc – Glossary of Common Project Control Terms**

**Cost Index**
Tabulation factors measured from a base date recording the cost movements for a particular category or item or unit of work over a series of time periods, ie annually, quarterly or monthly.

**Cost Indices**
Series of factored tabulations as defined above for Cost index.

**Cost Journal**
Accounts bookkeeping record of individual daily transactions in the Cost Ledger, may be within an IT system.

**Cost Ledger**
Accounting book for recording both cost and revenue, may be within an IT system.

**Cost Model (Cost Schedule)**
Plan of proposed or anticipated expenditure phased over scheduled time periods, in the case of a cost schedule costs will be attached to the activities on the network.

**Cost Monitoring**
Continuous tracking of the costs of work in progress with against control estimate cost targets.

**Cost Movement**
Any change in the previously recorded cost for an estimate item.

**Cost Norm**
Established average or expected cost of defined item or unit of work.

**Cost of Capital**
Expected return that is foregone by investing in a project rather than in comparable financial securities.

**Cost Over-run**
Any cost in excess of that budgeted.

**CPI**
Cost Performance Index: the ratio of actual cost over budgeted cost for completed work.

**Cost Phasing**
Term used to describe the distribution over time of planned or actual costs incurred.

**Cost Plan**
See Cost Model.

**Cost Plus Contract (Cost Reimbursible)**
Form of contract where reimbursement is based on actual costs incurred plus a mark-up or fee to cover overhead and profit.

**Cost Status**
Current cost position expressed in terms of budgets, commitments, expenditures and forecasts.

**Cost Study**
Review/analysis of costs associated with a potential revision to strategy/options, or a new project.

**Cost to Date**
Costs committed, incurred, expended, accrued, etc, to the current cut-off date.

**Cost Trend**
Tracking/extrapolation of Actual cost performance data.

**Cost Variance**
Actual or forecast cost deviation from the previously forecast or budgeted values for the estimate item.

**CPA**
(1) Contract price adjustment  
(2) Critical path analysis

**Critical Activity**
An activity on the critical path.

**Critical Event**
An event on the critical path.

**Critical Evidence (VQ)**
Evidence of work performance, which candidates must provide for National Vocational Qualification assessment purposes.
Provoc – Glossary of Common Project Control Terms

Critical Path
The path through a network with the least float (can also be zero or negative float).

CTR
Cost, Time and Resource – particular concept of project control based on assigning costs, durations and resources to individual network activities.

Currency Differential
Cost variance arising from currency exchange rate fluctuations.

Current Budget
Original budget plus all approved budget changes and transfers.

Current Costs
Based on current date cost position and derived from evaluation of current data.

Current Cost Variance
Current variance between Actual Cost of Work Performed and Budget Cost of Work Performed.

Deed of Warranty
A specific main contract obligation for the subcontractor to provide the warranty under deed.

De-escalation
Process of evaluating and removing actual escalation, from spends to date, in accordance with a defined formula or set of indices to give an equivalent value against a prior base date.

Defective Work Charge
See Backcharge. Contract may require defective work to be replaced.

Definition Phase
Initial period of a project when confirmation of scope and project strategy is developed.

Definitive Estimate
Detailed estimate prepared for control purposes from well-defined engineering/design data.

Deliverables
Project measurable documents, materials and other physical commodities or outputs capable of being delivered/tracked against a specific programme or schedule.

Delivered Material Cost
All up cost of material delivered to site, inclusive of freight, handling charges, insurance, duties, etc.

Demobilisation
Term used to describe final project or contract termination close-out activity.

Demurrage
Charges payable for detention of a vessel, vehicle or trailer.

Departmentalisation
The division of an organisation into departments, cost centres or service units for budgetary cost control purposes.

Depreciation
Drop in value of a capital asset due to use or ageing.

D

Damages
Sums of money awarded as financial compensation for a tort or breach of contract.

Data Bank
Collection of project information, norms, rates, indices, generic projects data etc.

Day Work
Work paid for on an hourly, daily or weekly time basis, covering labour, material and plant charges including overheads and profit.

Day Work Rates
Hourly, daily or weekly rates for Day Work.

Day Work Contract
Contract reimbursed against Day Work rates.

Debit
Charge to an account.
Depreciation Reserve
An account set up to receive credits to offset depreciation charges.

Design and Construct Contract
Contract based on a brief provided by the owner against which a contractor designs and constructs a project.

Design Basis
Formal front-end document defining project scope of work, anticipated execution philosophy required for engineering design activity, any site/regulation constraints, and forms the basis for estimated costs and timescale for the project.

Design Cost
Cost of preparing a defined design, inclusive of all fees, drawings, specifications, models, surveys, and all other documentation or services necessary to engineer the complete package.

Design Development
Nominal allowance in an estimate or forecast for anticipated additional costs arising from natural evolution of preliminary design data.

Design Management & Construct Contract (DMC)
A type of Design & Build which generally, though not exclusively, the contractor procures and takes full responsibility for all design on the project, (i.e. including what would normally be termed consultants design).

Designed Quantities
Quantities derived from take off from drawings with allowances for MUI (Miscellaneous and Unspecified Items), etc.

Detailed Estimate
See Class I Estimate.

Develop
Refine an initial idea or proposal to the point at which it holds together as a coherent and potentially viable proposition.

Direct Cost
Any cost directly allocatable to a productive account or cost centre.

Direct Labour
(1) Labour which can be directly related/allocated to output of a productive account or cost centre, compared with indirect labour which is not directly related to output.
(2) Labour employed directly by owner or main contractor, as opposed to sub-contract labour.

Direct Manhours
Manhours which are directly related to the output of a productive account or cost centre, as opposed to indirect manhours.

Direct Material
Purchased material which is directly used as part of the output of a productive account or cost centre.

Discounted Cash Flow
Overall cash flow on a project discounted to net present value or a specific year value.

Discounting
Application of compound interest to, adjust costs placed earlier in time, to an equivalent later, base date value.

Disposal Cost
The cost incurred at the end of an assets working life which would include the cost of demolition, scrap or resale value and labour cost.

Distributables
A category of costs which are spread or apportioned over other cost items.

Double Shift Work
Two separate labour teams operating in consecutive shifts.

Down Time
Period when equipment or plant is non-operational, planned or unplanned.
Drawing Measure/Quantities
Construction or material quantities as measured from drawings.

Duration
Elapsed time for work to be done, underpinned by quantities or standard time.

Dummies
The logic linking activities

E

E&OE
Errors and Omissions Excepted – a qualification clause commonly used to cover mistakes in quotations.

Earliest Event Time (EET)
Early Complete
The earliest time an event can be completed within the logic and imposed targets in the network.

Early Start
The earliest time an event can start within the logic and imposed targets in the network.

Early Warning System (EWS)
System/process to give advance notice of a potential cost/time over-run of a deliverable/project

Earned Income
Actual income value to date for services rendered, work performed or materials supplied.

Earned Manhours
Budget man-hours for work completed.

Earned Value
Budget value for work completed; the value of the useful work done at any given point in a project.

ECGD
Export Credit Guarantee Department – an official UK Government office for insurance of payment on overseas sales or contracts.

Effective Date
Cut-off date for the data incorporated into a cost/progress report.

Efficiency
See Productivity.

Efficiency Factor
See Productivity Factor.

Element Of Competence (VQ)
The smallest sub-division of a unit of competence.

Engineers Order (EO) (aka Work Order -)
Order raised by an Engineer or his delegate, releasing a work package to be delivered to the required scope, time, quality and cost.

EPC
Engineering, Procurement and Construction – An integrated contract covering all these functions to manage/deliver the project.

Equipment Cost
1) Delivered capital cost of permanent plant and equipment.
2) Purchase or rental cost of construction equipment.

Equipment List/Plant List
Design and progress document listing all items of major equipment/plant on a project.

Erected Cost
Total cost of erected equipment, facilities, structures or buildings inclusive of engineering, material, fabrication, erection, etc.

Erection
Installation of equipment, materials, structures, etc on site.

Escalated Cost
Costs which have been escalated from actual or estimated values, to equivalent values at a new date

Escalation
Cost increases arising from inflation or market forces resulting in a change in value against time, referenced to a base date.

Estimate
Evaluation of expected quantities, time and manhours, with allowances/provisions for expected unknowns.

Estimate Authorisation
Estimate approval at the appropriate level of authority.

Estimate Basis
Document defining all conditions and assumptions used in the preparation of an estimate.
**Estimate Classification**
Categorisation of an estimate based on levels of detail and accuracy (e.g. Class I, Class II and Class III Estimates).

**Estimate Reliability**
Level of confidence in an estimated value and the quality of underpinning information

**Estimate to Complete**
Estimate of remaining costs, man-hours or quantities to completion, of defined scope.

**Estimator**
a specialist who maintains the generic project models and norms for the business and applies them or industry standards in the preparation of the various classes of estimate.

**Evaluation Estimate**
See **Class III Estimate**.

**Event**
The end or start of an activity.

**Event Time**
The time by which an event can be (or is to be) achieved.

**Extensions of Time**
Contractual extension of time to reflect agreed claims/scope changes. Sometimes used to minimise the risk of invoking penalty clauses.

**Ex Quay (Duty to Buyer’s A/C)**
All goods for which all import duties and taxes are routed through the buyer’s account.

**Ex Quay (Duty Paid)**
All goods for which unloading from ship, import duties, taxes and customs clearance are included in vendors price/contract.

**Ex Ship**
All goods for which unloading, documentation, handling charges, import duties and taxes are routed through the buyer’s account.

**Ex Works**
Goods from the factory, mill, warehouse, etc, for which the vendor is responsible for all packing and loading.

**Expenditure**
Total value of all invoices and charges either paid or approved for payment.

**Factored Estimate**
1) Front-end estimate created by factoring/modelling known costs from previous similar projects, or part projects
2) Budget estimate created by factoring the costs of major items in order to provide the cost of minor components or bulk items.

**Factors (VQ)**
Things that may affect the setting of objectives or their achievement.

**Facilities**
Services to support the delivery and operation of a project.

**FAS**
Free alongside ship — cost of goods and all charges up to placement alongside a vessel at a contracted port.

**Feasibility Study**
Assessment of the technical and/or commercial viability of a project (research/investment).

**Feed-back**
Out-turn data used to create norms and modelling data structured to underpin future estimates. It includes data on how a process or a product meets expectations.

**Feed-out**
Term used for the analysed presentation of tender information, normally prepared by an estimator for use by the project execution team as a basis for cost control activities.

**Field Administration and Supervision**
Site administrative and supervisory staff.
Provoc – Glossary of Common Project Control Terms

Field Budget
Authorised target for field activities based on designed quantities and associated budget manhours and infrastructure/construction plant costs.

Field Change
Field-authorised change to overcome problems with the as-designed construction or erection drawing or specification.

Field Controllable Costs
Cost which can only be controlled on site.

Field Prorates
Field indirect costs distributed over direct construction cost accounts.

Field Purchased Material
Permanent material purchased by site against a Field Purchase Order.

Field Purchase Order
Purchase Order raised and authorised at site.

Final Account
Agreed final settlement of payment under a contract.

Final Measure
Agreed final measurement from as-built drawings or site construction.

Financial Model
Plan of proposed or anticipated income and expenditure against time for a project.

Firm Price
Price fixed in all respects apart from an escalation clause in some contracts where additional payment may be made using an agreed formula against a base date.

Fixed Assets Register
List of the current asset value of all completed/operational projects. This may be subdivided into main areas/facilities created by the project.

Asset under construction register.

List of the projects currently in progress, where purchase has taken place.

Fixed Capital
Capital values of fixed assets, land structures and equipment, which are difficult to liquidate to cash.

Fixed Fee
Contract for service for which there is no adjustment for escalation or other reasons, within the contract period providing scope is unaltered.

Fixed Lump Sum Price
Single price for specified scope of work not subject to adjustment for escalation or other reasons.

Fixed Price
Price held for fixed duration for specified goods or services.

Fixed Unit Price
Unit price held for fixed duration for specified goods or services.

Float
The duration an activity can move in time without affecting the critical path.

Free Float
The duration an activity can move without moving the adjacent activities planned dates.

Total Float
The overall time available within a schedule or programme from the activities earliest start to its latest finish finish date, without affecting the overall project end date.

Float Erosion
The using up of available float.

Float (Business/Stock)
A buffer level of cash, goods or stock maintained for immediate use maintained at a predetermined level.

Fluctuation Clause
Contractual clause covering the procedure for handling price adjustments due to cost of living increases during the contract period.
FOB
Free On Board — cost of goods and all charges up to being placed on board a vessel at the named port.

FOR
Free On Rail — cost of goods and all charges up to being placed on railway trucks at the contracted station.

Force-Majeure Clause
Contractual disaster clause specifying as a consequence of an Act of God. i.e. Earthquake, flood war, riots, etc release mechanisms from the contract or parts of contract.

Form of Contract
Agreement document, legally binding and enforceable in law. Can be a standard form of contract i.e. JCT building, civil, mechanical, or lead company’s own form. The standard form is prepared by a sector body. For any type of contract there will often be a choice of standard forms from which the contract specific document of agreement can be prepared.

Forward Cost Estimate
Forecast of outstanding costs usually to completion of a phase or the project.

Forward Escalation
Anticipated increases in costs arising from escalation.

Forward Labour Load(Resource Requirements)
Anticipated future manpower requirement.

Free Issue Material
Fabrication or construction materials supplied, at no cost, made available by owner or design contractor to the fabricator or construction contractor.

Fringe Benefits
The non-productive employment cost to cover employee terms and conditions such as holidays, sick leave, etc.

Front End
Term commonly used to describe the initial design or definition phase of a project.

Funding Estimate
Generally a class II estimate to underpin the funding case approval.

G

Gant Chart
Time based activity chart showing logical links and keydates

General Reserves
Provision within a cost estimate for undefined risks.

Grass-Roots Plant
Development of a Greenfield site from site preparation to a completed facility.

Green Field Site
Virgin site where no prior structural development has occurred

Brown Field Site
Sites on which buildings/structures exist or have previously existed.

Gross Margin/Profit
Operating profit, revenue, costs or loss before overhead recovery charges.

Growth
Increase costs arising from evolution of work scope from R&D, design development, procurement, fabrication and construction costs for the same original scope.

Guaranteed Maximum Price (GMP)
Contractual conditions which limits reimbursement to a maximum payment and for which completion is guaranteed.

Gulf Coast Manhours
Construction manhours calculated using Gulf Coast norms.
**Gulf Coast Norms**
Standard construction manhour norms developed from various US Gulf Coast projects data.

**H**

**Hammock**
An activity, joining the start of the leading activity to the end of a series of network activities and where duration reflects the overall time and related logic for the series, at plan and subsequent monitoring stages.

**Handling Cost**
Costs of handling, storing, and re-distribution of goods and materials.

**Handover**
Completion of a project or area of a project and transfer to the client or next owner.

**Hard Target**
The activity must not start before a set date and/or must complete by a set date.

**Height Money**
Wage adjustment for working at heights or adjacent to holes, generally in accordance with trades union working agreements.

**Hierarchy of Programmes**
The suite of programmes necessary to control the project/contract, generally at three levels though can go deeper, each level rolling up to its higher parent:

- **Level 1** summary logic showing key activities, dates and overall durations
- **Level 2** strategic control programmes showing all strategic activities, logic and durations for the project and main areas and phases i.e. design, construction etc.
- **Level 3** Detail programmes or schedules under pinning level 2 programme activities and durations

**NB:** With integrated computer planning packages this is now treated as project, sub-project, network and sub-network ,etc.

**Histogram**
Bar chart indicating estimated or actual manpower resources over each period of the contract.

**Historical Data/Analysis**
Detailed and systematic analysis of recorded cost and performance data on a collection of completed projects/project phases.

**I**

**Incentive Cost**
The cost of bonus incentive payments on contract.

**Incentive Payments**
Additional payments to labour and or subs/subcontractors for incentive purposes.

**Incurred Cost**
Actual cost to date of services rendered, work done or materials supplied, including accruals.

**Indefinite Schedule**
Un-resourced schedule.

**Indices**
See Cost Indices.

**Indirect Costs**
Cost for support/infrastructure. e.g. Preliminaries, labour, etc.

**Indirect Wages**
Indirect labour wages.

**Indirects**
All labour, material, plant, tools, supplies, services, etc not directly related to a project progress/productivity.

**Inflated Cost**
Artificially uplifted cost as a provision for unknowns, etc.

**Inflation**
See Escalation.
**In-House**
Company’s internal resource or information.

**In-House Estimate**
Estimate underpinned by company’s own information, without use of vendor or contractor, quotations/input, etc.

**Initial Approved Cost**
Initial approved base cost against which subsequent cost movements are measured and reported.

**Initial Objectives (VQ)**
Goals that are regarded as potentially achievable before a detailed analysis has been carried out.

**In-Place Sub-Contracts**
Major contractors with sub-contracts currently in place (eg. design, supply and erection sub-contracts).

**Installed Cost**
Closeout cost of installed equipment, materials and facilities, inclusive of design, procurement and construction.

**Installed Quantities**
Quantities installed as measured from design drawings.

**Intangibles**
Cost items for non-deliverables (ie. not a commodity). e.g. Labour, services, etc.

**Integrated Work Measurement**
Progress payment structured around integrated, cost schedule, which underpins estimate, budget, tender and actuals from an integrated base.

**Interest Rate of Return**
Discounted cash flow where the average outstanding investment and interest charges are repaid by revenue from the project over a defined write off period.

**Interface**
An event used to define the common point between one network and another, to allow the relationships to be established. This can be within or across projects.

**Interim Valuation**
Interim payment on an account, using an agreed payment framework for work done to date.

**Internal Change (Internal Risk)**
Internal evolution of scope, the costs of which are absorbed by the contractor or project.

**Internal Transfer**
Transfer of quantities, manhours or costs from one area of estimate to another, without affecting current overall estimate value.

**ICEC**
International Cost Engineering Council

**IPMA**
International Project Management Association

**Impact (R)**
The effect of an occurrence on cost or time, generally linked to rankings for magnitude at risk workshops for conversion to modelling values, for attachment to items on the model

**ITIS**
Invitation to Bid.

**ITP**
Instruction To Proceed.

**ITT**
Invitation to Tender.

**J**

**Job Card**
Travelling document authorising a package of site work to be carried out in accordance with attached drawings/ specifications, etc.
**Provoc – Glossary of Common Project Control Terms**

**K**

**Key Event**
Milestone event used to flag important targets/requirements on the project.

**Knock-on Cost/Effect**
Costs/time impact of a prior or anticipated occurrence.

**Knowledge Evidence (VQ)**
Evidence which demonstrates an individual’s underpinning knowledge and understanding required to support performance to the national standard. It is normally specified in the forms of:-
- Principles and Methods – demonstrated understanding of relevant theory, principles and methodology.
- Facts And Data – Demonstrated knowledge of relevant information and facts.

**L**

**Labour Mix**
The distribution of trades in a labour force.

**Labour Only Contract**
Contract for supply of labour only.

**Ladder**
Where a number of activities require partial completion before their subsequent activity can start, and completion before the subsequent activity can be freed-up to complete its remaining work. This gives the overall appearance of a ladder.

**Lag**
The schedule lapse time on a logic link between the start or finish of one activity and the start or finish of an succeeding activity.

**Lang Factors**
Estimating factors used to convert the manufactured cost of plant into the erected or installed cost and ultimately, the completed project cost.

**Latest Event Time (LET)**
Latest time an event can occur without affecting the target finish date for the project.

**Late Start**
Latest start date for an activity without affecting the target finish date for the project.

**Late Complete**
Latest complete date for an activity without affecting the target finish date for the project.

**Lead**
Is a logic link with a duration specifying the advance between the preceeding activity and its successor.

**Letter of Intent**
A document issued by a party intending to enter into a contract that purports to confer upon the opposite party a limited set of rights and conditions with the intention of them commencing their own obligations under the same contract.

**Level 1/Level 2/Level 3 Programmes**
See Hierarchy of Programmes

**Level of Confidence**
Probability of achievability of the cost and schedule forecasts/base often linked to the risk model.

**Level of effort Programmes**
Where resource limits have been set for the different skills required, and the planning package is allowed to set the elapsed duration for the project activities to stay within the limits, and hence determin the overall end date.

**Life Cycle Cost**
The whole life cost of the asset including capital expenditure, ongoing maintenance, future repair and/or renewal and eventual disposal.

**Liquidated Damages (LD’s)**
Contractual clause for reimbursing the client in the event of delay in completion by the contractor, usually £x/day/week.

Load Factor
Average output or demand on a plant compared with the design capacity.

Loading
Distribution of labour, cost or other resources over bar charts, schedules or networks.

Local Manhours
Home country construction manhours Factored to suit a specific geographic area, or ones specific to that geographic area.

Location Factor
Factor to adjust costs, manhours or other conversion data from one geographical area to another.

Logistics
Systems for organising the deployment of resources.

Long Lead Items
Plant or materials with long delivery duration to give time for design, manufacture and works testing. Often critical to project.

Loop
Logic error, where a succeeding activity attempts to start a preceding activity.

Lost Time
Productive time lost because of inclement weather, labour problems, equipment failure or other cause.

Lump Sum
Agreed single payment/price for work, goods or services on completion to the agreed specification/drawings

Management Period
Under certain types of contract, (eg. ICE), the period starting from the date of issue of the practical completion certificate and running for a specific period of time stated in the contract, (usually 12 months), during which the contractor is liable to make good any defects.

Managing Contractor
Main contractor responsible to owner for the overall delivery of the project, by self and others.

Manhour
Basic work unit for labour/resourcing.

Manhour Budget
Manhour target for project to completion.

Manhour Change
Change to current control manhour budget.

Manhour Cost
Actual or estimated cost from manhour estimate times manhour rate.

Manhour Estimate
Estimate breakdown of manhours required to deliver project.

Manhour Forecast
Forecast of manhours yet to be expended.

Manhour Norm
Standard time for task/deliverable. Can be companies own or national norm. i.e. SPONS, etc (monitor/deliverable).

Manhour Rate
1) Cost per manhour.
2) Manhours per work unit.

Manpower
Manning requirements for task/tasks.

Mapi Method
American variant of discounted cash flow.

Margin
Planned/tracked differential, such as between cost and revenue.

Mark-up
Provoc – Glossary of Common Project Control Terms

**Surcharge on actual costs or contract rates to provide reimbursement for overheads and profit, etc.**

**Master Budget**
Any high level summary budget.

**Master Network**
Overall control network for the complete project, which dictates the framework for more detailed underpinning networks developed as the project detail evolves.

**Master Schedule**
High level contractual summary schedule.

**Material Control**
1. Controlling the procurement activities of material from requisition through final delivery to the point of installation.
2. Process of monitoring the utilisation of materials on site specifically in regard to quality and quantity.

**Material Handling Cost**
Cost/charges for loading, unloading, transporting, storing, etc, of purchased material.

**Material Take-off (MTO)**
1. Measurement of material quantities from drawings.
2. Document output following measurement of material quantities from drawings.

**Measured Term**
Term contract where payments are made on valuations for installed/constructed work at the quoted contract rates.

**Measured Work**
Construction or fabrication work which is identified and measured, physically or from drawings, for tender, progress and/or payment.

**Mechanical Completion**
Major milestone for the completion of process or service installation ready for the start of commissioning.

**Method Statement**
Contractual strategy document submitted at tender/agreed at contract for delivery of the contract.

**Milestone**
Key or critical event within the project programme: often tracked to indicate the health of project, as performance measurement benchmarks or as triggers for payments.

**Mobilisation**
Period between contract placed and effective start of work to cover recruiting resources, setting up the site establishment, design offices etc.

**Moiety**
One half of the total retention percentage stated in the main contract. Moiety is released upon the certificate of practical completion and the final certificate.

**Monte Carlo Simulation**
Particular computerised probabilistic method used in modelling risk etc.

**MUI**
Miscellaneous Unspecified Items. Provision for items not specified, but considered to be needed.

**N**

**Net Present Value (NPV)**
The present value of all net cash inflows less the present value of all cash outflows.

**Net Profit**
Revenue less costs, less project overhead charges, for the financial year /project.

**Network (Project Network)**
Timescale model for the project or part project using a combination of activity duration’s, logic and resource constraints and key dates at strategic points/times.

**Network Analysis**
Running of the time model using critical path techniques to evaluate float/critical path, etc

**Node**
1) The start or finish event for an arrow network.
2) The activity itself for a precedence network.

Non-Productive Time
Paid time with no productive output. e.g. Meal time, walk time, lost time, overtime uplift, etc.

Non-Splittable Activity
An activity that, once started, must be completed without interruption.

Norm
Standard cost, manhour or duration for a specific deliverable.

Norm Cost
Cost derived from established cost norms.

Norm Hours
Manhours derived from manhour out-turn.

Normal Hours
The working hours in standard day/week.

Normal Time
Time worked before overtime payment.

NVQ (VQ)
National Vocational Qualification. A qualification based on occupational competence, to the relevant approved national occupational standard, which has been accredited by QCA and incorporated into the NVQ framework.

O

Objectives (VQ)
The goals that are regarded as potentially achievable by a project. Initial objectives are those established as a precursor to detailed analysis being carried out. Primary objectives must be met for project success to be achieved.

OCPCA
Oil and Chemical Plant Contractors Association.

OCPCA Norms
Standard manhour norms for mechanical and electrical work developed and published by OCPCA.

Occupational Standard (VQ)
A specification of expected performance in employment. It defines performance and knowledge requirements and outcomes and the range of circumstances for which performance is specified.

Offsites
Areas of plant outside the main process plant covering receipt, storage, administration, external utilities and infrastructure.

On Cost
Apportionment of indirects, burdens, overheads, profit, etc to direct costs.

Open Ended Cost
Contract with no fixed value, to allow for variable quantities, manhours, unit rates, etc.

Open Ended Order
Purchase or construction contract with unit price or unit rate but unknown final quantities.

Optimum Plant Size
Process equipment capacity sizing representing the best balance between the economics of size and the cost of carrying excess capacity during the early years of selling the product.

Order-of-Magnitude Estimate
Term commonly used for very preliminary cost estimate.

Out-of-Pocket Cost
Minor expenses account.

Overhead Costs
Company expenses not directly assignable to a particular project, but each project must contribute to these and the profit in most cases.

Owner
A general term covering employer/purchaser, manufacturer, client or operator.
Packaged Plant
System – Manufactured/assembled and works tested off site, brought to site assembled or in part-assembled units and placed/final assembled on site on purpose foundations ready to operate.

Packaged Unit
Entire working piece of equipment, complete with associated piping, instrumentation, etc., Usually arriving on site on skids.

Parent Company Guarantee
A guarantee given by a parent company to an employer under a contract, undertaking that in the event of it’s subsidiary company failing to perform it’s obligations, the parent company itself will be liable in place of the subsidiary. A parent company guarantee should not place obligations on the parent company over and above the terms and conditions placed on the subsidiary under the contract.

Path
Unbroken sequence of activities with the same float.

Payback Period/Payout Time
Calculated time taken for the original investment to be paid-off from the projected profit after allowing for depreciation and taxes.

Payroll Burden
Indirect payroll costs. e.g. National Insurance, , training, holiday’s, etc.

PC Sum
See Prime Cost Sum.

Performance Bond
See Surety Bond.

Performance Criteria (VQ)
The criteria which indicate the standard of performance required for the successful completion of an element of competence.

Performance Evidence (VQ)
Evidence, gathered under real work conditions, or conditions as close to the normal working environment as possible, which either demonstrates how a candidate performs a job/task, or is the result of such performance.

Performance Factor
Factor expressing productivity as a function of the budget = actual time taken, divided by, budgeted work time for the same scope.

Permanent Assets
Fixed capital value of plant, buildings, land, etc. not easily liquidated.

Permanent Material
Purchased equipment and material permanently incorporated into the finished project.

PERT
Programme Evaluation and Review Technique. = The original name for network analysis/ CPA

Physical Completion
Progress assessed by physical measurement.

PID/P&ID
Piping and Instrument Diagram.

Planning
Developing and running the Network model for a project.

Planning Engineer
A specialist engineer who develops the project timescale schedules, and running them in computer planning packages, increasingly this involves developing integrated cost schedules in the same package.

Plant
Main items of machinery and equipment permanently installed in a process/manufacturing plant.

Plot Plan
General layout drawing showing the major items, plant layout and external facilities.

Possession
1. Partial: A main contract condition allowing the employer to take possession of portion(s) of the completed works at specified dates.

2. Date of: The fixed date in the main contract for the contractor to take possession of the works.

3. Temporary: A fixed period of time made available to a contractor to carry out works in a specified area that would normally be occupied and operated by the client or a third party. Often utilised in works adjacent to railways.

**Precedence Matrix**
Analytical tabulation of activities showing the interrelationship of activities in a precedence network.

**Predecessor(s)**
An activity that must start or finish before another task can start or partially finish.

**Pre-Design Estimate**
Pre-budget estimate prepared from very preliminary design data to an accuracy of +/-20%.

**Preliminaries**
Preliminaries are the overhead charges associated with a contract for which the client is charged regardless of progress, ie: site establishment costs.

**Premium Time**
Overtime paid at enhanced rates.

**Price Variation Formula**
Contract price formula to compensate for variations in economic conditions.

**Primary Objectives (VQ)**
Those targets which must be met for a project or undertaking to be deemed a success.

**Prime Cost**
Basic cost for installed plant, materials, labour and services, excludes indirect charges, operating costs, maintenance costs and interest on loans.

**Prime Cost Sum (PC Sum)**
Contract sum for an item of work to be supplied/carried out by a supplier or sub-contractor - excludes general contractor attendance and profit margin.

**Private Finance Initiative (PFI)**
A method of procuring services that are delivered through assets. It consists of a long-term contractual public private partnership under which the private sector takes on the risks associated with the delivery of public sector services in exchange for payments linked to agreed standards of performance.

**Probability**
The chance that something (risk/benefit) may occur (usually % or index).

**Probability Analysis/Modelling**
Statistical modelling, where the model is run a number of times, using risk (probability and impact) values against the model elements, and the budgeted estimate/programme are compared with the model outcome to determine their achievability, expressed as a percentage chance of occurrence from the run.

**Procurement**
The process of obtaining a resource. It includes establishing the appropriate sources of supply, defining criteria for quantity, quality and cost, and selecting the appropriate contractual methods for its acquisition and the means for its delivery to the point of use.

**Procurement Phase**
Period during the life of a project when procurement is the main activity.

**Productive Account**
Direct account or cost centre where its activities impact directly on project/business throughput.

**Productive Labour**
See Direct Labour.

**Productivity**
Efficiency statement for work output compared to standard or norm.

**Productivity Factor**
The productivity factor expresses productivity as a function of a norm = actual time taken, divided by, the norm time for the same quantity of work.

**Productivity Profile**
Graphical showing actual or forecast productivity factors against time.

**Programme Manager**
The individual or body with responsibility for managing a group of projects.

**Progress Payment**
Interim payment in respect of work/service completed.

**Progress Weighting**
Conversion of different activities types to a common base to enable an overall progress evaluation to be made.

**Project**
Is defined by British Standard 6079 as “A unique set of co-ordinated activities, with definite start and finishing points, undertaken by an individual or organisation to meet specific objectives within defined schedule, cost and performance parameters.”

There are several attributes of projects, as described in BS 6079:-

- Non-repetitive and tending to have unique features that are novel to the management.
- Carry risk and uncertainty.
- Approved in return for undertakings to deliver quantified results within quality and safety/health parameters.
- Usually in the hands of a temporary team and may be subject to change as the work progresses.
- May be affected by events inside and outside the enterprise.

**Project Control**
The setting and monitoring of cost/schedule deliverables, identification and anticipation of variances and implementation of preventive and recovery actions

**Project Life Cycle**
The sequential phases through which a project passes from inception to demolition/reinstatement = Inception, Optioneering, Front end definition, Front end engineering, Detail Design, Procurement, Construction, Installation, Commissioning, Operation, Decommission, Demolition, Reinstatement

**Project Manager**
The individual or body with responsibility and accountability to manage the resources (including the technical, time and cost aspects) in order to deliver the project

**Project Management**
The planning, monitoring and control of all aspects of a project and the motivation of those involved in it to achieve the project objectives on time and to the specified cost, quality and performance.

**Project Management Team**
A multi-disciplinary group of people headed by a project manager set up to deliver the project

**Project Monitoring**
The recording of current project status against the control Estimate and Programme and identification of the variances.

**Project Phase**
One of a series of distinct steps in carrying out a project that, together, constitute the project life cycle.

**Project Programme**
A time and resource related schedule or diagram of project tasks that describes the project process.

**Provision**
Allowance in an estimate for a specific item or potential event, which cannot be fully defined/underpinned.

**Provisional Sum**
Specified sum in contract for item of work or supply which cannot be fully defined at contract.
Provoc – Glossary of Common Project Control Terms

**Purchase Requisition**
Formal request to order equipment/service or facility.

**Q**

**QCA (VQ)**
Qualifications and Curriculum Authority. The national accrediting body for NVQs.

**Quality Assurance (QA)**
Formal documentation, implementation and monitoring of business processes.

**Quality Control (QC)**
A control process to ensuring product or service quality meets defined and desired attributes.

**Quantity Control**
Monitoring design or construction deliverables completed, or status to completion against the control estimate quantities/activity (ie number of: drawings, EFD’s welds, etc.).

**Quantity Trend**
Tracking/analysing the actual deliverable quantity curve variances against the control estimate deliverable curve.

**Quantity Variance**
Difference between as-designed, as-purchased or as-built quantities and authorised budget quantities.

**R**

**Radius Allowance**
Payment to site construction workers to cover the cost of travelling to site. Normally aligned to a national agreement.

**Range Item/Range Statement (VQ)**
The definition of the boundaries of circumstances, contexts and contents governing the scope of performance criteria.

**Rate of Return on Investment**
Efficiency factor relating operating/profit to capital employed.

**Rectification Cost**
Cost of restoring faulty design, materials or workmanship to meet contract requirements

**Regulations**
Statutory and mandatory non-statutory requirements. Will include national and international regulations and codes of practice.

**Reimbursable Contract**
Contract in where payment is made on a cost reimbursable basis, against either rates at cost plus a mark-up, or a straight cost and mark-up.

**Reimbursable Rate**
The cost rate against which contract reimbursement is made.

**Re-Measure**
Re validation of quantities for unit rate construction or fabrication work from drawings

**Rental Equipment**
Mechanical equipment rented during the construction period of project.

**Reporting Cycle**
The routine sequence of tasks/cut off, necessary to collate and prepare a cost and schedule report for each reporting period against the project (generally monthly/quarterly).

**Resource Accumulation**
The total roll-up against time of all resource types across all phases of the project to predict demand/phasing for each resource type and overall demand.

**Resource Levelling**
Adjusting the schedule to optimise fluctuation in resource requirements for the different resource or key resource types.

**Resource Limited Scheduling**
The scheduling of activities to ensure available resource levels are not exceeded. (See Level Of Effort)
Resource Smoothing
Resource levelling, within the limits of the activities float/maintaining project end date.

Retention
Sum of money retained (Post completion) for a contracted period to cover possible defects in work or service, and paid to the contractor at the end of that period, if no defects have occurred.

Re-Use Price
Assessed re-use value for Material/equipment.

RFP
Request for Proposal

Risk
BS 6079 defines as: “a combination of the probability, or frequency, of the occurrence of a defined threat or opportunity and the magnitude of the consequences of the occurrence.”

Risk Analysis
The process of evaluation of potential risk to the project, identification/ranking and modelling to find the main risks.

Risk Management
The process whereby decisions are made to accept a known or assessed risk and/or the implementation of actions to reduce or eliminate the consequences or probability of occurrence.

Risk Ranking
The process of identification of impact and probabilities of an individual risk and attaching of those to the appropriate activity on the model in order to evaluate the overall potential risk to the project, and overall ranking to find the main risks and managing/mitigating them.

Risk Register
A database, or document to capture the risk titles, impacts and probabilities on a project, and link them back to the model elements. Along with this the database captures the mitigating actions and their owners. This is a live register, continually capturing the current risk status. More sophisticated registers read directly into the modelling tool as per Risk Decisions “Risk Manager” to “Risk Analyser”

Rolling Programme
This is the practise of having a strategic control programme, firming up the next 6 months window and detailing a working programme for the next 3 months window, on an ongoing basis.

Roll-up
Accumulation cost of schedule data at a detailed level and summarisation to a structural higher level.

Royalty
Payment for use of copyrights and patents, such as for propriety chemical processes.

S

Sales Estimate
Estimate prepared in support of bid.

Salvage Credits
Recovery value for unused/recovered equipment, material or property.

Sampling
Analysis of key criteria/data for a particular cost/programme category by taking particular examples across the range (samples), to develop trends and interpolate/extrapolate for possible future new variants.

Sanction Estimate
See Class II Estimate.

Sanctioned Cost
Authorised maximum cost for project/work package.

Sanctioned Manhours
Authorised manhours for work package.

Scaling Factors
Used for estimating cost/time for new process equipment by interpolating/extrapolating, for the same generic type of equipment, from the relationships between known equipment costs and sizes.

Schedule
Control programme for project/remaining scope.
**Scheduling**
The process of running forward and backward passes across the schedule.

**Schedule Impact**
Effect or influence of some occurrence, commonly a change, on an existing schedule or completion date.

**Schedule of Rates**
List of unit prices for categories of work that may be undertaken and/or services/materials supplied under the contract.

**Schedule of Rates Contract**
Open-ended contract with reimbursement against a Schedule of Rates.

**Scope**
See **Scope of Supply or Scope of Work**.

**Scope Estimate**
Semi-detailed estimate prepared for initial budget purposes based on preliminary but mainly design data to an accuracy of +/-10%.

**Scope of Supply**
Define item of services, commodities or facilities to be delivered under contract.

**Scope of Work**
Extent of work to be delivered under contract.

**S-Curve**
Cumulative graph against time for tracking overall progress cf with plan: for cost, manhours, materials etc. CP1/SP1 can be calculated from the variance on this form of graph.

**Semi-Detailed Estimate**
Initial budgetary estimate underpinned by mainly preliminary but fixed design data to an accuracy of +/-10%.

**Sequence of Activities**
Logic sequence path for a number of activities.

**Sinking Fund**
Fund set up to pay off a known liability, wasting asset or depreciation by a defined date.

**Site Establishment**
All on site support facilities required on a construction site, including site administration and supervision, temporary facilities, contractor’s areas, construction tools, utilities, stores, workshops, labour camp etc.

**Site Instruction**
Written client instruction issued at site to the construction contractor.

**Size Mix**
Range of sizes embodied in a category of materials or tasks, such as pipework, steelwork etc.

**Skeleton Network**
A summary network with a reduced number of activities but maintaining the logic and timing of the underpinned activities. See **Level 1 Programme**

**Slack (Free Float)**
See **Free Float**.

**Slush Fund**
Provisional fund for draw down in the case of contingent irregularities.

**Special Purpose Vehicle (SPV)**
In PFI, an entity, (usually a limited company), set up to act as the supplier specifically for a PFI contract which does not usually have any other activities.

**Specification of Requirements**
The detailed statement of how the project shall be achieved and how it shall be expected to perform.

**Specific Reserves**
Estimate/forecast provision for specific possible occurrences.

**Splittable Activity**
An activity that can be interrupted for resource smoothing purposes.

**SQA (VQ)**
Provoc – Glossary of Common Project Control Terms

Scottish Qualifications Authority. Equivalent to QCA and the accrediting body for Scottish Vocational Qualifications (SVQ).

Stage Payments
Progress payments made during a contract work package or a contract, for the achievement of the deliverables/milestones agreed in the contract.

Stakeholder
A person, or group of people who have a vested interest in the success of an organisation and the environment in which the organisation operates.

Standard Time
A term used in Work Study to define the time taken to achieve a task by a normally motivated and skilled operative, including calculated allowances for relaxation and other necessary non-productive time, but excluding remedial works.

Star Rate
Agreed additional unit rate for work not covered under the original contract schedule of rates.

Statement of Requirements
A clear but often broadly based definition of the principle aims and objectives for a project. It is sometimes called the Project Brief.

Study Estimate
Pre-budget estimate based on a very preliminary design data to an accuracy of +/-20%.

Summary Network
A very condensed presentation network reflecting the more detail programmes.

Surety Bond
The third party guarantee document executed by the owner to ensure the contractor performs his contracted liability.

Suspense Account
Cost account held for the purpose of collecting unmatched expenditure, an ongoing audit/check facility.

Suspense Clause
Purchase order or contract clause defining the circumstances under which suspension or cancellation may be invoked, and the terms under which suspension or cancellation shall be effected.

T

Tangibles
Physical ‘tangible’ commodities, cf ‘intangible’ labour, services etc.

Target Date
Fixed milestone date for either the start or finish of an activity.

Take Over Certificate
Formal certification that work has been completed in accordance with the contract and ownership is transferred.

Temporary Works
On site works to provide temporary support for structures during construction process, e.g. formwork for concrete, propping of floors, excavations, etc.

Tender
Formal pre-contract submission in response to an enquiry stating price, completion time and any qualifications which will form the basis for contract if chosen.

Term Contract
A contract with pre-agreed unit rates for a prescribed period which enables a client to call off work as required.

Terminal Cash Flow
Rate of revenue or income at end of economic life

Termination
Cancellation of a placed purchase order or contract before completion of works.

Tied Activities
Activities that must be performed sequentially or within a defined time of each other.

Time-Based Network Linked Bar Chart
Time Limited Scheduling
The scheduling of activities and resources to ensure the project duration/imposed dates, are not exceeded.

Time Now
The monitor/report cut-off date for information.

Time Phasing
Term used to describe the distribution of planned or actual manhours across time.

Total Float
The overall time by which an activity may be delayed or extended without affecting the total project duration, but may delay adjacent activities.

Transfers Certificate
Formal transfer of custody of area/zone of building from one trade to another or contractor to client.

Trend Forecast
Forecasts derived from analysis of data trends.

Trending
The process of analysing data to determine trends through continuous monitoring across project life.

Turn-Key Contract
Contract for design, supply, construction and commissioning of a plant or facility.

Turnover
Aggregate in the period of the value recognised on: long term contracts, short term contracts, fee income and sales.

Valuation
Certified assessment or calculation of completed work for payment purposes (interim or final).

Value Engineering
Technique for optimising the design for construction and operation at the most economic cost, without loss of quality or safety.

Value Management
1. The process concerned with defining what “value” means to a client within a particular context.
2. A structured problem solving and decision making process encompassing value engineering and other value related activities.

Unallocatable Cost/Manhours
Costs which cannot be allocated to a direct account or productive cost code.

Underpinning Knowledge and Understanding (VQ)
The knowledge of facts, procedures and principles required to attain the standards for competent performance.

Under-Recovery
Where expenditure exceeds recoverable revenue, for part or all of the work.

Unit Cost
Cost per stated item or unit of measurement.

Unit Of Competence (VQ)
A group of elements within an Occupational Standard that have a coherent functional relationship.

Unit Rate
Any rate expressed against a unit of measurement

Unlimited schedule
A schedule produced without resource constraint.

V

Valuation
Certified assessment or calculation of completed work for payment purposes (interim or final).

Value
Estimate/Actual-manhours or costs.

Value Engineering
Technique for optimising the design for construction and operation at the most economic cost, without loss of quality or safety.

Value Management
1. The process concerned with defining what “value” means to a client within a particular context.
2. A structured problem solving and decision making process encompassing value engineering and other value related activities.

Variance
Any deviation from plan/budget

Variance Analysis
Analysis of the causes of reported variances.

Variation
Change in scope of work or supply, subject to confirmation and approval. (Often used for internal
Variation Order
Document authorising the defined project change to be implemented. (Often used for internal growth changes, rather than Contract scope changes).

Verification (VQ)
The process of checking that what has been done is as specified and to the required standard.

Verifier (VQ)
A person competent, registered and approved to verify the performance of the NVQ assessment process.

Version
This is the unique identification number attached to master versions of an estimate or programme, copies of which are used as the baseline for monitoring/reporting actuals against, on a continuous basis.

Version Control
This procedure is to control the versions of a programmes and estimates, to prevent what-if or monitored copies being used as firm information.

Walking Time
Time allowed for movement of construction labour between different places of work or site accommodation.

Wastage Factors
Factors applied to bulk material quantities to allow for unavoidable wastage during fabrication, erection or installation.

Weighted Percent Complete
Overall progress completion measurement, using weighting to normalise disparate activities.

Wet Time
Time lost due to wet weather and treated as additional to current contract value.

Wharfage
Charge for temporary storage at dockside

The Work Breakdown Structure (WBS)
The hierarchical structure for the project against which the estimate and programme elements will be referenced for packaging and reporting common data/management information.

Work Component
Level within Work Breakdown Structure

Work Element
Level within Work Breakdown Structure.

Work Measurement
The measurement of drawings or by physical survey of fabrication or construction work, required for estimating, budgeting, tendering, progressing or payment purposes.

Work Package
A group of activities/tasks necessary to deliver a defined area of plant/facility or element in a work breakdown structure.

Working Rule Agreement
Sets out the minimum terms and conditions for construction activities.

Writings Off
Reduction/elimination of the net book value for a fixed asset due to sale, demolition, redundancy or replacement.

Yardstick
Historical data established for benchmarking and control of current work.