



Praxis®

# Praxis Framework

Comparative glossary of project,  
programme and portfolio terminology.

The Praxis Framework comparative glossary of project, programme and portfolio management terms.

Version 1.0, September 2015.

Version 1.1, October 2015.

Praxis Framework Ltd.  
Surrey, United Kingdom

All trademarks are hereby acknowledged and the author and publisher make no claim to these trademarks.

Readers are responsible for the use and application of the information contained in this publication. The author and publisher accept no responsibility for use of the principles, tools and techniques contained in it and adherence or otherwise to any of them does not in itself confer any immunity from legal or other obligations.

Cover design taken from Praxis Framework: An integrated guide to the management of projects, programmes and portfolios, [published by the Association for Project Management](#).

ISBN: 978-1-903494-25-7.

## Introduction

Welcome to the Praxis Framework comparative glossary.

The aim of this document is twofold. Firstly it acts as a conventional glossary of terms. Secondly, it provides comparisons between terms from the guides listed in the coverage section below. The glossary is in no way a substitute for the various guides. It merely explains the relationships between different terms so that someone familiar with one terminology can quickly discover equivalents or similarities in another.

## Using the glossary

The glossary contains many hyperlinks. Hyperlinks under headings in the left column are external links to the Praxis Framework web site. These provide more extensive and detailed information about the term. Hyperlinks in the right hand column are internal to the glossary.

Unlike PRINCE2™ activities and PMBoK® Guide processes, Praxis activities are not described by individual entries in the glossary as they are adequately covered by the links to the Praxis Framework web site. These activities are therefore highlighted in italics and not hyperlinked. The same is taken for steps in procedures in the PRINCE2 themes.

There are many references to 'equivalent terms' throughout the glossary to explain how terms in one guide relate to terms in another. These equivalences should not be seen as exact matches. Different guides have different structures and many of the 'equivalent terms' are approximate or near equivalents. To gain a full and detailed understanding of the relationships between terms they need to be seen in context in the corresponding guides.

## Conventions

### Language

The glossary is written in British English but an increasing number of pages that the glossary links to at [www.praxisframework.org](http://www.praxisframework.org) are being translated by volunteers around the world. Newly translated pages are frequently uploaded.

The links will take you to the English language pages which have links to any available translations.

### Inclusion

The inclusion of a guide in the Praxis Glossary coverage does not automatically mean that every individual entry from the guide's glossary is included. Many guides choose to include generic terms that have no special meaning within the field of P3 management. Some also include terms that are not sufficiently described within their own text. These are all excluded from the Praxis Glossary.

### Capitalisation

The glossary includes terms from many different guides. Each guide has a different policy on capitalisation. For example:

- PRINCE2 capitalises process names, documents and roles.
- The PMBoK® guide capitalises process and knowledge area names but not documents and roles.
- ISO21500 capitalises the first letter of processes but not subject groups, documents or roles.
- The APM BoK only capitalises in accordance with normal written English.

The approach in this glossary is to capitalise processes as they are always unique to each guide. Document, role and other terms are often common to multiple guides, so these are only capitalised in accordance with normal written English.

## Reference numbers

The PMBOK® guide and ISO21500 often have the same name for processes that are slightly different. To differentiate them, PMBoK® guide and ISO21500 processes have their reference numbers appended to the process name.

These can quickly be distinguished as the PMBoK® guide uses two digits and ISO21500 uses three.

## Coverage

Version 1.0 compares terms from the following guides:

- Body of Knowledge v6 published by the Association for Project Management.
- PRINCE2™ 2009 edition published by Axelos Ltd.
- A Guide to the Project Management Body of Knowledge fifth edition published by the Project Management Institute.
- The Praxis Framework published by Praxis Framework Ltd.

Version 1.1 incorporates:

- PRINCE2 Agile™ published by Axelos Ltd.
- The guide to Planning, Scheduling, Monitoring and Control published by the Association for Project Management.

## Updates

The glossary will be updated regularly. The next update will incorporate Managing Successful Programmes and the standard for program management from the Project Management Institute. Subsequent updates will incorporate guides and standards for portfolio management.

To be notified about the release of new updates, you can either [email us](#) with 'Praxis Glossary' as the subject or simply follow us on [Twitter](#).

PMBOK® is a registered trade mark of the Project Management Institute Inc.

PRINCE2™ and PRINCE2 Agile™ are registered trade marks of Axelos Ltd.

Praxis® is a registered trade mark of Praxis Framework Ltd.

This document is provided subject to a Creative Commons [CC BY-SA](#) licence



**0/100 rule** See [earning rules](#).

**50/50 rule** See [earning rules](#).

**Abstract resource** Abstract resources can be introduced into a [schedule](#) for computer based [resource scheduling](#). Unlike resources that represent machinery or labour that are needed to perform an [activity](#), abstract resources are introduced purely to provide extra control over the scheduling process.

For example, a resource called ‘space’ could be assigned to activities that are working in a confined space. If two activities run concurrently but, when added together, exceed the stated limit in space, the resource scheduling algorithm will schedule them at different times.

**Accept** One of the four possible [threat](#) responses.

**Accept a Work Package** An [activity](#) in the [Managing Product Delivery](#) (MP) [process](#) of PRINCE2.  
The purpose of this activity is to ensure that there is agreement between the project manager and [team manager](#) on the definition of a [work package](#). This will include performance of risk analysis, agreement of [tolerances](#) and inclusion of the work package in the [team plan](#).

The equivalent in Praxis is the *accept work package* activity in the [development process](#), which works in conjunction with the *authorise work* activity in the [delivery process](#).

This formal [delegation](#) of work from the project manager to a team or individual is not explicit in the PMBoK® guide or ISO21500 but could be considered implicit in the processes [Direct and Manage Project Work](#) (PMBoK® guide) and [Direct project work](#) (ISO21500).

**Acceptance** The formal act of accepting a [deliverable](#) according to its pre-defined [acceptance criteria](#). In this context a ‘deliverable’ could constitute a [product](#), [work package](#) or project [output](#).

**Acceptance criteria** A list of criteria that must be met before a [deliverable](#) can pass its [acceptance test](#). The criteria should be measurable so that the deliverable can be [verified](#).

In [agile](#) projects these criteria may be referred to as the [definition of done](#) for a [user story](#).

**Acceptance test**

A test used to confirm that [acceptance criteria](#) have been achieved.

In Praxis, acceptance tests will typically be performed as part of the *deliver products* activity in the [development process](#) and as part of the *handover* activity in the [closure process](#).

In PRINCE2, acceptance tests would form part of the [deliver a work package](#) and [hand over products](#) activities.

In the PMBoK® guide [accepted deliverables](#) are an output of the [Validate Scope](#) process. ISO21500 does not have an explicit procedure for the acceptance of deliverables.

**Accepted deliverables**

[Products](#) that have been [validated](#) by their end users as meeting their [acceptance criteria](#).

**Accountability matrix**

See [responsibility assignment matrix \(RAM\)](#).

**Accounting rate of return**

The accounting rate of return (ARR) is a simple [investment appraisal](#) technique for evaluating less complex projects and their [benefits](#).

More:

- [Encyclopaedia](#)

A key factor that is ignored in ARR is how the value of money changes over time, i.e. in an economy that has price inflation, the value of money earned today is different to the same amount earned in five years' time. This is taken into account in more sophisticated [discounted cash flow](#) methods such as [net present value](#) and [internal rate of return](#).

**Accrual**

See [accrued cost](#).

**Accrued cost**

The cost of work that has been done but for which payment is not yet due. For example, if a contractor is performing work valued at £5,000 and payable on completion, and has completed half the work, there is £2,500 of accrued cost.

If the contractor does not complete the work you may not be committed to paying. Once the work is complete according to the contract, but it has not yet been paid, the cost becomes a [committed cost](#).

**Acquire Project Team (9.2)**

The second process within the PMBoK® guide’s [project human resource management](#) knowledge area. It is an [executing](#) process that uses the [staffing management plan](#) to build the team that will be executing the project. Its main outputs are specific assignments and an updated [project management plan](#).

The corresponding areas of Praxis are the [mobilisation](#) function and the [process](#) activities where mobilisation is used, i.e. the [definition process](#) and [boundaries process](#).

There is no obvious equivalent in PRINCE2 but it could be argued that mobilisation is implicit in the [plan the next stage](#) activity in the [Managing a Stage Boundary \(SB\)](#) process.

In ISO21500 the equivalent process is [Establish project team](#).

**Action centred leadership**

See [Adair](#).

**Activity**

An activity is a piece of work that occurs over a period of time. This is generally used in two ways:

1. The individual pieces of work that are needed to develop the [objectives](#) of a project. These are the building blocks of a [network diagram](#) and form the basis of building detailed estimates of the [duration](#), cost and [resource](#) requirements of the project.
2. To describe the components of a process that achieves the goals of a [process](#). This form of the term is used by both Praxis and PRINCE2.

**Activity attributes**

The attributes of an [activity](#), including information such as [dependencies](#), [resource](#) requirements, [imposed dates](#), [constraints](#) and [assumptions](#).

**Activity box**

In a [precedence diagram](#) each [activity](#) is represented by a box. The activity box is subdivided to provide space for the [activity description](#) and the results from a [critical path analysis](#), namely ES ([earliest start](#)), D ([duration](#)), EF ([earliest finish](#)), LS ([latest start](#)), F ([float](#)) and LF ([latest finish](#)).

**Activity calendar**

In [network analysis](#) different [activities](#) may have different working patterns, e.g. some activities may only be performed at weekends. All planning software allows the allocation of activity calendars that are used in [scheduling](#) to determine the days on which an activity may occur.

See also: [calendars](#).

**Activity code**

The code given to an [activity](#) to ensure it has a unique reference. This can then be used for filtering and ordering activity based reports.

<b>Activity cost estimate</b>	The estimated cost of an <a href="#">activity</a> including all <a href="#">direct costs</a> for <a href="#">resources</a> . Individual activity cost estimates are consolidated in <a href="#">bottom-up estimating</a> to provide detailed estimates for <a href="#">work packages</a> or sections of the <a href="#">work breakdown structure</a> .
<b>Activity description</b>	The description of an activity normally written above the arrow in an <a href="#">activity on arrow</a> diagram or in the centre of the <a href="#">activity box</a> in a <a href="#">precedence diagram</a> .
<b>Activity duration</b>	See <a href="#">duration</a> .
<b>Activity list</b>	<p>This is simply a list of the <a href="#">activities</a> needed to produce the <a href="#">products</a> contained in the <a href="#">work breakdown structure</a>.</p> <p>While Praxis does not explicitly define an activity list as an output, it is implicit within the identify work activity in the <a href="#">schedule management</a> procedure. In ISO21500 the activity list is an output of the <a href="#">Define activities</a> process and in the PMBoK® guide it is also an output of the <a href="#">Define Activities</a> process.</p> <p>In PRINCE2 it is an output of the <i>identifying activities and dependencies</i> step of the <a href="#">planning</a> procedure.</p>
<b>Activity network</b>	See <a href="#">network diagram</a> .
<b>Activity on arrow</b> More: – <a href="#">Encyclopaedia</a>	<p>The original form of <a href="#">network diagram</a> that has effectively been superseded by the <a href="#">precedence diagram</a> format.</p> <p>In an activity-on-arrow network, <a href="#">activities</a> are represented by a line between two circles. The first circle represents the start of the activity and is known as the start event (sometimes called the i-node). The second circle represents the finish of the activity and is known as the finish event (sometimes called the j-node).</p>
<b>Activity on node</b>	A form of <a href="#">network diagram</a> in which the <a href="#">activities</a> are represented by nodes and <a href="#">dependencies</a> are represented by arrows. The most common form of activity on node network is the <a href="#">precedence diagram</a> method (PDM).
<b>Activity weeks method</b>	A simple measure of project progress that records the number of <a href="#">activities</a> in progress each week.
<b>Activity-based cost</b>	See <a href="#">activity cost estimate</a> .



**Actual cost**

The actual money spent in performing an [activity](#) so far. The total actual cost may include elements of [accrued costs](#) and [committed costs](#).

When used in earned value management this is sometimes referred to as [actual cost of work performed](#) (ACWP).

**Actual cost of work performed (ACWP)**

More:

- [Encyclopaedia](#)

An [earned value management](#) term representing the actual cost of performing an [activity](#), part of a project or the entire project. Some practitioners prefer the simpler term [actual cost](#) (AC).

**Actual duration**

The time that an [activity](#) actually took to complete.

**Actual effort**

The actual time expended by a [resource](#) in the performance of an [activity](#).

**Actual event time**

The time that an [event](#) actually occurred in an [activity on arrow](#) network.

**Actual expenditure**

See [actual cost](#).

**Actual finish date**

The date an [activity](#) actually finished.

**Actual progress**

A measure of the work that has been completed.

**Actual start date**

The date an [activity](#) actually started.

**Actual time expended (ATE)**

The total time expended on the project to date in [earned value management](#).

**Adair**

More:

- [Encyclopaedia](#)

John Adair developed his leadership model while working as a lecturer at the Sandhurst Military Academy in the UK. He was one of the first proponents of the idea that leadership can be trained and developed rather than being a purely innate ability in 'born leaders'.

Adair<sup>1</sup> identified three overlapping areas of core responsibility: task, team and individual. He called the balancing of these three elements, 'Action Centred Leadership'.

**Adaptive life cycle**

A [development life cycle](#) that has a high degree of [stakeholder](#) involvement and is also highly iterative and incremental. [Agile](#) approaches are the most common example.

<sup>1</sup> Adair J., (revised 2009), Effective Team Building, Pan MacMillan.

**Adjourning**

More:

– [Encyclopaedia](#)

---

A stage Bruce [Tuckman](#) added to his model of team building in 1977 to signify the stage where the team disbands.

**Administer procurements (4.3.37)**

The ISO21500 process that covers the management of suppliers. It includes the checking of performance and taking action as required to maintain compliance with project [objectives](#).

In Praxis the nearest equivalent is the *monitor* step in the [contract management](#) procedure which works in conjunction with the [control](#) function and the [delivery process](#).

The equivalent in the PMBoK® guide is [Control Procurements](#).

PRINCE2 does not contain processes that explicitly deal with external contracts although the role of the [senior supplier](#) in the organisation structure is relevant. Controlling contracts should be seen as implicit in other control functions.

---

**Affinity diagram**

The collection and presentation of ideas into related groups. Typically done as part of a [brainstorming](#) exercise where ideas are written on cards which are then arranged into groups.

---

**Agile**

More:

– [Encyclopaedia](#)

Agile project management is an umbrella term for development methods that take an incremental and iterative approach. Although it originated in software development, and is still principally found in that environment, the principles can be applied to other disciplines.

The different flavours of agile are united by certain key characteristics:

- Short development iterations known as [sprints](#).
  - Very close working between developers and [stakeholders](#).
  - Regular reprioritisation of work.
  - Rapid and flexible approach to addressing [scope](#) change.
- 

**Agilometer**

A tool incorporated into [PRINCE2 Agile](#) that assesses the level of risk associated with using [agile](#) in combination with PRINCE2.

---

**Analogous estimating**

See [comparative estimating](#).

---

**Analytical estimating**

See [bottom-up estimating](#).

---

**AND relationship**

Most [network diagrams](#) only use this type of [dependency](#) between [activities](#). It means that an activity cannot start until all its [predecessors](#) are complete.

See also [OR relationship](#) and [probabilistic networks](#).

---

**APM Body of Knowledge (APM BoK)**

The UK Association for Project Management's Body of Knowledge covers project, programme and portfolio management in 68 [functions](#) based on a functional analysis of the discipline.

The equivalent in Praxis is the knowledge section of the framework.

Although much broader, in principle the APMBok corresponds to the [themes](#) in PRINCE2 and the tools and techniques in the [knowledge areas](#) of the PMBoK® guide.

Since ISO21500 processes do not contain tools and techniques the standard does not have equivalent functional guidance.

---

**APM PSMC**

The term used in this glossary for the APM publication on planning, scheduling, monitoring and control. The book is subtitled The Practical Project Management of Time, Cost and Risk.

---

**Application area**

This term is quoted by the PMBoK® guide to describe a category of projects that share a common feature. Common features may be technical, commercial, environmental or any other aspect of a project's nature. E.g. 'Internet Projects' is a technical application area, 'Marketing Projects' is a commercial application area and 'Government Projects' is an environmental application area.

---

**Applied direct costs**

The actual [direct costs](#) of labour, material and all other direct [resources](#) in a time period independent of when the costs are committed or due to be paid.

---



The printed version of the Praxis framework is published by the Association for Project Management.

[Click here](#) to go to the APM book store.

**Appoint the executive and the project manager**

The first activity in the PRINCE2 process: [Starting up a Project \(SU\)](#)

Having received a project [mandate](#), the first step in PRINCE2 is to appoint the project [executive](#) who will lead the [project board](#) (the body providing [sponsorship](#) in a PRINCE2 project) and a project manager who will perform the day-to-day management of the project. The outputs of this activity are agreed job descriptions for both roles.

In Praxis these appointments are part of *appointing the identification team* in the [identification process](#).

The equivalent appointments in the PMBoK® guide take place around the [Develop Project Charter](#) process.

ISO21500 has a similar process to the PMBoK® guide ([Develop project charter](#)) but doesn't make any reference to the sponsor.

**Apportioned effort**

[Effort](#) that is not easily measured or divisible into discrete [work packages](#) but which is related and proportional to effort that can be measured.

This typically refers to overhead effort such as project management.

**Approval to proceed**

The approval necessary before commencement of the next [phase](#), [stage](#) or [tranche](#) of a project or programme.

**Approved change requests review**

A review of [change requests](#) that have been approved to check that they have actually been implemented.

**Arbitration**

A way of resolving contractual disputes without resorting to legal action in the courts. Many [contracts](#) will nominate an arbitrator who may be asked to rule on a specific aspect of a contract that is in dispute.

**Archived plan**

Some computer packages allow versions of a [schedule](#) to be archived. This is particularly useful where a project is subject to a [baseline review](#). If the project schedule needs to be re-baselined, then the original baseline can be archived to maintain a record of the changes.

**Arrow**

The arrow drawn between two [events](#) in an [activity on arrow](#) network. Also sometimes used as an abbreviation for activity on arrow as in "an arrow network".

**Arrow diagram method**

See [activity on arrow](#).

<b>As late as possible</b>	A term used in computer scheduling packages to indicate that an <a href="#">activity</a> should be performed as late as possible, i.e. it should be scheduled to take up its entire amount of <a href="#">float</a> .
<b>As of date</b>	See <a href="#">progress date</a> .
<b>As soon as possible</b>	A term used in computer scheduling packages to indicate that an <a href="#">activity</a> should be performed as soon as possible, i.e. not scheduled to take up any of its <a href="#">float</a> .
<b>As-built schedule</b>	A <a href="#">schedule</a> that illustrates the actual performance of a project.
<b>Ascertained cost</b>	An alternative name for a <a href="#">cost plus fee</a> contract.
<b>Assemble the Project Initiation Documentation</b>	<p>This is the last activity in the PRINCE2 <a href="#">Initiating a Project</a> (IP) process. It brings together all the information developed by other activities within the process and assembles it as the <a href="#">project initiation documentation</a> (PID).</p> <p>The PID then forms the basis of a decision whether or not to proceed with the project in the <a href="#">authorize the project</a> activity.</p> <p>In Praxis the equivalent documentation is brought together by the <i>consolidate definition documentation</i> activity in the <a href="#">definition process</a>.</p> <p>The PMBoK® guide process, <a href="#">Develop Project Management Plan</a> is similar in scope and meets the same objective of having comprehensive documentation to support approval of the execution of the project. The corresponding process in ISO21500 is <a href="#">Develop project plans</a>.</p>
<b>Assess risks (4.3.29)</b>	<p>The ISO21500 process that is concerned with analysing the identified risks. It only references <a href="#">qualitative risk analysis</a> but if <a href="#">quantitative risk analysis</a> were required it should be included in this process.</p> <p>In both Praxis and PRINCE2 this is covered by the assess activity in the <a href="#">risk management</a> procedure. Both make reference to quantitative analysis as well as qualitative analysis.</p> <p>The equivalents in the PMBoK® guide are <a href="#">Perform Qualitative Risk Analysis</a> and <a href="#">Perform Quantitative Risk Analysis</a>.</p>
<b>Assignment</b>	Often used to describe the work on an <a href="#">activity</a> attributed to a specific <a href="#">resource</a> .

## Assumptions

It is inevitable that in developing project documentation, many assumptions will have to be made. These will be assumptions about available [resources](#), risks or technology; there will be [estimating](#) assumptions for both time and cost and assumptions about the changing external [context](#).

It is a common excuse that “there is no point in producing a plan that will be based on so many assumptions”. Assumptions cannot be avoided and the need to make them does not mean that it is not worth producing project plans. The only rule is that assumptions must be documented.

## Assumptions analysis

[Assumptions](#) should be periodically examined to assess the likelihood of the assumption proving false and the potential impact of that false assumption.

This will usually result in [risk events](#) being added to the [risk register](#).

## Assurance

Assurance is the set of systematic activities intended to ensure that the [objectives](#) and management processes of a project, programme or portfolio are fit for purpose.

More:

- [Knowledge](#)
- [Competence](#)
- [Capability maturity](#)
- [Resources](#)

In Praxis the goals of assurance are to:

- review management [planning](#);
- monitor effectiveness of functions and processes;
- give [stakeholders](#) confidence that the work is being managed effectively and efficiently.

This Praxis topic is equivalent to the P3 Assurance topic in the APM BoK. PRINCE2 divides this into [project assurance](#) and [quality assurance](#).

The equivalent in ISO21500 is the [Perform quality assurance](#) process and in the PMBoK® guide it is also the [Perform Quality Assurance](#) process.

## Assurance management plan

The assurance management plan sets out the preferred procedures, tools and techniques to be used in [assurance](#).

More:

- [Description](#)
- [Templates](#)

This should cover both internal and external assurance and unlike other management plans will be owned by the [sponsor](#) rather than the project or programme manager.

## Attribute sampling

A [quality control](#) method that samples a small set of [products](#) and uses the results to make predictions about the whole population.

Useful in a project where lots of products have common attributes but also useful when sampling a small set of projects to assess the overall [capability maturity](#) of a portfolio of projects.

## **Audit**

A systematic evaluation of how a project or programme is being managed against a predetermined set of criteria.

Projects and programmes are designed to meet strategic organisational objectives. Senior management will rely on audits for [assurance](#) that the project or programme remains aligned with those objectives and is being managed in a way that maximises the probability of achieving all the benefits set out in the [business case](#).

---

## **Authorised unpriced work**

Work that has been authorised but for which a [contract](#) price has yet to be agreed.

---

## **Authorize a Stage or Exception Plan**

The delivery of a PRINCE2 project is usually divided into [stages](#). Each stage must be approved by the [project board](#) before it can be started. This [activity](#) is the point at which each new stage is approved and is part of the [Directing a Project](#) (DP) process.

The same activity is used to approve [exception plans](#) when they are required.

The corresponding activity in Praxis is *review request for authorisation* in the [sponsorship process](#). The name reflects the fact that authorisation is not guaranteed.

There is no equivalent in the PMBoK® guide or ISO21500 since they do not contain specific sponsorship processes.

---

## **Authorize Initiation**

In PRINCE2 the [Initiating a Project](#) (IP) process is where the detailed [planning](#) is done. Before investing in the initiating process the [project board](#) must approve a plan for this detailed work and the initial outline plan for the project (the [project brief](#)). This activity considers the brief and decides whether to proceed.

The corresponding activity in Praxis is *review request for authorisation* in the [sponsorship process](#). The name reflects the fact that authorisation is not guaranteed.

There is no equivalent in the PMBoK® guide or ISO21500 since they do not contain specific sponsorship processes.

**Authorize project closure**

An [activity](#) in the PRINCE2 [Directing a Project](#) (DP) process which considers a request to close the project.

The corresponding activity in Praxis is *review request for authorisation* in the [sponsorship process](#). The name reflects the fact that authorisation is not guaranteed.

There is no equivalent in the PMBoK® guide or ISO21500 since they do not contain specific sponsorship processes.

---

**Authorize the Project**

This is an activity within the PRINCE2 process, [Directing a Project](#) (DP).

Once the [project initiation documentation](#) (PID) has been assembled, it is submitted to the [project board](#) for approval. If the PID is accepted, the project manager can proceed with the first [stage](#) of the project.

The corresponding activity in Praxis is *review request for authorisation* in the [sponsorship process](#). The name reflects the fact that authorisation is not guaranteed.

There is no equivalent in the PMBoK® guide or ISO21500 since they do not contain specific sponsorship processes.

---

**Authorize Work Packages**

This is an activity within the PRINCE2 process, [Controlling a Stage](#) (CS).

When a project manager assigns work to teams in the form of a [work package](#). This package contains the [product description](#)(s) of the product(s) that must be developed and also specifies timescales, costs and progress reporting arrangements. This activity works in conjunction with the [accept a work package](#) activity in the [Managing Product Delivery](#) (MP) process.

The equivalent in Praxis is the *authorise work* activity in the [delivery process](#), which works in conjunction with the *accept work package* activity in the [development process](#).

This formal delegation of work from the project manager to a team or individual is not explicit in the PMBoK® guide or ISO21500 but could be considered implicit in the processes [Direct and Manage Project Work](#) (PMBoK® guide) and [Direct project work](#) (ISO21500)

---

**Avoid**

One of the four possible [threat responses](#).



<p><b>Backlog</b></p>	<p>A term frequently used in <a href="#">agile</a> development for a list of prioritised <a href="#">product</a> requirements or features. Prioritisation is typically done using techniques such as <a href="#">MoSCoW</a>.</p> <p>Each <a href="#">sprint</a> or <a href="#">timebox</a> plans to deliver a selection of products or features from the backlog.</p>
<p><b>Backlog item</b></p>	<p>An entry in a <a href="#">backlog</a>. This may be in the form of a <a href="#">user story</a> or <a href="#">activity</a>.</p>
<p><b>Backward pass</b> More: – <a href="#">Encyclopaedia</a></p>	<p>The second phase of <a href="#">critical path analysis</a>. It calculates the <a href="#">latest starts</a> and <a href="#">latest finishes</a> of <a href="#">activities</a>.</p>
<p><b>Balance</b></p>	<p>A phase in the APM BoK portfolio <a href="#">life cycle</a> where the combined risk, resource usage, cash flow and impact on the business of the component projects and programmes is balanced.</p> <p>Also an activity in the Praxis portfolio <a href="#">management process</a>.</p>
<p><b>Balanced matrix</b> More: – <a href="#">Encyclopaedia</a></p>	<p>A form of <a href="#">matrix organisation</a> that gives equal authority to the project and functional sides of the matrix. There is a designated project manager but he or she is still within one of the functions. Although better for the project than the <a href="#">weak matrix</a>, there is still the danger that the project manager has divided loyalties between the project and his or her functional manager.</p>
<p><b>Bar chart</b></p>	<p>See <a href="#">Gantt chart</a>.</p>
<p><b>Base date</b></p>	<p>See <a href="#">progress date</a>.</p>
<p><b>Baseline</b></p>	<p>A baseline is a measure of anything that may change, before it is changed.</p> <p>For example:</p> <ul style="list-style-type: none"> <li>• In project control a <a href="#">baseline schedule</a> will be used to compare with <a href="#">actual progress</a>.</li> <li>• In <a href="#">benefits management</a> the performance levels of the business will be baselined in areas that are expected to achieve improved performance.</li> </ul> <p>A <a href="#">budget</a> is a form of cost baseline.</p>
<p><b>Baseline cost</b></p>	<p>The amount of money an <a href="#">activity</a>, project or part of a project was intended to cost when the <a href="#">schedule baseline</a> was set.</p>

<b>Baseline duration</b>	The <a href="#">duration</a> that an activity, project or part of a project was intended to take when the <a href="#">schedule baseline</a> was set.
<b>Baseline effort</b>	The <a href="#">effort</a> assigned to an <a href="#">activity</a> , project or part of a project when the <a href="#">schedule baseline</a> was set.
<b>Baseline finish date</b>	The <a href="#">scheduled finish date</a> of an <a href="#">activity</a> , <a href="#">stage</a> or <a href="#">milestone</a> at the time the <a href="#">schedule baseline</a> was set.
<b>Baseline management product</b>	In PRINCE2 this is a type of <a href="#">management product</a> that, once approved, is subject to formal <a href="#">change control</a> .
<b>Baseline review</b>	A review to establish whether the <a href="#">baseline</a> being used is still valid for the purposes of monitoring progress on the project. If the <a href="#">scope</a> of the project has changed significantly since the baseline was set, it may not be valid to compare current progress against the original baseline. It may be necessary to reset the project's baseline in order to exercise <a href="#">control</a> .
<b>Baseline schedule</b>	<p>When the plans are agreed and work is about to start on the project's products, the project <a href="#">schedule</a> and costs are <a href="#">baselined</a>. These provide reference points against which progress can be compared as work proceeds.</p> <p>During the project, reports are produced that compare actual progress against the baselined schedule. Typical examples are the financial comparisons produced during <a href="#">earned value management</a> and an actual vs. baseline <a href="#">Gantt chart</a>.</p>
<b>Baseline start date</b>	The <a href="#">scheduled start date</a> of an <a href="#">activity</a> , <a href="#">stage</a> or <a href="#">milestone</a> at the time the <a href="#">schedule baseline</a> was set.
<b>Basis of estimates</b>	Documentation that explains and supports how <a href="#">estimates</a> were constructed.
<b>Belbin</b>	An often quoted system for categorising people's roles within a team is that of R. Meredith Belbin who studied teams working on management games and experimented with different mixes of people.
More:	<ul style="list-style-type: none"> <li>- <a href="#">Encyclopaedia</a></li> </ul> <p>His initial approach was to group the most able people together to form an elite team. These teams did not perform well and Belbin concluded that a high performing team needs a complementary mix of characters. He identified nine team types, each of which have positive contributions to make to a team but also have what Belbin terms 'allowable weaknesses'.</p>

**Benefit**

All projects and programmes must deliver some form of benefit to the [host organisation](#) otherwise there is no point in undertaking the work. Some benefits, such as cost savings through lower energy bills, are tangible and easily quantifiable. Others, such as increased staff morale are harder to quantify.

[Change management](#) must be used to derive tangible benefits from the [outcomes](#). For example, increased staff morale may lead to lower staff turnover, which in turn could lead to a tangible and quantifiable saving from reduced recruitment costs.

The sum of the quantifiable benefits is what will justify the investment in the project as described in the [business case](#).

**Benefit owner**

The [benefits](#) that are identified in a [business case](#) must have owners. Overall ownership of benefits resides with the [sponsor](#).

Individual benefits will be owned by the person who is responsible for managing the change that delivers the benefit – often referred to as a [business change manager](#).

**Benefit profile**

More:

- [Description](#)

A benefit profile is used to define both [benefits](#) and [dis-benefits](#). It is typically developed during the [definition process](#) of a project or programme following [requirements management](#). The profile includes sections that describe the benefit or dis-benefit and how it will be realised and measured.

**Benefit realisation review**

See [benefits review](#).

**Benefit/cost analysis**

The analysis of the potential costs and [benefits](#) of a project to allow comparison of the returns from alternative forms of investment. Usually expressed as a simple ratio of the value of benefits to costs.

Sometimes referred to as cost/benefit analysis. The principle is exactly the same but the ratio is reversed.

**Benefit/project matrix**

There is rarely a one-to-one relationship between [benefits](#) and projects within a programme. It is more usually the case that a project will contribute towards more than one benefit and a benefit will be facilitated by more than one project.

A benefit/project matrix maps projects against benefits. It can be populated with the proportion of the value of each benefit that is attributable to each project. This helps with the development of [business cases](#) for each project.

## Benefits log

See [benefits register](#).

## Benefits management

More:

- [Knowledge](#)
- [Competence](#)
- [Capability maturity](#)
- [Resources](#)

This Praxis function defines [benefits](#), implements the necessary change and ensures the benefits are realised. Its goals are to:

- define benefits and [dis-benefits](#) of the proposed work;
- establish measurement mechanisms;
- implement any change needed in order to realise benefits;
- measure improvement and compare to the [business case](#).

Also a function in the APM BoK.

PRINCE2, ISO21500 and the PMBoK® guide do not include the realisation of benefits but they make reference to it being performed after the project is complete, i.e. projects run using these three guides concludes when the [output](#) is delivered. In Praxis the realisation of benefits may be part of a project.

## Benefits management plan

More:

- [Description](#)
- [Templates](#)

A separate benefits management plan (as opposed to a benefits section in the [scope management plan](#)) will often be required where there are multiple benefits, significant change and the relationships between [outputs](#) and [benefits](#) are more complex, i.e. a benefits management plan is usually appropriate where the work is managed as a programme rather than a project.

## Benefits map

More:

- [Sample](#)

A benefits map is a form of [influence diagram](#) and is needed where there are complex relationships between multiple [outputs](#), [benefits](#) and the strategic objectives that the benefits support. Within these relationships there may be [dis-benefits](#), and [outcomes](#) that form a bridge between outputs and benefits.

**Benefits realisation process**

More:

- [Method](#)
- [Competence](#)
- [Maturity](#)

This Praxis process manages the realisation of [benefits](#) for both projects and programmes.

It is usually the case that simply producing an [output](#) does not automatically realise benefits. In most cases an output is used to change some aspect of an organisation’s mode of operation or environment. Implicit within the word ‘change’ is a quantifiable improvement in one or more performance indicators to which value has been assigned.

The goals of this process are to:

- establish the current state of what is being changed;
- co-ordinate the delivery of outputs with the [management of change](#);
- ensure changes are permanent;
- establish whether benefits have been achieved.

In its simplest form, realising benefits is about measuring current performance, helping the people who make up the organisation through the period of change (the transition) and finally, measuring the improvement in performance.

PRINCE2, ISO21500 and the PMBoK® guide do not include the realisation of benefits but they make reference to it being performed after the project is complete, i.e. projects run using these three guides concludes when the [output](#) is delivered. In Praxis the realisation of benefits may be part of a project.

---

**Benefits register**

A list of the [benefits](#) arising from a project or programme with key data about each benefit. This acts as an index of [benefit profiles](#).

---

**Benefits review**

[Benefits](#) are realised over a period of time. This will be monitored on a day-to-day basis but periodically a formal benefits review should be conducted. This will involve a review of [change management](#) and [benefits management](#) procedures as well as comparison of actual benefits realised against the planned benefits.

---

**Benefits review plan**

A PRINCE2 project does not include [benefits realisation](#). It is assumed that this will be performed by a host programme or [business as usual](#). However, the project does have responsibility for planning benefits reviews and this is set out in the benefits review plan.

---

**Benefits tolerance**

[Tolerance](#) as applied to a [benefit](#).

PRINCE2 requires this to be documented in the [business case](#).

<p><b>Berlo</b> More: – <a href="#">Encyclopaedia</a></p>	<p>David Berlo set out his theory of <a href="#">communication</a> in 1960<sup>2</sup>. It is also known as the SMCR model because of its four components: source, message, channel and receiver.</p>
<p><b>Beta distribution</b> More: – <a href="#">Encyclopaedia</a></p>	<p>A statistical distribution that is commonly used in <a href="#">PERT analysis</a> and <a href="#">Monte Carlo analysis</a>.</p>
<p><b>Bid</b></p>	<p>A quotation or proposal, usually made in response to a <a href="#">request for quotation</a>, which offers to enter into a <a href="#">contract</a> for specified price under certain contractual terms and conditions.</p>
<p><b>Bid analysis</b></p>	<p>The process of breaking down and assessing a <a href="#">bid</a>. This usually facilitates the comparison of alternative bids. A variety of qualitative and quantitative methods can be used that address aspects of the bid such as <a href="#">value for money</a> and <a href="#">whole life costing</a>.</p>
<p><b>Bidder conference</b></p>	<p>A meeting of prospective <a href="#">suppliers</a> prior to the issue of a <a href="#">tender</a> that ensures all suppliers have a clear, common understanding of the client’s requirements.</p>
<p><b>Blake and Mouton</b> More: – <a href="#">Encyclopaedia</a></p>	<p>Robert Blake and Jane Mouton developed their managerial grid in the early 1960’s<sup>3</sup>. They described two dimensions:</p> <ul style="list-style-type: none"> <li>• Concern for people indicates the degree to which a leader considers team members’ needs, interests and personal development.</li> <li>• Concern for production indicates the degree to which the leader emphasises objectives, organisational efficiency and productivity.</li> </ul> <p>Within these dimensions they identified five example managerial styles.</p>
<p><b>Blueprint</b> More: – <a href="#">Description</a></p>	<p>A blueprint is a form of <a href="#">specification</a>. It is applicable to programmes of business change where the ultimate objective is a changed organisation and working methods. The blueprint represents the sum of all <a href="#">outcomes</a> resulting from the <a href="#">outputs</a> of projects and the change activity performed by <a href="#">business-as-usual</a>. The <a href="#">benefits</a> in the <a href="#">business case</a> should be capable of being realised as a result of achieving the blueprint.</p>

---

<sup>2</sup> Berlo, D., (1960), The process of communication: an introduction to theory and practice, Holt, Reinhart and Winston, New York.

<sup>3</sup> Blake, R. Mouton J., (1964), The Managerial Grid, Gulf Publishing, Houston.

**BOOT**

More:

- [Encyclopaedia](#)

BOOT is an acronym for build, own, operate, transfer. It is an asset [procurement](#) method, typically used by governments.

**Bottom up estimating**

More:

- [Encyclopaedia](#)

Initial [estimating](#) is usually performed [top down](#). Once the full [work breakdown structure](#) (WBS) has been developed, [activities](#) listed and [resources](#) allocated, detailed bottom up estimating can start.

This involves itemising each component of resource or cost on the lowest level activities and then aggregating these for each element in the WBS.

**Boundaries process**

More:

- [Method](#)
- [Competence](#)
- [Capability maturity](#)

The delivery phase of smaller projects may not be divided into [stages](#). The delivery phase of more complex projects and all programmes will be divided into stages or [tranches](#) respectively.

The initial impression of a boundaries process may be that it all takes place between the end of one stage or tranche and the beginning of the next stage or tranche. In reality it is rarely that clear cut. In programmes, tranches of work often overlap and even in projects where stages are sequential, the boundary [activities](#) will span the end of one stage and the beginning of the next.

The process will need to be tailored to suit but the main goals of managing boundaries will always be to:

- conclude a stage or tranche in a structured way;
- prepare for the next tranche or stage.

The equivalent process in PRINCE2 is [Managing a Stage Boundary](#) (SB). Neither the PMBoK® guide nor ISO21500 explicitly address boundaries between the stages of a project.

**Brainstorming**

The unstructured and dynamic generation of ideas by a group of people where anything and everything is acceptable - well almost! Particularly useful in generating a list of possible project risks.

**Branching logic**

Alternative paths within a [probabilistic network](#).

**Breakdown code**

A code that represents the 'family tree' of an element in a [breakdown structure](#).

By applying such coding systems to [work breakdown structures](#), [organisational breakdown structures](#) and [cost breakdown structures](#), reports can be produced for just about any element of a project by referring to the relevant codes.

**Breakdown structure**

More:

- [Encyclopaedia](#)

A breakdown structure is a hierarchy of components of some aspect of a project, programme or portfolio.

Examples include: [cost breakdown structure](#) (CBS), [organisational breakdown structure](#) (OBS), [product breakdown structure](#) (PBS) and [work breakdown structure](#) (WBS).

**Brief**

More:

- [Description](#)

The project or programme brief is created by the [identification process](#) and is one of the documents submitted to the [sponsor](#) to seek approval to start the [definition process](#).

During the definition process each section of the brief will be used as a basis for development of multiple specialist documents. The version of the brief used for authorisation will then be archived.

PRINCE2 also calls this document the [project brief](#).

In the PMBoK® guide and ISO21500 the [project charter](#) has very similar content.

**Budget**

A budget is a quantitative statement of [resources](#) (usually monetary) required to achieve a particular [objective](#). Typical within the project environment would be the overall project budget, [phase budgets](#) and [stage budgets](#). In the programme environment there may also be [tranche budgets](#).

**Budget at completion (BAC)**

An [earned value management](#) term for the total authorised [budget](#) for a project. This is equal to all allocated budgets and any as yet undistributed budgets (e.g. [change budget](#) or [contingency reserve](#)). [Management reserves](#) are not included.

**Budget cost of work performed (BCWP)**

More:

- [Encyclopaedia](#)

In [earned value management](#) this is the value of work done by a specified date where the value is calculated according to the actual work performed and the original [budget](#) costs. It also includes the applicable portion of [apportioned effort](#) (overheads).

Also known as [earned value](#).

**Budget cost of work scheduled (BCWS)**

More:

- [Encyclopaedia](#)

In [earned value management](#) this is the value of work that should have been completed by a specified date according to the [baseline schedule](#) and [budgets](#). This includes an applicable portion of [apportioned effort](#) (overheads).

Sometimes referred to simply as [planned value](#).



## Budgeting and cost control

More:

- [Knowledge](#)
- [Competence](#)
- [Capability maturity](#)
- [Resources](#)

A Praxis function that includes the detailed [estimation](#) of costs, the setting of agreed [budgets](#) and control of costs against that budget. Its goals are to:

- determine the income and expenditure profiles for the work;
- develop budgets and align with [funding](#);
- implement systems to manage income and expenditure.

Also a function in the APM BoK.

In the PMBoK® guide these aspects are covered by the [project cost management](#) knowledge area and in ISO21500 by the [cost](#) subject group

PRINCE2 does not have a theme dedicated to financial matters but these are mentioned in the [plans theme](#) and [progress theme](#).

## Buffer

More:

- [Encyclopaedia](#)

A reserve of time added to a [network diagram](#) in the [critical chain](#) technique. A buffer on the critical chain is a [project buffer](#) and one applied to a non-critical chain is a [feeder buffer](#).

## Burden

Overhead expenses added to [direct costs](#) to represent the overhead costs of the [host organisation](#) that should be allocated to the project.

## Burn chart

A chart that shows the number of [story points](#) on the vertical scale and time on the horizontal scale.

If the chart shows story points completed it is called a [burn up chart](#). If it shows the story points yet to do, it is called a [burn down chart](#).

## Burn down chart

More:

- [Encyclopaedia](#)

A burn down chart is a graphical plot of work remaining against time. The simple psychology of the chart is that it focuses the mind on what is left to do rather than what has been achieved. While an appreciation of what has been done creates feelings of satisfaction, an appreciation of what is left to do creates a feeling of urgency.

See also [burn up chart](#).

## Burn up chart

A burn up chart is a graphical plot of work completed against time. It is typically used in agile to show [story points](#) completed.

See also [burn down chart](#).

## Burst event

An event in an [activity on arrow](#) network that has more than one [activity](#) emerging from it.

**Business ambassador**

A role in DSDM ([Dynamic Systems Development Method](#)) that is the main role with responsibility to promote understanding of the business view of a project.

**Business as usual**

Projects and programmes are temporary constructs that deliver a set of [objectives](#) that are implemented by the more permanent operational parts of an organisation.

The term [business as usual](#) (often reduced to BAU) is used to refer to these permanent operations to distinguish them from projects and programmes.

**Business case**

PRINCE2 and the APM BoK all have a chapter dedicated to the management of the [business case](#) document.

In Praxis the equivalent topic is termed [business case management](#) to distinguish it from the document of the same name.

The PMBoK® guide and ISO21500 both refer to the business case but do not have sections dedicated to it.

**Business case (document)**

More:

- [Description](#)

The business case is the central document to a project or programme [life cycle](#). The reason for defining a life cycle with [phases](#), [tranches](#) and/or [stages](#) is to enable [go/no go](#) decisions to be made that prevent wasted investment. These decisions are primarily made based on the viability, achievability and desirability of the business case.

**Business case management**

More:

- [Knowledge](#)
- [Competence](#)
- [Capability maturity](#)
- [Resources](#)

Business case management is the function concerned with developing, communicating and maintaining the [business case](#). Its goals are to:

- summarise context and delivery in a single document;
- explain the desirability, achievability and viability of the proposed work;
- develop the primary document that will be used to support a ‘[go/no go](#)’ decision at all gates in the [life cycle](#);
- update and maintain the business case throughout the life cycle.

The equivalent chapters in PRINCE2 and the APM BoK are simply called business case.

Both the PMBoK® guide and ISO21500 mention the business case and include it as an input to the creation of the [project charter](#), but they do not have dedicated sections.

**Business change management**

In many instances, for a project output to produce [benefits](#), there needs to be business change. People and organisations are often resistant to change and the danger is that expensive project deliverables are not effectively used.

Business [change management](#) is the work involved in managing people through a period of change and embedding that change so that it becomes the normal way of working.

---

**Business Change Manager**

The role that is responsible for the management of change and realisation of [benefits](#).

**Buyer**

A PMBoK® guide term for the person who acquires products or services in the [project procurement management](#) processes.

---

**C/Spec**

A colloquial abbreviation for [cost/schedule control systems criteria](#).

---

**Calendar**

[Critical path analysis](#) uses units of time (usually days) to calculate start and finish times for the [activities](#) in a network. The day numbers need to be translated into dates for presentation of meaningful information. This requires knowledge of the normal working week and any special non-working days.

This information is held in a calendar. Most computer planning packages allow a variety of calendars to be defined. The default is usually an overall [project calendar](#) with specialist [activity calendars](#) and [resource calendars](#) being used to indicate working patterns for particular activities or resources.

---

**Capability**

See [capability maturity](#).

## Capability maturity

More:

- [Knowledge](#)
- [Resources](#)
- [Model](#)

Capability and maturity are usually represented as a model against which an organisation's performance can be measured and improved. Usually referred to as capability maturity models, they describe the essential elements of effective processes and work on the premise that the quality of a system or product is highly influenced by the quality of the process used to develop it.

The goals of capability and maturity management are to:

- assess the ability of an organisation to perform P3 management effectively and efficiently;
- identify how the organisation can improve its P3 management;
- promote the improvement of P3 management against an independent standard.

This is covered in the APM BoK in the function success factors and maturity.

The publishers of PRINCE2 and the PMBoK® guide cover capability maturity in separate documents. The Axelos publication is P3M3 (project, programme and portfolio management maturity model) and the Project Management Institute's publication is OPM3 (organisational project management maturity model).

---

## Capacity planning

More:

- [Encyclopaedia](#)

The term capacity planning means different things to people in different environments. Two things are common regardless of the detailed approach:

- Capacity is the maximum amount of work that an organisation is capable of completing in a given amount of time.
- $\text{Capacity} = (\text{amount of resource}) \times (\text{utilisation}) \times (\text{efficiency})$ .

The key thing about capacity management in the context of [P3 management](#) is that projects and programmes are transient so flexibility in capacity is important. Many quantitative approaches to capacity management are designed for production engineering or computer systems.

---

## Capital costs

Costs expended on capital investment as opposed to those expended on operational resources.

### **Capture and examine issues and risks**

An [activity](#) from the PRINCE2 [Controlling a Stage](#) (CS) process.

During a [stage](#) issues and risks will arise. This PRINCE2 activity is a simple one that notes the collection of [issues](#) and risks, and records them in the [issue register](#) and [risk register](#) respectively. It also produces [issue reports](#) as required. The examination of risks is conducted according to the [procedure](#) in the [risk theme](#).

In Praxis the capture and documentation of issues is covered in various activities, often focusing on the [sponsorship process](#) since that is mainly where issues are resolved. The capture and assessment of risks is covered by the [risk management](#) procedure.

In the PMBoK® guide the [issue log](#) is an output of two stakeholder processes indicating that issues tend to arise from [stakeholders](#). Risks are identified and analysed using the [project risk management](#) processes.

In ISO21500 the issues log is an output of [Direct project work](#). Risks are identified and assessed using the processes in the [risk](#) subject group.

---

### **Capture previous lessons**

An [activity](#) from the PRINCE2 [Starting up a Project](#) (SU) process.

All projects and programmes should learn from previous projects and programmes. PRINCE2 formalises this in the capture previous lessons activity which is the first to be done after the project manager is appointed.

The equivalent in Praxis is the *review previous lessons* activity in the [identification process](#).

In the PMBoK® guide lessons learned are part of [organisational process assets](#) which are an input to the [Develop Project Charter](#) process.

ISO21500 lists lessons learned from previous projects as an input to [Develop project plans](#).

## Carnall

More:

- [Encyclopaedia](#)

Colin Carnall's book 'Managing Change in Organisations' was first published in 1990<sup>4</sup>. In it he proposed a model that focuses on the role of the manager during the process of change.

In the P3 environment, the pressure for change creates the need for a project or programme and the 'manager' (in the context of Carnall's model) is primarily the [business change manager](#) (BCM).

Dealing with organisational cultures and managing organisational politics are clearly functions that the BCM (with support of other members of the project/programme team) needs to build into [stakeholder management](#) while managing the transition as part of [benefits realisation](#).

---

## Cascade chart

A form of [Gantt chart](#) where the [activities](#) are listed vertically such that their [predecessors](#) are always higher in the list.

This has the effect of placing the earliest activities in the top left hand corner of the chart and the latest in the bottom right hand corner.

---

## Cash flow

Cash inflow is the money received by the project or programme and cash outflow is the money paid. The combination of receipts and payments against time is a cash flow that is usually presented as an [s-curve](#).

---

## Categorise

A [phase](#) in the APM BoK portfolio [life cycle](#) where the component projects and programmes are classified and grouped according to certain shared characteristics such as the strategic objectives with which they align.

Also an [activity](#) in the Praxis portfolio [management process](#).

---

## Cause and effect diagram

See [Ishikawa diagram](#).

---

## Centre of excellence

A body that promotes consistency of methods, [knowledge management](#), [assurance](#) and training. The same functions may be performed by a [PMO](#).

---

## Champion

An alternative name for the role of [sponsor](#).

---



---

<sup>4</sup> Carnall, C., (2007), Managing Change In Organisations, Prentice Hall, London.

**Change (PRINCE2 theme)**

The change theme in PRINCE2 is concerned with [change control](#) and [configuration management](#). Note: it does not address [change management](#).

Praxis covers this in the change control and configuration management functions and their component [procedures](#).

ISO21500 addresses this through a single process ([Control scope](#)) in the [Scope subject group](#). The PMBoK® guide similarly has the process [Control Scope](#) in the [project scope management](#) knowledge area.

**Change authority**

A group that has responsibility for assessing [change requests](#).

**Change budget**

All projects and programmes are subject to requests to change the [specification](#). [Change requests](#) come from a variety of sources but mainly from those who will be the ultimate users of whatever the project is intended to produce.

Even though changes are inevitable, surprisingly few projects have the foresight to allocate a change budget which is simply a budget allocated to pay for authorised change requests.

**Change control**

More:

- [Knowledge](#)
- [Competence](#)
- [Capability maturity](#)
- [Resources](#)

Change control is the means by which all requests to change a [scope baseline](#) are captured, evaluated and then approved or rejected. Its goals are to:

- capture [stakeholders'](#) requests to make changes to [scope](#);
- ensure that requests are only approved if viable and achievable;
- integrate changes into the existing scope.

**Change control board**

A group of [stakeholders](#) who consider [change requests](#). They normally have the authority to approve changes that are funded from an agreed [change budget](#).

PRINCE2 refers to this body as the change authority.

**Change freeze**

A point after which no further [change requests](#) will be considered.

**Change log**

The change log records all [change requests](#) and their progress through the [change control](#) procedure.

## Change management

More:

- [Knowledge](#)
- [Competence](#)
- [Capability maturity](#)
- [Resources](#)

The achievement of [benefits](#) in a [business case](#) often requires changes to the working practices of the [host organisation](#). These changed practices are known as [outcomes](#) and moving from the current practice to the desired outcome is achieved through change management. Outcomes usually involve a section of the organisation adopting and utilising the [outputs](#) of one or more projects.

The goals of change management are to:

- define the organisational change required to convert outputs into benefits;
- ensure the organisation is prepared to implement change;
- implement the change and embed it into organisational practice.

The APM BoK also has a function for change management. Neither the PMBoK® guide, ISO21500 nor PRINCE2 cover change management.

---

## Change management plan

More:

- [Description](#)
- [Templates](#)

The effective management of change is vital in order to generate benefits from outputs. Changes to [business as usual](#) will be included in the scope of most projects, programmes and portfolios. There will always be resistance to change and implementing a clearly documented and consistent approach contributes to dealing with this resistance.

---

## Change order

An authorisation to make a change, including a change of scope or agreement to accept a design solution that is outside the agreed cost parameters.

---

## Change register

Sometimes used in the same way as [change log](#) (i.e. a list of all [change requests](#)) but sometimes this refers to a register of approved changes.

---

## Change request

A formal request to make a change to a [baseline](#) that triggers the [change control](#) procedure.

---

## Change team

Although a [business change manager](#) has responsibility for implementing change to achieve a particular [benefit](#), they may need the support of a change team to perform all the transformation and [benefits realisation](#) work.



## Charter

There are two very different definitions for this term.

In the PMBoK® guide and ISO21500 the [project charter](#) is a document that gives the project manager authority to apply resources to the project.

In the UK it may refer to a Royal Charter that is awarded to professional bodies and places obligations upon them to promote a profession in the public interest.

---

## Check list model

Check list models use data, typically from [post project reviews](#) or [post programme reviews](#), to build a model of the effects of broad categories of risk. The degree to which a [risk event](#) typically occurs is indicated with a factor on a numeric scale.

Weighting is applied to indicate to what extent the current project or programme is sensitive to the risk (within the limits defined in the model).

Finally, the factor and weighting are multiplied to give a score indicating the most significant areas of risk that should be examined.

---

## Checkpoint

A PRINCE2 term that refers to a point at which an [event-driven](#) review will be performed.

---

## Checkpoint Report

A PRINCE2 term used to describe the report produced by the project team at a [checkpoint](#). Its format is defined at the time that the [work package](#) is agreed and provides progress information on the [products](#) within the work package.

This report is given to the project manager by the team.

---

## Cialdini

More:

- [Encyclopaedia](#)

Robert Cialdini set out his 'six principles of influence' in his book 'Influence: the Psychology of Persuasion'<sup>5</sup>. He identified these by observing the behaviours of people in sales, advertising, fund raising etc. to see how these experienced professionals influenced their target audience.

[Influencing](#) is a key skill for both P3 managers and sponsors. The 'assess' step in the [stakeholder management](#) procedure will identify key [stakeholders](#) who have the potential to impact the work. The P3 manager and [sponsor](#) usually do not have authority over these stakeholders and must use influencing skills to gain support for the work.

---

<sup>5</sup> Cialdini, R. B., (1995), Influence: the Psychology of Persuasion, Quill, New York.

**Claim**

A request by a supplier for additional payments. This usually arises as a result of [change requests](#) but in some cases it can turn into a dispute about costs incurred due to incorrect application of the [contract](#).

**Class of service**

In [PRINCE2 Agile](#) this is a broadly defined category for different types of work. Different classes of service are typically associated with qualitatively different [risk profiles](#), especially with regard to [schedule](#) risk and the cost of delay.

Four generic classes of service are widely recognized: ‘standard’, ‘fixed date’, ‘expedite’ and ‘intangible’.

**Client**

The individual or organisation that commissions the project and will pay for it on [handover](#) of the completed [output](#).

Referred to as the customer in PRINCE2.

**Close Procurements (12.4)**

A PMBoK® guide process that brings contractual arrangements to an end including the settlement of [claims](#) and finalisation of contract documentation.

The equivalent in Praxis is the *conclude* step in the [contract management](#) procedure, which would be performed during the *demobilise* activity of the [closure process](#).

PRINCE2 doesn’t cover [procurement](#) in detail but this work could be considered implicit in the [hand over products](#) activity in the [Closing a Project \(CP\)](#) process.

In ISO21500 the completed procurements are an output of [Close project phase or project](#).

**Close Project or Phase (4.6)**

This PMBoK® guide process is used to close down a [phase](#) of a project or the entire project. It is equally applicable to projects that have reached their natural conclusion or have been prematurely closed.

This process plans the administrative and contract closure procedures and the activities needed to complete [handover](#) of the finished project deliverables. If the project has been terminated prematurely, then this process should investigate and document the causes and actions taken.

In Praxis this work is covered by the [activities](#) in the [closure process](#).

The equivalent in PRINCE2 is the [Closing a Project \(CP\)](#) process and in ISO21500 it is [Close project phase or project](#).

**Close project phase or project (4.3.7)**

This ISO21500 process is used to close down a [phase](#) of a project or the entire project. It is equally applicable to projects that have reached their natural conclusion or have been prematurely closed.

This process verifies that the [deliverables](#) of the project or phase have been completed and all processes have been completed or terminated.

In Praxis this work is covered by the activities in the [closure process](#).

The equivalent in PRINCE2 is the [Closing a Project \(CP\)](#) process and in the PMBoK<sup>®</sup> guide it is [Close Project or Phase](#).

---

**Closing (ISO 21500 process group)**

The ISO21500 closing group comprises two processes.

It is very similar in scope to the [closure process](#) in Praxis, the [Closing a Project \(CP\)](#) process in PRINCE2 and the [closing process group](#) in the PMBoK<sup>®</sup> guide.

---

**Closing a Project (CP)**

The PRINCE2 process that covers all the activities involved in closing the project, including the development of plans for any [follow-on actions](#) and [post-project review](#).

The various outputs of the CP activities are all submitted to the [Project Board](#) who formally approve closure of the project and issue a [project closure notification](#) to the necessary parties.

The equivalent in Praxis is the [closure process](#).

In the PMBoK<sup>®</sup> guide this is covered by the processes in the [closing process group](#) and in ISO21500 by the processes in the process group called simply [closing](#).

---

**Closing process group**

This PMBoK<sup>®</sup> guide process group contains two processes.

It is very similar in scope to the [closure process](#) in Praxis, the [Closing a Project \(CP\)](#) process in PRINCE2 and the [closing process group](#) in ISO21500.

---

**Closure notification**

In PRINCE2 this is a communication from the [project board](#) to all [stakeholders](#) the project is being closed. This is a [trigger](#) for [demobilisation](#).

## Closure process

More:

- [Process](#)
- [Competence](#)
- [Capability maturity](#)

This Praxis process manages the closure phase of the project or programme [life cycle](#).

The goals of this process are to:

- close a project or programme that has delivered all its [outputs](#);
- close a project or programme that is no longer justifiable;
- review the management of the work and [learn lessons](#).

Note that the first goal does not identify closure as being when the objectives are complete. [Objectives](#) may be described as [outputs](#), [outcomes](#) or [benefits](#) and these are all achieved at different times. Closure is principally concerned with a temporary organisation handing over responsibility for its objectives and disbanding. Where that occurs in the life cycle will depend on how the project or programme was constituted in the first place.

The equivalent in PRINCE2 is the [Closing a Project](#) (CP) process.

In the PMBoK® guide this is covered by the processes in the [closing process group](#) and in ISO21500 by the processes in the process group called simply [closing](#).

---

## Closure recommendation

In PRINCE2 this is a recommendation from the project manager to the [project board](#) that the project be closed. If the board are satisfied that the project can be closed they will send out a [closure notification](#).

This recommendation results from the work done in the recommend project closure activity in the [Closing a Project](#) (CP) process.

---

## COCOMO

The COConstructive COst MOdel is a software estimating technique that uses estimates of lines of code adjusted by several environmental factors such as:

- level of complexity;
- project size;
- required reliability;
- levels of ability of team members.

The COCOMO algorithms convert the lines of code into effort based on the environmental factors.

**Cohen and Bradford**

More:

- [Encyclopaedia](#)

Alan Cohen and David Bradford created a six step [influencing](#) model for their book 'Influence Without Authority'<sup>6</sup>. The overriding principle is that influence is gained through 'give and take'.

---

**Collaborative negotiation**

A form of [negotiation](#) that seeks to create scenario where all parties involved get part or all of what they were looking for from the negotiation.

---

**Collect lessons learned (4.3.8)**

This ISO21500 process is part of the [closing](#) process group and initially gives the impression that all [lessons learned](#) are documented at the end of the project. This is not the case and ISO21500 itself says "at some level lessons learned may be outputs of every project management process".

This process is simply a focus for collating and publishing the lessons learned from throughout the project.

Praxis and PRINCE2 similarly maintain a [lessons log](#) throughout the project. This is formally reviewed at the end of each [stage](#) and again at the end of the project.

In the PMBoK® guide lessons learned form part of the [organisational process assets](#) and therefore will be updated whenever these are an output of a process.

---

**Collect requirements (5.2)**

This PMBoK® guide process is concerned with capturing [stakeholder](#) wants and needs in order to establish project [objectives](#) and [scope](#).

The equivalent in Praxis is the combination of the [requirements management](#) procedure and the [solutions development](#) procedure.

PRINCE2 deals with requirements capture mainly through its approach to [product-based planning](#). Some aspects of solutions development are covered by the preparation of the [project approach](#) as covered by part of the activity called [Select the project approach and assemble the Project Brief](#).

The nearest equivalent in ISO21500 is [Define scope](#).

---

**Commissioning**

The commissioning process takes an inactive system and activates it to achieve defined operational standards.

---

<sup>6</sup> Cohen, Allan R., and Bradford, David L., (2005), Influence Without Authority, Wiley, Hoboken, New Jersey.

**Committed costs**

Costs to which the project or programme is contractually obliged to pay, regardless of whether the product or service has actually been delivered or invoiced.

---

**Committed expenditure**

See [committed costs](#).

---

**Communication**

More:

- [Knowledge](#)
- [Competence](#)
- [Resources](#)

Communication is the means by which information is exchanged and a common understanding achieved. Its goals are to:

- impart relevant information;
- ensure the information is understood.

In the P3 environment these basic goals are a means to:

- ensuring that members of the [management team](#) understand the [objectives](#) and their role in achieving them;
- building relationships with [stakeholders](#);
- minimising conflict by avoiding misunderstandings;
- developing confidence and trust;
- maintaining the commitment of stakeholders and team members;
- effective control of the work throughout the [life cycle](#).

In the PMBoK® guide this is covered in the tools and techniques section of the [Plan Communications Management](#) process.

ISO21500 and PRINCE2 do not go into detail on models of communication.

---



Featured article: [Get the frogs off the log](#)

**Communication  
(ISO21500 subject  
group)**

An ISO21500 subject group that provides a set of processes for managing procurement. The processes comprise:

- [Plan communications.](#)
- [Distribute information.](#)
- [Manage communications.](#)

In Praxis, the principles of [communication](#) are covered in the communication function; the practicalities of communication are covered in [information management](#) and the key function of communicating with [stakeholders](#) is covered in [stakeholder management](#).

PRINCE2 doesn't have a specific communications theme but covers the subject in areas such as [organisation](#) and the activities in the [PRINCE2 Processes](#).

The PMBoK® guide and ISO21500 share a very similar structure and the nearest equivalent in the PMBoK® guide is [project communication management](#) knowledge area; in ISO21500 it is the [communication](#) subject group.

---

**Communication  
management plan**

The PMBoK® guide document that describes the means by which [communication](#) with the project's [stakeholders](#) will be planned, structured, monitored and controlled.

In Praxis, this information is contained in the [stakeholder management plan](#). The closest equivalent (although less comprehensive) in PRINCE2 is the [communications management strategy](#). In ISO21500 much of this information will be in a section of the [project management plan](#).

---

**Communication  
management  
strategy**

The PRINCE2 document that describes the means and frequency of [communication](#) with the project's [stakeholders](#).

In Praxis, this information is contained in the [stakeholder management plan](#); in the PMBoK® guide it is in the [communications management plan](#) and in ISO21500 it is in a section of the [project management plan](#).

---

**Communication  
plan**

In Praxis this is a schedule of [communication](#) activities. It is based on the general [delivery plan](#) format with the scope being [stakeholder](#) communications.

While focusing on the timing of communications, the plan may also include their cost, how they will be controlled and how they link to other delivery plans.

## Communities of practice

More:

- [Knowledge](#)
- [Resources](#)

Communities of practice (CoPs) are groups of people who share an interest in P3 management or an aspect of P3 management. The goals of these communities are to:

- share information that helps individuals to develop their skills,
- help the profession to collectively evolve and improve.

There are three aspects of a community of practice:

- The domain.
- The community.
- The practice.

Communities of practice is also a function in the APM BoK.

---

## Comparative Estimating

More:

- [Encyclopaedia](#)

An [estimating technique](#) that compares the current project with similar work and adjustments are made for known differences.

Accuracy can be increased by breaking the project into elements and performing a comparison on those elements. This enables more specific differences between the past projects and the current project to be assessed.

This is sometimes referred to as analogous estimating.

---

## Competence

More:

- [Knowledge](#)
- [Resources](#)
- [Framework](#)

Dictionary definitions of competence are relatively straightforward and are simply concerned with an individual's ability to perform a job or roles successfully. A competent project manager is, therefore, someone who is able to successfully manage a project, a competent programme manager is someone who can successfully manage a programme and so on.

In the context of the Praxis framework, the goals of competence are to:

- define criteria that enable competence to be identified;
- provide a means of integrating functional and process competencies to support [capability maturity](#).

Praxis also contains a full [competency framework](#).

---

## Competency framework

More:

- [Framework](#)

A set of competencies that may be used to define a role.

The APM's framework is called simply – the APM Competency Framework.

The corresponding PMI® publication is the Project Manager Competency Development (PMCD) Framework and the corresponding APM document is simply called The APM Competency Framework (often abbreviated to APM CF).



---

<b>Competitive negotiation</b>	A form of <a href="#">negotiation</a> that is about getting the best deal for one party regardless of the needs and interests of the other(s).
<b>Completion date</b>	The date calculated by which the project could finish following careful <a href="#">estimating</a> , <a href="#">planning</a> and <a href="#">risk analysis</a> taking into account <a href="#">resource limits</a> and <a href="#">contingency</a> .
<b>Complexity</b> More: – <a href="#">Knowledge</a>	<p>Complexity is an indicator of the inter-relationships within a project, programme or portfolio that affect the way it will be managed and the skills needed to manage it.</p> <p>Since all projects, programmes and portfolios are made up of many inter-related functions and processes, they are all, by the dictionary definition, complex. But of course some are more complex than others.</p>
<b>Compound risk</b>	A <a href="#">risk event</a> that comprises a number of inter-related risk event.
<b>Concept</b>	The first phase in the APM BoK project and programme <a href="#">life cycle</a> . The equivalent in Praxis is the identification phase and in PRINCE2 it is the phase managed through the <a href="#">Starting up a Project (SU)</a> process.
<b>Concession</b>	<p>In general usage this term usually refers to an offer made by one party during <a href="#">negotiation</a>, in order to gain a concession in return.</p> <p>In PRINCE2 the term is used to describe an <a href="#">off-specification</a> that is accepted by the <a href="#">project board</a> as not needing <a href="#">corrective action</a>.</p>
<b>Concurrent Engineering</b>	In engineering projects, concurrent engineering shortens timescales by overlapping <a href="#">phases</a> . For example, as soon as sufficient preliminary design work has been done, detailed design work will commence. As soon as sufficient detailed design has been done, procurement will start. It may even be that some fabrication or construction starts before the detailed design is complete. This is an industry specific example of <a href="#">fast tracking</a> .
<b>Conditional logic</b>	See <a href="#">probabilistic dependencies</a> .
<b>Conduct procurements (12.2)</b>	<p>A PMBoK® guide <a href="#">Executing Process</a> that is concerned with obtaining bids from <a href="#">sellers</a>, selecting sellers and awarding <a href="#">contracts</a>.</p> <p>In Praxis these are all covered by steps in the <a href="#">procurement</a> and <a href="#">contract management</a> procedures.</p> <p>The ISO21500 equivalent is <a href="#">Select suppliers</a>.</p> <p>PRINCE2 does not cover this kind of external procurement in any detail.</p>

**Configuration** The complete technical description required to build, test, accept, install, operate, maintain and support a system. In this context a ‘system’ could be an IT system, a building, a ship, a set of organisational processes or any other [output](#) of a project or programme.

**Configuration audit** An [audit](#) to check that the information in the [configuration item records](#) are consistent within the [configuration library](#) and with any information held by the people or teams producing the [configuration items](#).

**Configuration item** A component of a [configuration](#) that has a defined function and is designated for [configuration management](#).

**Configuration item record** A record that describes the development [life cycle](#) of an individual [configuration item](#). It will hold information about links to other items, the owner of the item, version control, cross references to [change requests](#) etc.

**Configuration Librarian** The person whose job it is to maintain the [configuration](#) and operate the [configuration management](#) system.

**Configuration library** The total set of [configuration item records](#).

**Configuration management** Configuration management encompasses the administrative activities concerned with the creation, maintenance, controlled change and [quality control](#) of [products](#). Its goals are to:

More:

- [Knowledge](#)
  - [Competence](#)
  - [Capability maturity](#)
- identify the products that will be treated as [configuration items](#);
  - support the assessment of [change requests](#) and document the results of [change control](#);
  - maintain the validity of the [configuration](#) and the accuracy of the configuration management system.

This is also a function in the APM BoK and is covered by the [change theme](#) in PRINCE2.

In the PMBoK® guide configuration management is covered in the tools and techniques of [Perform Integrated Change Control](#). ISO21500 makes reference to configuration management but does not describe it.

## Configuration management plan

A management plan that describes policies and procedures for managing the configuration items that make up the configuration. Praxis suggests that this will be part of the [scope management plan](#) unless the complexity of the [configuration](#) requires a separate management plan.

If required, this would be developed during the *prepare governance documents* activity in the [definition process](#).

ISO21500 doesn't explicitly mention a configuration management plan but covers the same content, in general terms, in [Develop project plans](#). Similarly, the PMBoK® guide refers to a configuration management plan as part of the [project management plan](#) which is produced in the [Develop Project Management Plan](#) process.

In PRINCE2 this document is referred to as the [configuration management strategy](#) and is produced by the [prepare the configuration management strategy](#) activity in the [Initiating a Project \(IP\)](#) process.

---

## Configuration management strategy

The PRINCE2 term for a [configuration management plan](#).

---

## Conflict management

More:

- [Knowledge](#)
- [Competence](#)
- [Resources](#)

Conflict is most usually perceived as something that is negative and almost invariably having a detrimental impact on the achievement of the project, programme or portfolio [objectives](#). Some aspects of conflict can be used positively and it is important to recognise the difference between conflict management and conflict resolution. The latter is only one aspect of the former.

The goals of conflict management are to:

- utilise the positive aspects of conflict;
- resolve organisational and interpersonal conflict;
- minimise the impact of conflict on objectives.

This is also a topic in the APM BoK.

In the PMBoK® guide conflict management is covered in the tools and techniques of [Manage Project Team](#). ISO21500 makes no reference to conflict management.

---

## Constraint dates

See [imposed dates](#).

**Constraints** Restrictions or limitations that apply to a project, programme, [stage](#), [work package](#) etc. This could range from legal or regulatory constraints to time and cost limits.

In the context of [network diagrams](#), this is often used as a generic term for factors affecting the possible start and finish dates of an [activity](#) including [dependencies](#), [imposed dates](#) and [resource limits](#).

**Consumable resource** The most common [resources](#) are [re-usable](#) i.e. people and machinery.

Some computer packages allow definition of [consumable resources](#) e.g. materials. This allows a crude form of stock control to be built into the [schedule](#). As the activities which use the materials are progressed, the amount available will decrease and reports can be produced that trigger re-ordering.

**Context** The P3 management context has two aspects that can be likened to nature and nurture, i.e. the initial conditions that define the natural characteristics of the work and the actions that are then taken to manage it.

More:

- [Knowledge](#)

The nature aspect is referred to as the [setting](#). The nurture aspect is covered in [governance](#) and [professionalism](#).

The APM BoK has a very similar contextual foundation.

**Contingency** A term used to describe [delivery plans](#) or [budgets](#) that are prepared to deal with [risk events](#) should they actually occur.

The APM PSMC uses the term to refer to a [contingency reserve](#).

See also [contingency plan](#).

**Contingency allowance** See [contingency reserve](#).

**Contingency budget** See [contingency reserve](#).

**Contingency plan** An alternative [delivery plan](#) designed to be implemented should a specified [risk event](#) occur. Sometimes referred to as a fallback plan.

**Contingency planning** The process of developing [contingency plans](#) to cover [risk events](#) not addressed by other means.

**Contingency reserve** A sum of money or time that is included in a [budget](#) (and therefore the [business case](#)) to deal with any identified [risk events](#) that actually occur. The sum of money and time is usually derived from a [contingency plan](#) that describes what needs to be done and what [resources](#) will be required to deal with the consequences of risk.

**Contingent response strategy** The PMBoK® guide term for a [contingency plan](#).

**Contract** A mutually binding agreement between two or more parties. In the P3 environment this is usually between a seller or [supplier](#) (who is obligated to provide a specified product) and a buyer or [customer](#) (who is obligated to pay for it).

**Contract management** Contract management includes the [negotiation](#), creation and administration of a [contract](#) between two or more parties. Its goals are to:

More:

- [Knowledge](#)
- [Competence](#)
- [Capability maturity](#)

- support [procurement](#) by negotiating terms and conditions;
- document contractual agreements;
- monitor contractual performance;
- conclude contracts.

The APM BoK has a function called [provider selection and management](#) although this focuses more on the selection than the management.

The equivalent in the PMBoK® guide is the tools and techniques contained in the [Control Procurements](#) process. In ISO21500 this is known as [Administer procurements](#).

**Contract management plan** A statement of how contractual relationships will be managed in a project, programme or portfolio. It must reflect the terms of the [contract](#) and highlight key controls such as [audits](#) and performance reviews.

## Control

More:

- [Knowledge](#)
- [Competence](#)
- [Capability maturity](#)
- [Resources](#)

Control involves monitoring performance against approved [baselines](#), updating delivery documents and taking [corrective action](#) as necessary. Control is required throughout the [life cycle](#) but this explanation is primarily aimed at controlling the [delivery process](#).

The goals of control are to:

- review performance against baselines;
- evaluate the effect of actual performance on future plans;
- take action as required to achieve planning targets or agree revised targets.

This is also a function in the APM BoK. The equivalent in PRINCE2 is the [progress](#) theme.

---

## Control changes (4.3.6)

Change control is often used just in relation to changes to the [scope](#) of a project. This ISO21500 process takes a broader view and deals with any request to modify any aspect of the project.

In the PMBoK® guide the equivalent process is [Perform integrated Change Control](#).

In Praxis the [change control](#) function is focused on scope change control, albeit that requests to change scope impact many other aspects of the project. The fully integrated approach comprises change control, the more general [control](#) function and the [delivery process](#).

In PRINCE2 the [change](#) theme and [Controlling a Stage \(CS\)](#) process achieve the same ends.

---

## Control charts

Charts used to graphically show actual performance against time. Products are sampled and inspected. The chosen performance criterion is plotted against time in order to identify potential problems with the production process. Products exceeding the control limits would trigger a closer inspection of the process. See also [RAG reports](#).

**Control Communications (10.3)**

A PMBoK® guide process concerned with monitoring and controlling communications throughout the project organisation.

In Praxis this area is covered by the [information management](#) and [stakeholder management](#) procedures.

There is not a single equivalent in ISO21500. It would be more accurate to say that the [Distribute information](#) and [Manage communications](#) collectively cover the same ground as the PMBoK® guide processes [Manage Communications](#) and Control Communications. (Note: when drawing comparisons it is somewhat confusing that Manage Communications is an [Executing Process](#) in the PMBoK® guide and the process of the same name in ISO21500 is a [Controlling process](#))

PRINCE2 doesn't have a specific theme for [communication](#) and addresses this area primarily through the description of [stakeholder engagement](#) in the [organization](#) theme.

---

**Control costs (4.3.27)**

An ISO21500 process focused on the collation of information related to expenditure, calculating [actual costs](#), preparing forecasts and taking [corrective action](#) as required.

Praxis covers this area in the [budgeting and cost control](#) function and the *co-ordinate and monitor progress* activity in the [delivery process](#).

The equivalent process in the PMBoK® guide is [Control Costs](#).

PRINCE2 doesn't have dedicated cost control procedures or processes and this area should be considered implicit in the [review the stage status](#) and [review work package status](#) activities in the [Controlling a Stage \(CS\) process](#).

---

**Control Costs (7.4)**

A PMBoK® guide process focused on the collation of information related to expenditure, calculating [actual costs](#), preparing forecasts and taking corrective action as required.

Praxis covers this area in the [budgeting and cost control](#) function and the *co-ordinate and monitor progress* activity in the [delivery process](#).

The equivalent process in ISO21500 is [Control costs](#).

PRINCE2 doesn't have dedicated cost control procedures or processes and this area should be considered implicit in the [review the stage status](#) and [review Work Package status](#) activities in the [Controlling a Stage \(CS\) process](#).

### Control limits

Upper and lower control limits on a control chart are used to identify where a process needs to be checked. The control limit is closer to the mean than the specification limit and is used to warn of a process going out of control rather than identifying a product that has failed its [quality control](#) inspection.

### Control management plan

More:

- [Description](#)
- [Templates](#)

Control is one of the central functions of project, programme and portfolio management. It is concerned with performing work in accordance with [delivery documents](#) and updating them based on [actual progress](#).

A control management plan describes how [control](#) should be performed and is particularly important in programmes and portfolios where it ensures that progress information from component projects and programmes is consistent.

### Control Procurements (12.3)

This PMBoK® guide process deals with the management of relationships with contracted suppliers. It monitors the performance of both the buyer and the seller and may generate requests to make changes to contracts if appropriate.

The equivalent in ISO21500 is [Administer procurements](#).

In Praxis the nearest equivalent is the *monitor* step in the [contract management](#) procedure which works in conjunction with the [control](#) function and the [delivery process](#).

PRINCE2 does not contain processes that explicitly deal with external contracts although the role of the [senior supplier](#) in the organisation structure is relevant. Controlling contracts should be seen as implicit in other control functions.

### Control project work (4.3.5)

This is the high level integration process in ISO21500 that co-ordinates performance information from the more detailed processes in the [controlling process group](#).

In the PMBoK® guide the equivalent [process](#) is [Monitor and Control Project Work](#).

PRINCE2 defines processes that manage the delivery of the project in a different way. At a broad level a combination of the [Direct project work](#) and [Control project work](#) processes from ISO21500 is equivalent to the [Controlling a Stage](#) (CS) and [Managing Product Delivery](#) (MP) processes in PRINCE2.

Praxis takes a similar approach to PRINCE2 and the corresponding combination is formed of the [delivery](#) and [development processes](#).



### **Control Quality (8.3)**

This PMBoK® guide process monitors and records the results of activities that assess performance. This applies to both the [outputs](#) of the project and the processes used to manage their delivery. It is conducted in accordance with the [quality management plan](#).

The equivalent in ISO21500 is [Perform quality control](#).

The Praxis approach sees quality as inherent in all aspects of P3 management rather than a separate topic. Therefore, all references to [control](#) (whether they refer to outputs or processes) are manifestations of [quality control](#).

In PRINCE2 quality control is covered by a series of steps in the 'quality audit trail' in the [quality](#) theme.

---

### **Control resources (4.3.19)**

This ISO21500 process ensures that the [resources](#) required to undertake the project are available and assigned as necessary. Where necessary it will trigger [corrective action](#) or [change requests](#).

Given that [Administer procurements](#) deals with external [suppliers](#) it is fair to assume that this process focuses on internal resources in which case there is no direct PMBoK® guide equivalent.

The equivalent in Praxis is the *maintain* step in the [mobilisation](#) procedure.

In PRINCE2 it is the [progress theme](#) as applied by the [review the stage status](#) activity in the [Controlling a Stage \(CS\) process](#).

---

### **Control Risks (11.6)**

This process from the PMBoK® guide deals with the implementation of [risk responses](#). It covers the tracking of [risk events](#), monitoring [residual risks](#) and identifying new risks (and therefore overlaps to some extent with [Identify Risks](#)). It is also concerned with evaluating the effectiveness of risk processes.

The nearest equivalent in Praxis is the *implement responses* step in the [risk management](#) procedure although, because of the overlap, elements of other steps are also relevant.

ISO21500's corresponding process is [Control risks](#).

This aspect of risk in PRINCE2 is primarily covered by the *implement* step of the risk management procedure in the [risk](#) theme.

**Control risks  
(4.3.31)**

This process from ISO21500's deals with the implementation of [risk responses](#). It covers the tracking of [risk events](#), monitoring [residual risks](#) and identifying new risks (and therefore overlaps to some extent with [Identify risks](#)). It is also concerned with evaluating the effectiveness of risk processes.

The nearest equivalent in Praxis is the *implement responses* step in the [risk management](#) procedure although, because of the overlap, elements of other steps are also relevant.

The PMBoK® guide's corresponding process is [Control Risks](#).

This aspect of risk in PRINCE2 is primarily covered by the *implement* step of the risk management procedure in the [risk](#) theme.

---

**Control schedule  
(4.3.14)**

This is the ISO21500 process that monitors the status of [activities](#), updates [schedules](#) and manages changes to the [baseline](#).

The equivalent in Praxis is the [control](#) function as applied by the *update and communicate* activity in the [delivery process](#).

In PRINCE2 it is the [progress theme](#) as applied by the [review the stage status](#) activity in the [Controlling a Stage \(CS\)](#) process.

The equivalent in the PMBoK® guide is [Control Schedule](#).

---

**Control Schedule  
(6.7)**

This is the PMBoK® guide process that monitors the status of [activities](#), updates [schedules](#) and manages changes to the [baseline](#).

The equivalent in Praxis is the [control](#) function as applied by the *update and communicate* activity in the [delivery process](#).

In PRINCE2 it is the [progress theme](#) as applied by the [review the stage status](#) activity in the [Controlling a Stage \(CS\)](#) process.

The equivalent in ISO21500 is [Control schedule](#).

---

**Control scope  
(4.3.14)**

This is the ISO21500 [process](#) that operates [change control](#) in the context of the project's [scope](#). It works in parallel with other control processes such as [Control schedule](#) and [Control cost](#), which are all co-ordinated under the umbrella of [Control changes](#).

The equivalent in Praxis is the [change control](#) procedure and in PRINCE2 it is the [procedure](#) in the [change](#) theme.

The equivalent in the PMBoK® guide is [Control Scope](#).

### **Control Scope (5.6)**

This is the PMBoK® guide [process](#) that operates [change control](#) in the context of the project's [scope](#). It works in parallel with other control processes such as [Control Schedule](#) and [Control Cost](#), which are all coordinated under the umbrella of [Perform Integrated Change Control](#).

The equivalent in Praxis is the [change control](#) procedure and in PRINCE2 it is the [procedure](#) in the [change](#) theme.

The equivalent in ISO21500 is [Control scope](#).

---

### **Control Stakeholder Engagement (13.4)**

This is the PMBoK® guide [process](#) that monitors [stakeholder](#) relationships and adjust plans as necessary.

This area is covered in Praxis by a combination of the [stakeholder management](#) procedure and the [control](#) function.

In PRINCE2 all aspects of stakeholder management are covered in the [organization](#) theme.

ISO21500 does not have a [controlling](#) process for stakeholder management.

---

### **Controlling (ISO21500)**

An ISO21500 [process group](#) that includes the [processes](#) involved in tracking progress and taking [corrective action](#) where necessary. These processes can be applied at different levels with the project, i.e. for the project as a whole or for a [stage](#) or [sub-project](#).

When viewed from the perspective of the project [life cycle](#), these processes are covered in Praxis by the [delivery process](#) and [development process](#).

In PRINCE2 the corresponding process at the project life cycle level is [Controlling a Stage](#) (CS) and [Managing Product Delivery](#) (MP).

The equivalent in the PMBoK® guide is the [Monitoring and Controlling](#) process group.

**Controlling a Stage (CS)**

This PRINCE2 process manages the delivery phase of the [life cycle](#) one [stage](#) at a time. Its purpose is to [delegate](#) and monitor work, deal with [issues](#) and report progress to the [project board](#). It also takes corrective action as required in order to keep the work within agreed [tolerances](#).

The equivalent in Praxis is the [delivery process](#).

In the PMBoK® guide there are three processes that together broadly cover the same area, although the PMBoK® guide does not require delivery to be managed in stages.

- [Direct and Manage Project Work](#).
- [Monitor and Control Project Work](#).
- [Perform Integrated Change Control](#).

Similarly, in ISO21500 this area is covered by:

- [Direct project work](#).
- [Control project work](#).
- [Control changes](#).

**Co-ordination matrix**

See [weak matrix](#).

**Co-ordination process**

This Praxis process manages the co-ordination of project and programmes within a portfolio.

More:

- [Method](#)
- [Competence](#)
- [Maturity](#)

While the management process shapes and adjusts the portfolio, this process deals with the day-to-day co-ordination of its component projects and programmes. The two processes are closely aligned. While the management process sets parameters within which the co-ordination is performed, the information produced by the co-ordination will inform the on-going prioritisation and balancing.

The goals of this process are to:

- consolidate information from the component projects and programmes to understand the portfolio as a whole;
- monitor the performance of the portfolio against its [objectives](#);
- manage the inter-relationships between projects and programmes.

At any given point in time, the portfolio will contain inter-related projects and programmes at all stages of the [life cycle](#). In reality, the co-ordination involves projects in definition, programmes in delivery, projects in closure and programmes in identification etc.

**Corporate or programme management**

The PRINCE2 organisation structure identifies the ultimate originator of a project as corporate or programme management. This reflects the fact that some projects are stand-alone (and therefore report directly to corporate management) whilst some are part of a programme (and therefore report into a programme organisation).

The term appears in many PRINCE2 processes to show the origination of documents such as a project mandate or where issues need to be escalated above the [project board](#).

**Corporate or programme standards**

PRINCE2 often refers to these as the over-arching standards that the project must adhere to. They are typically the basis of project controls and the four PRINCE2 management strategies, i.e. the:

- [Communication management strategy](#).
- [Configuration management strategy](#).
- [Quality management strategy](#).
- [Risk management strategy](#).

The PMBoK® guide refers to these corporate standards as [organisational process assets](#).

**Corrective action**

No project or programme will go exactly according to plan. As progress is monitored there will be deviations from plan and a frequent need to get the project back on track. Corrective action is a broad term covering a range of actions taken to get progress back on target whenever it strays off target.

In Praxis, corrective action is an [activity](#) within the [delivery process](#). In the PMBoK® guide and ISO21500, it is an output and input of several processes involved in monitoring and controlling a project.

**Cost (ISO21500 subject group)**

An ISO21500 subject group that provides a set of processes for managing cost. The processes comprise:

- [Estimate costs.](#)
- [Develop budget.](#)
- [Control costs.](#)

The equivalent in Praxis are the [financial management](#) functions and their component [procedures](#).

PRINCE2 doesn't have a dedicated section on costs but addresses cost and budgeting issues in many different areas.

The PMBoK® guide and ISO21500 share a very similar structure. The nearest equivalent [knowledge area](#) in the PMBoK® guide is [project cost management](#) and the nearest equivalent [subject group](#) in ISO21500 is [cost](#).

**Cost aggregation**

The process of aggregating [activity](#) cost [estimates](#) upwards through the [work breakdown structure](#).

**Cost baseline**

The costs as authorised at the outset of the project or programme. These [baseline](#) costs will form the basis of [progress reporting](#) using techniques such as [earned value management](#).

Often used synonymously with the term [budget](#).

**Cost breakdown structure**

A hierarchical breakdown of costs into categories that allow cost reporting to be done by any category within the structure.

When used in conjunction with other [breakdown structures](#), reports can be produced for any combination of elements in the project, programme or portfolio.

**Cost centre**

A person, department, location, [activity](#) or any combination of these used for the allocation and management of costs.

**Cost code**

A [breakdown code](#) for types of cost in a [cost breakdown structure](#).

**Cost curve**

A graph plotted against a horizontal time scale and cumulative cost vertical scale. This is commonly produced when the project [baseline](#) is set to indicate planned expenditure. It can be used to track [actual cost](#) against [planned cost](#) and could be used to show the effect of income as well as expenditure.

### Cost envelope

A cost envelope can be developed by combining a cost curve based upon the [earliest start](#) dates of [activities](#) with a cost curve based upon their [latest start](#) dates. The area between the curves is the cost envelope.

### Cost estimating relationships

Correlations between the factors that drive costs and other parameters such as size, design or performance. Once established, these correlations can be used in [parametric estimating](#).

### Cost management plan

In both the PMBoK® guide and ISO21500 this is a component of the [project management plan](#) that describes how project costs will be planned, structured and controlled.

The nearest equivalent in Praxis is the [finance management plan](#) which deals with [funding](#) as well as expenditure.

PRINCE2 does not have a specific cost management plan but this information would be part of the [project initiation documentation](#).

### Cost performance index (CPI)

More:

- [Encyclopaedia](#)

An [earned value management](#) term which indicates the financial performance of the project. It is the ratio of the value of work performed to the actual cost of work performed and is given by the formula

Cost performance index =  $\frac{\text{budget cost of work performed}}{\text{actual cost of work performed}}$

An index of less than 1 indicates that the project is performing worse than planned in financial terms. An index of more than 1 indicates that it is performing better. Indices have the advantage over variances of being independent of the overall size of the project.

### Cost plus fee

A payment method where the customer pays the [supplier's](#) costs plus a fee for performing the work. The fee structure can take a variety of forms including:

- [Cost plus fixed fee.](#)
- [Cost plus percentage fee.](#)
- [Cost plus incentive fee.](#)

In any form of 'cost plus' contract the bulk of the risk lies with the customer. There is little or no incentive for the supplier to keep costs down since their costs are simply reimbursed and a fee added.

Once common in the defence sector, this type of pricing is increasingly rare. It may be applied to small projects or [sub-projects](#) where it is not possible, or impractical, to provide a detailed [specification](#) on which a better defined pricing arrangement can be based.

**Cost plus fixed fee** A form of [cost plus fee](#) pricing where the [supplier's](#) costs are reimbursed and an agreed fixed fee is paid on satisfactory completion of the project or [milestones](#) within the project.

**Cost plus incentive fee** A form of [cost plus fee](#) pricing where the [supplier's](#) costs are reimbursed. An agreed fixed fee is paid on satisfactory completion of the project or [milestones](#) within the project and in addition, an incentive is paid based upon achieving certain performance targets.

For example if the supplier is able to complete the work at a lower cost than originally estimated, they could share the cost savings with the customer.

**Cost plus percentage fee** A form of [cost plus fee](#) pricing where the [supplier's](#) costs are reimbursed and an agreed percentage of costs is paid as a fee for performing the work. This form of pricing carries the greatest cost risk for the customer as it provides no incentive for the supplier to control costs.

**Cost tolerance** The variance in a budget that is allowed before an [issue](#) must be raised to the next level of management.

See also: [tolerance](#).

**Cost variance (CV)** An [earned value management](#) term that indicates how work is progressing in cost terms. It represents the value of the work done less the actual cost of the work done:

More:

- [Encyclopaedia](#)

$$CV = BCWP - ACWP \text{ (budget cost of work performed - actual cost of work performed)}$$

A negative result shows that more money is being spent than value being created, i.e. the project is overspending. A positive number indicates that less money is being spent than had been expected in order to create the corresponding value.

**Cost/benefit analysis** The analysis of the potential costs and [benefits](#) of a project or programme to allow comparison of the returns from alternative forms of investment. Usually expressed as a simple ratio of the costs to the value of benefits.

Sometimes referred to as benefit/cost analysis. The principle is exactly the same but the ratio is reversed.

**Cost/Schedule Control Systems Criteria** In 1967 the US Department of Defence defined a standard for the reporting of progress on defence projects. The most common method that meets this standard is [earned value management](#).



**Crash cost**

The cost of reducing an [activity](#) to its [crash duration](#).

**Crash duration**

The reduced [duration](#) of an [activity](#) as a result of [crashing](#).

**Crashing**

If there is an urgent need to shorten the [critical path](#) of a [network](#), critical [activities](#) may be ‘crashed’. This indicates drastic action to reduce the [duration](#) of an activity, probably by introducing additional [resources](#) at additional cost.

Alternatives should be considered to calculate the maximum duration compression for the least cost and maintaining risk at acceptable levels.

**Create the project plan**

An activity from the PRINCE2 [Initiating a Project](#) (IP) process that creates the [project plan](#).

The equivalent in Praxis is the *plan delivery* activity in the [definition process](#).

The ISO21500 equivalent is it is also a combination of [Develop schedule](#) and [Develop budget](#). In the PMBoK® guide it is a combination of [Develop Schedule](#) and [Determine Budget](#).

**Create WBS (5.4)**

A PMBoK® guide process that takes the [project scope statement](#) and [project scope management plan](#) and creates a [work breakdown structure](#).

In Praxis this is part of the [scope management](#) procedure and is also very similar to the PRINCE2 [product-based planning](#) technique described in the [plans](#) theme.

The ISO21500 equivalent is [Create work breakdown structure](#).

**Create work breakdown structure (4.3.12)**

An ISO21500 process that takes the [project scope statement](#) and [project scope management plan](#) and creates a [work breakdown structure](#) and [work breakdown structure dictionary](#).

In Praxis this is part of the [scope management](#) procedure and is also very similar to the PRINCE2 [product-based planning](#) technique described in the [plans](#) theme.

The PMBoK® guide equivalent is [Create WBS](#).

**Critical activity**

An [activity](#) on the [critical path](#).

### Critical chain

More:

- [Encyclopaedia](#)

The critical chain technique was developed by Dr. Eliyahu Goldratt in his 1997 business novel, Critical Chain<sup>7</sup>.

The method builds on the principles of [critical path analysis](#) and [resource limited scheduling](#) to identify chains of [activities](#) that are constrained by both [dependencies](#) and [resource availability](#). Importantly, the technique then goes on to take aspects of human nature into account.

---

### Critical path

The end result of [critical path analysis](#) is the identification of the longest sequence of [activities](#) in a network. This sequence will have the lowest [float](#) of any sequence of activities - usually, but not always, zero.

---

### Critical path analysis

More:

- [Encyclopaedia](#)

Critical path analysis is a [time scheduling](#) technique for analysing a [network diagram](#). It calculates dates when [activities](#) in the network should occur and identifies flexibility in the performance of some activities.

The two important limitations of critical path analysis are that:

- only one estimated [duration](#) is used for each activity;
- the technique makes no allowances for [resource](#) availability.

The calculation comprises three phases:

- [forward pass](#);
  - [backward pass](#);
  - [float](#) calculations.
- 

### Critical path method

See [critical path analysis](#).

---

### Critical sequence

[Critical path analysis](#) uses [dependency links](#) and [durations](#) to calculate an end date for a project; it does not take [resource limits](#) into account.

Most [resource limited scheduling](#) algorithms schedule [activities](#) according to [resource availability](#) but still quote float figures based on critical path analysis.

The sequence of activities that has no flexibility, either from the critical path calculation or because there is no flexibility in the resources they need, is called the critical sequence.

---

<sup>7</sup> Goldratt, E. M., (1997), Critical Chain, North River Press, Great Barrington, MA.

**Critical success factors**

The key environmental factors that are deemed critical to the success of a project, programme or portfolio.

For instance: it may be deemed critical to the success of the project that regular meetings take place between the [client](#) and [prime contractor](#). Should this regular communication not be part of the project environment, the project is not likely to succeed.

**Criticality index**

A [Monte Carlo analysis](#) will perform many [critical path analysis](#) calculations using randomly selected activity durations. This can result in identification of many different [critical paths](#).

The criticality index indicates the frequency with which an activity appears on the critical path, e.g. an [activity](#) with a criticality index of 0.75 appears on the critical path in 75% of the critical path analyses performed during the Monte Carlo simulation.

**Current date**

See [progress date](#).

**Current finish date**

A term sometimes used to indicate the most recently calculated (and therefore current) estimate of the [scheduled finish](#) of an [activity](#).

**Current start date**

A term sometimes used to indicate the most recently calculated (and therefore current) estimate of the [scheduled start](#) of an [activity](#).

**Customer**

The individual, or group, who commission the project and will benefit from the final [deliverables](#).

In a contractual relationship, the customer will purchase goods and services from a [supplier](#). In this context, the PMBoK® guide refers to the customer as the buyer.

**Customer's quality expectations**

A term used in PRINCE2 that refers to the quality expected from the project's [output](#) as described in the [project product description](#).

**Cybernetic control**

More:

- [Encyclopaedia](#)

Cybernetic control is evident in all aspects of nature and technology. It occurs when a closed system regulates itself using a feedback loop. Examples range from a body cooling itself through perspiration to a safety valve on a steam engine.

Many [control](#) processes used in P3 Management are examples of cybernetic control.

<p><b>Cycle time</b></p>	<p>In <a href="#">agile</a> the cycle time represents the time taken between taking an item from the <a href="#">backlog</a> and delivering a <a href="#">product</a>. In traditional planning terms this is not dissimilar to an <a href="#">activity duration</a> but arises from the similarities between agile and a production environment. An alternative term is <a href="#">lead time</a>.</p>
<p><b>Daily log</b> More: – <a href="#">Description</a></p>	<p>A daily log is a personal document that records informal information that is not stored in any of the other defined documentation. It is primarily a diary of events that its owner can use as an aide memoire of conversations and decisions.</p> <p>This document is used in both Praxis and PRINCE2.</p>
<p><b>Daily stand-up</b></p>	<p>A short meeting to assess progress, typically occurring daily and limited to 15 minutes. The meeting discusses what has been done the previous day, will be done today and any problems being encountered.</p> <p>Usually associated with the <a href="#">scrum</a> approach to product development.</p>
<p><b>Dangle</b></p>	<p>Most <a href="#">network diagrams</a> are drawn with a single start <a href="#">activity</a> and a single finish activity. If other activities have either no <a href="#">predecessors</a> or no <a href="#">successors</a> they are referred to as dangles.</p>
<p><b>Dashboard report</b></p>	<p>A concise report showing (usually in graphical form) the <a href="#">key performance indicators</a> for a project, programme or portfolio.</p>
<p><b>Data date</b></p>	<p>The PMBoK® guide term for the <a href="#">progress date</a>.</p>
<p><b>Decision networks</b></p>	<p>See <a href="#">probabilistic networks</a>.</p>
<p><b>Decision trees</b> More: – <a href="#">Encyclopaedia</a></p>	<p>A decision tree is a technique for identifying alternative courses of action and their implications (often in terms of cost). It shows decisions and consequences as lines between nodes. If the object is to quantify costs, the expected cost of decisions and their possible outcomes can be calculated for any node in the tree. The purpose is to calculate the full implications of a decision rather than just the initial cost.</p>
<p><b>Decomposition</b></p>	<p>The process of dividing elements of a <a href="#">breakdown structure</a> into smaller components.</p>
<p><b>Define</b></p>	<p>The part of the portfolio <a href="#">life cycle</a> where the projects, programmes and (if appropriate) change to <a href="#">business as usual</a> are defined.</p> <p>In Praxis, this <a href="#">phase</a> is managed as part of the portfolio management process.</p>

**Define activities  
(4.3.13)**

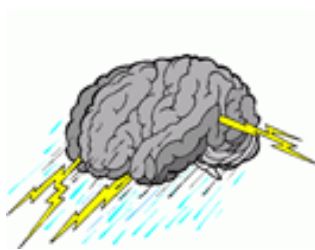
The third [process](#) within ISO21500's [scope](#) subject group.

It is a planning process that uses the [work breakdown structure](#) to identify the work needed to produce the project's [products](#). The output is an [activity list](#).

In Praxis the equivalent is the *identify work* step in the [schedule management](#) function.

The PRINCE2 equivalent is the first part of the *identifying activities and dependencies* step in the [plans](#) theme, which follows on from the development of a [product flow diagram](#).

The PMBoK® guide categorises this work as part of the [project time management](#) knowledge area using the [Define Activities](#) process.



Featured article: [Brainstorming doesn't work](#)

**Define Activities  
(6.2)**

The second [process](#) within the PMBoK® guide's [Project Time Management](#) knowledge area.

It is a [planning process](#) that uses the [scope baseline](#) to identify the work needed to produce the project's [products](#). The outputs are an [activity list](#), [activity attributes](#) and a [milestone](#) list.

In Praxis the equivalent is the *identify work* step in the [schedule management](#) function.

The PRINCE2 equivalent is the first part of the *identifying activities and dependencies* step in the [plans](#) theme, which follows on from the development of a [product flow diagram](#).

ISO21500 categorises this work as part of the [scope](#) subject group using the process [Define activities](#)

**Define project organisation (4.3.17)**

This ISO21500 process defines the full project organisation with roles and responsibilities.

In the PMBoK® guide this is covered by [Plan Human Resource Management](#).

Praxis and PRINCE2 make the distinction between the [management team](#) and the [delivery team](#). When describing organisational activities they both focus on the management team.

In Praxis appointments are covered in *appoint identification team* in the [identification process](#) and *appoint definition team* in the [definition process](#).

Similarly, PRINCE2 has the [organisation](#) theme and the [design and appoint the project management team](#) activity in the [Starting Up a Project \(SU\) process](#).

---

**Define scope (4.3.11)**

An ISO21500 process that develops a detailed description of the project and its products. The equivalent in the PMBoK® guide is [Define Scope](#).

The equivalent in Praxis is the *define scope* activity in the [definition process](#). In PRINCE2 it is the [create the project plan](#) activity in the [Initiating a Project \(IP\) process](#) (which includes the preparation of all [product descriptions](#)).

---

**Define Scope (5.3)**

A PMBoK® guide process that develops a detailed description of the project and its products. The equivalent in ISO21500 is [Define scope](#).

The equivalent in Praxis is the *define scope* activity in the [definition process](#). In PRINCE2 it is the [create the project plan](#) activity in the [Initiating a Project \(IP\) process](#) (which includes the preparation of all [product descriptions](#)).

---

**Definition**

The second phase of a project or programme [life cycle](#) where requirements are refined, a preferred solution identified and plans prepared.

In Praxis this phase is managed by the [definition process](#), in PRINCE2 by the [Initiating a Project \(IP\) process](#), in the PMBoK® guide by the [Develop Project Management Plan](#) process and in ISO21500 by the [Develop project plans](#) process.

**Definition documentation**

At the end of the Praxis [definition process](#), a request for authorisation will be submitted to the project or programme [sponsor](#). The decision whether or not to proceed to the delivery phase will be made after a review of the relevant definition documentation which typically includes:

- [Management plans](#).
- [Business case](#).
- [Delivery plans](#).

This is broadly equivalent to the PRINCE2 [project initiation documentation](#) and the [project management plan](#) in the PMBoK® guide and ISO21500.

---

**Definition of done**

A term used in [agile](#) for [acceptance criteria](#).

---

**Definition of ready**

An [agile](#) term for the criteria that must be in place for a piece of work ([activity](#), [work package](#), [stage](#) etc.) to be started.

Similar to the planning term '[make ready needs](#)'.

---

**Definition plan**

The definition plan is created in the [identification process](#) and, alongside the [brief](#), is one of the documents submitted to the [sponsor](#) when seeking approval for the definition phase of the [life cycle](#).

This document is based on the general [delivery plan](#) format and adapted to suit the context of the work. Since this plan only exists in conjunction with a project or programme brief, its content can be simplified to avoid duplication.

### **Definition process**

More:

- [Process](#)
- [Competence](#)
- [Capability maturity](#)
- [Resources](#)

This process manages the definition phase of the project or programme [life cycle](#). Its goals are to:

- develop a detailed picture of the project or programme;
- determine whether the work is justified;
- describe [governance](#) policies that describe how the work will be managed;
- gain the [sponsor's](#) authorisation for the delivery phase.

An authorised [brief](#) and [definition plan](#) will trigger the process, which is fundamentally the same regardless of whether it has been decided to govern the work as a project or a programme. The output will be a set of documents that describe all aspects of the work, with their content and detail varying to suit the context.

This is equivalent to the [Initiating a Project \(IP\)](#) process in PRINCE2, the [Develop project plans](#) process in ISO21500 and the [Develop Project Management Plan](#) process in the PMBoK® guide.

---

### **Definition team**

The team that manages the [definition process](#) in Praxis.

On smaller projects the same team will manage the work through its entire [life cycle](#). On more complex projects and programmes the management team may change in its make up between the identification, definition and deliver [phases](#) of the life cycle.

See also: [identification team](#).

---

### **Definitive estimate**

An [estimate](#) resulting from [bottom-up estimating](#). Sources vary, but a definitive estimate is normally considered to be within  $\pm 5-10\%$ .



## Delegation

More:

- [Knowledge](#)
- [Competence](#)

Delegation is the practice of giving a person or group the authority and responsibility to perform specific activities on behalf of another. The act of delegation does not transfer accountability and the person who has delegated the work remains accountable for its results.

The goals of delegation are to:

- allocate work effectively to individuals teams and [suppliers](#) within the project, programme or portfolio;
- use delegation as a motivation and development tool.

The APMBok also contains a delegation function.

While PRINCE2 doesn't describe the tools and techniques of delegation it does go into some detail about how delegation is applied in the organisation structure. This is included in the [progress](#) theme.

The PMBoK® guide and ISO21500 do not discuss delegation.

---

## Deliberate decision event

An event in a [probabilistic network](#) where a decision is made based upon the outcome of the [preceding activities](#) or any other information that prevents the decision being made automatically. In other words, finalising the sequence of [activities](#) will need human intervention when the necessary information is available.

---

## Deliver a Work Package

An activity from the PRINCE2 [Managing Product Delivery \(MP\) process](#).

This is where the individual or team that has created a [work package](#) hands it over to the project manager. The [activity](#) includes quality checks and updates to relevant plans.

The equivalent in Praxis is the *deliver products* activity in the [development process](#).

The PMBoK® guide does not formally define the project manager/product development team relationship but, in general, the delivery of [products](#) is covered by the [Direct and Manage Project Work](#) process.

ISO21500 does not have products or [deliverables](#) as a primary output of any of its processes. Instead it explains, in [Direct project work](#), that "*deliverables are the result of the integrated processes performed as defined in the project plans.*"

---

## Deliverable

A [product](#) that is to be delivered to the [user/customer](#).

## Delivery

More:

- [Knowledge](#)
- [Resources](#)

This is an area in Praxis that is about the functions immediately concerned with the delivery of [outputs](#), [outcomes](#) and [benefits](#). Six of the sections deal with components that are fundamental to every project, programme and portfolio:

- [Scope](#): what are the [objectives](#) and scope of the work?
- [Schedule](#): how long will it take to achieve?
- [Finance](#): how are necessary funds acquired and costs managed?
- [Risk](#): what are [threats](#) and [opportunities](#) involved?
- [Change](#): what areas of [business-as-usual](#) must be changed to realise benefits?
- [Resource](#): how will the necessary resources be acquired, [mobilised](#) and managed?

---

## Delivery documents

- [Description](#)

Praxis defined three categories of documentation. Delivery documents are the most dynamic of the three documentation groups and should be maintained in accordance with the principles of [information management](#) and [configuration management](#).

They are at the heart of executing the work and are primarily used in the [delivery](#), [development](#) and [boundaries](#) processes.

---

## Delivery plan

Praxis uses the term delivery plan to distinguish a document from a [management plan](#).

Delivery plans come in various shapes and sizes. The first delivery plan to be prepared will be the project or programme [definition plan](#). Subsequently, delivery plans can be prepared to cover a part of the [life cycle](#) (e.g. a [stage](#) or [tranche](#) plan), a delivery component (e.g. a [benefits review plan](#) or [communication plan](#)) or a specialist plan (e.g. an [exception plan](#) or [contingency plan](#)).

It is useful for all types of delivery plan to follow a consistent format although this should be adapted as necessary and not followed slavishly.

## Delivery process

More:

- [Method](#)
- [Competence](#)
- [Maturity](#)
- [Resources](#)

This Praxis [process](#) manages the delivery phase of the project or programme [life cycle](#).

The delivery phase of a small project may comprise only one [stage](#); the delivery phase of a programme may comprise only one [tranche](#). Most projects and programmes will comprise multiple stages or tranches that are conducted in serial or parallel.

The goals of delivering a project or programme are then to:

- delegate responsibility for producing deliverables to the appropriate people;
- monitor the performance of the work and track against the [delivery plans](#);
- take action where necessary to keep work in line with plans;
- escalate [issues](#) and replan if necessary;
- accept work as it is completed;
- maintain communications with all [stakeholders](#).

This is equivalent to the [Controlling a Stage](#) (CS) process in PRINCE2.

In the PMBoK® guide there are three processes that together cover the same area:

- [Direct and Manage Project Work](#).
- [Monitor and Control Project Work](#).
- [Perform Integrated Change Control](#).

Similarly, in ISO21500 this area is covered by:

- [Direct project work](#).
- [Control project work](#).
- [Control changes](#).

---

## Delivery team

Praxis makes a distinction between the [management team](#) and the delivery team. The delivery team includes all those who are responsible for performing the activities that deliver [products](#). This may include internal [resources](#) and external resources ([suppliers](#)).

---

## Delphi technique

More:

- [Encyclopaedia](#)

The Delphi technique is an iterative process for gaining consensus on an issue from a group of subject matter experts. It has been used very effectively by large organisations for strategic business planning.

### **Demobilisation**

The controlled disposal of assets and dispersal of [resources](#) that are no longer needed by the project, programme or portfolio.

See also [mobilisation](#).

---

### **Dependency**

Often used as an abbreviation for a [dependency link](#) but PRINCE2 also uses this term to refer to relationships between [products](#) in a [product flow diagram](#).

Dependencies may be internal (under the control of the project manager) or external (outside the control of the project manager).

---

### **Dependency link**

In [precedence diagrams](#), relationships between [activities](#) can be defined in four different ways. The simplest and most common dependency link is the [finish to start link](#).

Others include:

- [Start to start](#).
- [Finish to finish](#).
- [Start to finish](#).

In [critical path analysis](#), dependency links may be given a time value that is included in the [forward pass](#) and [backward pass](#) calculations. These values are variously known as [lead time](#) or [lag time](#). Some authorities maintain that lead time is a time value on a start to start link and lag time is the corresponding value on a finish to finish link. This differentiation is of use when applied to [ladder](#) networks.

In a [probabilistic network](#), these dependencies can indicate alternative ways in which a sequence of activities may be done.

In [activity on arrow](#) networks, dependencies are defined by the way that activities and [dummies](#) interconnect with [events](#).

---

### **Dependency network**

A generic term for all forms of network that show the dependencies between the [activities](#) that have to be done to complete a project.

This encompasses [deterministic networks](#) such as [activity on arrow](#) and [precedence](#) as well as [probabilistic networks](#).

---

**Design and appoint the project management team**

An **activity** from the PRINCE2 **Starting Up a Project (SU) process** that is concerned with designing the structure of the **project management team** and appointing suitable individuals. This is performed by the project manager with help from the **executive**, both of whom have been appointed earlier in the process.

This approach broadly assumes that this team will take the project through its entire **life cycle**. Praxis allows for the **identification team** to be different from the **definition team** (particularly relevant for larger, more **complex** projects and programmes). Therefore the equivalents in Praxis are the *appoint identification team* and *appoint definition team* activities in the **identification** and **definition** processes respectively.

The equivalents in ISO21500 are the **Define project organization** and **Establish project team** processes. The corresponding PMBoK® guide processes are **Plan Human Resource Management** and **Acquire Project Team**.

In both ISO21500 and the PMBoK® guide these processes cover the **delivery team** as well as the **management team**.

---

**Design and build**

A project delivery approach where the design and construction are contracted to a single entity.

---

**Design authority**

Construction and engineering projects are populated with technical specialists such as structural engineers and mechanical engineers who ensure the overall consistency and coherence of a project or programme.

Business change projects, and particularly programmes, do not have the same obvious roles to ensure that all aspects of a diverse set of **deliverables** are consistent and integrated. In some circumstances, the role of the design authority is created to fulfil this need. The term is most often used in environments that are more focused on business change than engineering.

**Determine Budget  
(7.3)**

This PMBoK® guide [process](#) develops a detailed [budget](#) for the project using [bottom-up estimating](#). The primary output is the cost baseline (budget) but this process is also used to determine [funding](#) requirements.

In Praxis the equivalent for a non-complex project is the *estimate costs* step in the [financial management](#) procedure. For more complex projects the equivalent is the *refine base estimates* and *estimate reserves* step in the more detailed [budgeting and cost control](#) procedure.

The corresponding process in ISO21500 is [Develop budget](#), although this addresses costs only and not funding.

PRINCE2 does not define specific cost related activities and this is covered as part of the *prepare estimates* step in the [plans theme](#).

---

**Deterministic  
network**

Both the [activity on arrow](#) and [precedence](#) forms of network are said to be deterministic since they have no facilities to accommodate [probabilistic dependencies](#).

In simple terms this means that deterministic networks are not able to include relationships which represent alternative sequences of [activities](#) or probabilities of alternative sequences.

---

**Develop budget  
(4.3.26)**

This ISO21500 process develops a detailed [budget](#) for the project using [bottom-up estimating](#).

In Praxis the equivalent for a non-complex project is the *estimate costs* step in the [financial management](#) procedure. For more complex projects the equivalent is the *refine base estimates* step in the more detailed [budgeting and cost control](#) procedure.

The corresponding process in the PMBoK® guide is [Determine Budget](#), although this addresses [funding](#) as well as costs.

PRINCE2 does not define specific cost related activities and this is covered as part of the *prepare estimates* step in the [plans theme](#).

### **Develop Project Charter (4.1)**

The first [process](#) in a PMBoK® guide project is to develop the [project charter](#).

The project charter is very similar in content to the [project brief](#) in both Praxis and PRINCE2 and therefore this process corresponds to the [identification process](#) in Praxis and the [Starting Up a Project \(SU\)](#) process in PRINCE2.

However, the key difference is that documents such as a [business case](#) and a [statement of work](#) are inputs to the process whereas these are developed within the corresponding processes in Praxis and PRINCE2.

In ISO21500 the equivalent is [Develop project charter](#).

---

### **Develop project charter (4.3.2)**

The first process in an ISO21500 project is to develop the [project charter](#).

The project charter is very similar in content to the [project brief](#) in both Praxis and PRINCE2 and therefore this process corresponds to the [identification process](#) in Praxis and the [Starting Up a Project \(SU\)](#) process in PRINCE2.

However, the key difference is that documents such as a [business case](#) and a [statement of work](#) are inputs to the process whereas these are developed within the corresponding processes in Praxis and PRINCE2.

In the PMBoK® guide, the equivalent is [Develop Project Charter](#).

---

### **Develop Project Management Plan (4.2)**

This PMBoK® guide process has one purpose – to develop the [project management plan](#).

The project management plan is primarily a set of [management plans](#) and other [governance](#) documents. The equivalent in Praxis is therefore the *prepare governance documents* activity in the [definition process](#).

PRINCE2 includes this set of documents in the [project initiation documentation](#) and brings it together in the [Assemble the project initiation documentation](#) activity of the [Initiating a Project \(IP\)](#) process.

In ISO21500 the equivalent is [Develop project plans](#).

**Develop project plans (4.3.3)**

This ISO21500 process produces two plans – the [project plan](#) (a [delivery plan](#)) and a set of [management plans](#).

These two documents are very similar in content to the definition documentation in Praxis. The equivalent in Praxis is the *consolidate definition documentation* activity in the [definition process](#).

PRINCE2 calls this set of documents the [project initiation documentation](#) and brings it together in the [assemble the project initiation documentation](#) activity of the [Initiating a Project \(IP\) process](#).

In the PMBoK® guide the corresponding process is [Develop Project Management Plan](#), although this focuses on the management plans rather than the delivery plans.

---

**Develop project team (4.3.18)**

This ISO21500 process is concerned with getting the best out of the individuals in a [project team](#). It spans many aspects of human resource management, many of which will be out of the span of control of the project manager on smaller projects. The larger the project the more relevant this process becomes.

In Praxis these subjects are dealt with in knowledge [functions](#) rather than as specific project [processes](#). The most relevant functions are [teamwork](#) and [learning and development](#), although all the [interpersonal skills](#) are relevant.

In the PMBoK® guide the equivalent process is [Develop Project Team](#).

PRINCE2 does not address human resource management in any detail.

---

**Develop Project Team (9.3)**

This PMBoK® guide process is concerned with getting the best out of the individuals in a [project team](#). It spans many aspects of human resource management, many of which will be out of the span of control of the project manager on smaller projects. The larger the project the more relevant this process becomes.

In Praxis these subjects are dealt with in knowledge [functions](#) rather than as specific project [processes](#). The most relevant functions are [teamwork](#) and [learning and development](#), although all the [interpersonal skills](#) are relevant.

In ISO21500 the equivalent process is [Develop project team](#).

PRINCE2 does not address human resource management in any detail.



**Develop schedule  
(4.3.23)**

This ISO21500 [process](#) covers the development and analysis of [network diagrams](#) to produce activity [schedules](#) and [resource](#) requirement schedules.

Praxis covers these areas in [schedule management](#) and its component topics: [time scheduling](#) and [resource scheduling](#).

PRINCE2 addresses these areas in the [plans](#) theme.

The equivalent process in the PMBoK® guide is [Develop Schedule](#).

---

**Develop Schedule  
(6.6)**

This PMBoK® guide [process](#) covers the development and analysis of [network diagrams](#) to produce activity [schedules](#) and [resource](#) requirement schedules.

Praxis covers these areas in [schedule management](#) and its component topics: [time scheduling](#) and [resource scheduling](#).

PRINCE2 addresses these areas in the [plans](#) theme.

The equivalent process in ISO21500 is [Develop schedule](#).

---

**Development life  
cycles**

More:

- [Encyclopaedia](#)

The most common development [life cycle](#) is the 'waterfall'. This is generally regarded as being the 'traditional' development life cycle. Its name relates to the fact that it looks like a cascade where water falls from one level to the next.

Another way of representing this is to draw it in a 'V' shape. This highlights the top-down approach to defining requirements, the bottom-up approach to developing products and the [verification](#) and [validation](#) of what has been produced against what was required.

## Development process

More:

- [Process](#)
- [Competence](#)
- [Capability maturity](#)
- [Resources](#)

This is the [process](#) where things actually get produced. It is very simple but very [context](#) sensitive. The principles of the development process can be applied to any scope of work and in essence it is simply a process for [delegation](#) from one level in the organisation structure to another.

In some contexts this may be replaced with a specialised approach, e.g. in [agile](#) projects, it may be replaced with a [scrum](#) development process.

The goals of the process are to:

- transfer responsibility for a package of work;
- execute the package of work;
- transfer ownership of the finished [products](#).

The equivalent process in PRINCE2 is [Managing Product Delivery](#) (MP).

The PMBoK® guide and ISO21500 do not have separate processes for [delegated](#) work. Instead, they take the view that the [processes](#) they define can be applied at different levels, e.g. at project level and at [work package](#) level. It is up to the project manager to decide how the application of the same processes at different levels should interface.

---

## Direct and Manage Project Work (4.3)

This is the top level PMBoK® guide process that co-ordinates more detailed [execution processes](#). It is the process of leading and performing the work defined in the [project management plan](#).

The equivalent in ISO21500 is [Direct project work](#). In Praxis it is the [delivery process](#) and in PRINCE2 [Controlling a Stage](#) (CS).

---

## Direct costs

Costs that are directly attributable to an [activity](#) e.g. the effort, material or equipment costs, as opposed to [indirect costs](#).

---

## Direct project work (4.3.4)

This is the top level ISO21500 process that co-ordinates more detailed [implementing](#) processes. It is the process managing the performance of the work defined in the [project plans](#).

The equivalent the PMBoK® guide is [Direct and Manage Project Work](#). In Praxis it is the [delivery process](#) and in PRINCE2 [Controlling a Stage](#) (CS).

**Directing a Project (DP)**

The PRINCE2 [process](#) that describes the involvement and responsibilities of the [project board](#). It comprises five sub-processes covering authorisation of project [stages](#) and guidance as required on a management by exception basis.

The equivalent in Praxis is the [sponsorship process](#).

Neither the PMBoK® guide nor ISO21500 have processes dedicated to the sponsorship of a project.

**Dis-benefit**

A term used to describe an unfavourable [outcome](#) of a project or programme.

This does not necessarily mean that something has gone wrong. It may be that in transforming an organisation there are some expected dis-benefits. The work is still worthwhile because these dis-benefits are outweighed by the [benefits](#).

Dis-benefits should be documented and quantified in the same way as benefits.

**Discount factor**

See [discount rate](#).

**Discount rate**

Discount factors indicate how much money reduces in value due to inflation. They are used in [discounted cash flow](#) calculations to compare cash flows over a period of years taking inflation into account.

**Discounted cash flow**

More:

- [Encyclopaedia](#)

Discounted cash flow (DCF) is an [investment appraisal](#) technique that, unlike [payback](#) or [accounting rate of return](#), takes the value of money over time into account.

The basic principle is that £1,000 today doesn't have the same value (in terms of what it can buy) as it does next year.

This is important to projects and programmes because they spend cash and create [benefits](#) that have a cash value, but over a period of time.

**Discovery phase**

See [sprint zero](#).

**Discrete distribution**

A distribution used in [Monte Carlo analysis](#) to indicate that only specific [durations](#) between the [optimistic](#) and [pessimistic](#) estimates can occur.

**Discrete effort**

An [activity](#) that can be measured as part of [earned value management](#) and produces a specific output or [product](#).

**Discretionary dependencies**

More:

- [Encyclopaedia](#)

[Dependency links](#) that are not an absolute requirement of the work being done. They indicate a chosen sequence of work as distinct from the [constraints](#) indicated by [mandatory dependencies](#).

**Distribute information (4.3.39)**

An ISO21500 implementing process concerned with keeping [stakeholders](#) informed throughout the project.

In Praxis this area is covered by the [information management](#) and [stakeholder management](#) procedures.

There is not a single equivalent in PMBoK® guide. It would be more accurate to say that the [Manage Communications](#) and [Control Communications](#) processes collectively cover the same ground as the ISO21500 [Distribute information](#) and [Manage communications](#) processes. (Note: when drawing comparisons it is somewhat confusing that Manage Communications is an [executing](#) process in the PMBoK® guide and the process of the same name in ISO21500 is a [controlling](#) process).

PRINCE2 doesn't have a specific theme for [communication](#) and addresses this area primarily through the description of stakeholder engagement in the [organisation theme](#).

**Distributions**

More:

- [Encyclopaedia](#)

Techniques such as [programme evaluation and review technique](#) (PERT) and [Monte Carlo analysis](#), use statistical estimates for the [duration](#) or cost of an [activity](#).

In both cases a distribution must be specified. With PERT this is normally a [beta distribution](#) from which a [mean duration](#) or [mean cost](#) is calculated.

In Monte Carlo, random durations are generated between the upper and lower estimates. These are calculated according to the distribution specified. Typical distributions used are beta, [uniform](#), [triangular](#) or [discrete](#) distributions.

**Do nothing option**

The consequence or result of not performing a project or programme. A [business case](#) should outline this as part of an [investment appraisal](#).

**Drawdown**

The movement of funds from the funding body to the project, programme or portfolio. Normally done in accordance to the [funding profile](#).

**Drop line method**

A way of illustrating progress on a [Gantt Chart](#). A vertical line is drawn at the [progress date](#). The line is stepped to the left or right to cross [activities](#) and indicate the [percentage complete](#) of the activities.

This clearly illustrates where activities are ahead or behind schedule.

<b>Dummy</b>	<p>An arrow in an <a href="#">activity on arrow</a> network that represents a link between two <a href="#">events</a> but which is not an <a href="#">activity</a>. Its purpose is purely to show logical connections between events and is normally drawn as a dotted line to distinguish it from activities.</p> <p>The APM PSMC also refers to dummy activities in the context of precedence networks. These are used instead of leads and lags so that they are visible on a computer generated Gantt chart. It alternatively refers to these as schedule visibility tasks.</p>
<b>Duration</b>	<p>The time an <a href="#">activity</a> is estimated to take. Usually measured as <a href="#">working time</a> but sometimes estimated in <a href="#">elapsed time</a>.</p>
<b>Dynamic systems development method (DSDM)</b>	<p>An <a href="#">agile</a> project delivery framework developed and owned by the DSDM consortium.</p>
<b>Earliest finish</b>	<p>The earliest time an <a href="#">activity</a> can finish. Calculated during the <a href="#">forward pass</a> of <a href="#">critical path analysis</a>.</p>
<b>Earliest start</b>	<p>The earliest time an <a href="#">activity</a> can start. Calculated during the <a href="#">forward pass</a> of <a href="#">critical path analysis</a>.</p>
<b>Early adopter</b>	<p><a href="#">Customers</a> who buy or adopt the first version of a <a href="#">product</a>. Early adopters typically like innovative products and provide early feedback on product quality.</p>
<b>Early event time</b>	<p>The earliest time an <a href="#">event</a> can occur. Calculated during the <a href="#">forward pass</a> of <a href="#">critical path analysis</a>.</p>
<b>Earned hours</b>	<p>The <a href="#">earned value</a> of work done expressed in <a href="#">effort</a> hours instead of money.</p>
<b>Earned value</b>	<p>The value of the work done according to the <a href="#">baseline cost</a>, i.e. if all the work done so far had been completed at the original rates and costs, this is the amount it would have cost.</p>
<p>More:</p> <ul style="list-style-type: none"> <li>- <a href="#">Encyclopaedia</a></li> </ul>	<p>Also referred to as <a href="#">budget cost of work performed</a> (BCWP).</p>
<b>Earned value analysis</b>	<p>The calculations performed as part of <a href="#">earned value management</a>.</p>

**Earned value management**

More:

- [Encyclopaedia](#)

Assessing the progress of [activities](#) through ‘time spent so far’ or ‘money spent so far’ is usually misleading. Earned value calculations assess the value of work that has been done at a particular point and express that in proportion to the value of what should have been done by that point.

The key advantages of earned value management are that it gives an accurate view of how work is progressing and enables this to be used in estimates of the eventual cost and [duration](#) of the project.

**Earned value techniques**

A collective term used by the [APM PSMC](#) for various techniques used to measure the progress of an [activity](#), e.g. [level of effort](#), [earning rules](#) and [apportioned effort](#).

**Earning rules**

Earning rules relate to the way progress is credited to an [activity](#) in [earned value management](#). The three most common rules are:

- 0/100: no value is credited to the activity until it is complete.
- 50/50: 50% of the value is credited when the work is started and 50% when it is completed.
- Percent complete: value is credited in proportion to progress on the activity.

Other rules can be applied such as 20/80. The advantage of this is that some value is credited at the start to register that an activity is in progress but the achievement of full value is weighted towards completion.

**Effort**

The [resource](#) time needed to complete an [activity](#).

**Effort driven activity**

An [activity](#) whose [duration](#) can be varied according to the [resources](#) available to do it. For example if an effort driven activity was defined as needing 12 effort days it would be scheduled for a 6 day duration if two resources were available and 4 days if three resources were available.

**Effort remaining**

An [estimate](#) of the remaining effort required to complete an activity as estimated at the [progress date](#).

**Elapsed time**

The calendar time between two points as distinct from the working time. In a normal five day working week there are seven elapsed days.

**Elemental trend analysis**

An alternative name for [line of balance](#).

**Emergent design**

A phrase originally coined in the context of education but consistent with the [agile](#) approach to projects where individual functionality is developed first and the overall architecture emerges as the product develops.

**End project report**

A PRINCE2 report prepared by the project manager and submitted to the [project board](#). It confirms the [handover](#) of all project [deliverables](#).

The report should also include an updated [business case](#) and an assessment of the project's performance against the original [project initiation documentation](#).

**End stage assessment**

In PRINCE2, the project manager and [project board](#) will review the [end stage report](#) in order to decide whether or not to proceed with the next [stage](#).

**End stage report**

A PRINCE2 report prepared by the project manager at the end of each project [stage](#).

The report is submitted to the [project board](#) and contains an assessment of the project's performance during the stage and the project's status on completion of the stage.

**Enhance**

One of the four possible [opportunity](#) responses.

**Enterprise environmental factors**

A term used in the PMBoK® guide used for factors that are not under the control of the [management team](#) but may influence or constrain the management of a project, programme or portfolio.

**Enterprise project management office**

A [PMO](#) that explicitly covers all projects, programmes and portfolios within an enterprise.

**Environment**

More:

- [Knowledge](#)

The way a project, programme or portfolio is governed and managed will depend upon many different external factors referred to in Praxis as the environment. These must be understood by the P3 [sponsor](#) and manager at the outset so that the work is managed in an appropriate manner.

**Epic**

A large [user story](#) that will be broken down into several more specific user stories when possible.

[PRINCE2 Agile](#) defines an epic as a high-level definition of a requirement that has not been sufficiently refined or understood yet.

**Escalate issues and risks**

An activity from the PRINCE2 [Controlling a Stage \(CS\) process](#) that is invoked if the [stage](#) (or project) is forecast to exceed the [delivery tolerances](#) set by the [project board](#). In this case the project manager issues an [exception report](#) for the project board to consider.

In Praxis this eventuality is encompassed within the *corrective action activity* in the [delivery process](#).

Neither the PMBoK® guide nor ISO21500 have an equivalent exception process. This type of escalation is implicit within the many references to [change requests](#) that are submitted to the [Perform Integrated Change Control](#) process.

**Escalation**

The exercise of raising an [issue](#) with a higher level of management.

**Establish project team (4.3.15)**

This ISO21500 process is concerned with acquiring the human resources needed to complete project [activities](#). It includes the ultimate release of [resources](#) when no longer required.

The equivalent in Praxis is the [mobilisation](#) function and the *mobilise* and *demobilise* activities in the [definition](#), [boundaries](#) and [closure](#) processes.

The equivalent in the PMBoK® guide is [Acquire Project Team](#).

There is no obvious equivalent in PRINCE2 but it could be argued that mobilisation is implicit in the [plan the next stage](#) activity in the [Managing a Stage Boundary \(SB\) process](#).

**Estimate**

An assessment of a quantity. In project terms estimates are usually of time and cost for an element of a project. Estimates should be qualified to indicate the likely degree of accuracy e.g. by appending a spread such as  $\pm 15\%$ .

Alternatively, categories of estimate can be defined such as preliminary estimate or definitive estimate. These terms usually imply a certain degree of accuracy.

See also [estimating techniques](#).

**Estimate activity durations (4.3.22)**

This ISO21500 process takes the output of the [Estimate resources](#) process and estimates the time that those [resources](#) will take to complete the [activity](#).

The equivalent in the PMBoK® guide is [Estimate Activity Durations](#).

In Praxis this is covered by the [planning](#) function and in PRINCE2 by the procedure in the [plans](#) theme.



**Estimate Activity Durations (6.5)**

This PMBoK<sup>®</sup> guide process takes the output of the [Estimate Activity Resources](#) process and estimates the time that those resources will take to complete the [activity](#).

The equivalent in ISO21500 is [Estimate activity durations](#).

In Praxis this is covered by the [planning](#) function and in PRINCE2 by the procedure in the [plans](#) theme.

---

**Estimate Activity Resources (6.4)**

This PMBoK<sup>®</sup> guide process identifies the [resources](#) needed to complete an [activity](#), including people, materials and equipment.

The equivalent in ISO21500 is [Estimate resources](#).

In Praxis this is covered by the [planning](#) function and in PRINCE2 by the procedure in the [plans](#) theme.

---

**Estimate at completion (EAC)**

More:

– [Encyclopaedia](#)

---

The current projected total cost of the project derived from [earned value management](#) data. The [actual cost](#) so far of the project is added to the [estimate to completion](#).

---

**Estimate costs (4.3.25)**

An ISO21500 process concerned with estimating the cost of completing an [activity](#).

Praxis covers estimating generically in the [planning](#) function and makes reference to specific [estimates](#) in [budgeting and cost control](#) and [schedule management](#).

PRINCE2 combines cost and time estimating in the *prepare estimates* step of the [procedure](#) in the [plans](#) theme.

---

**Estimate Costs (7.2)**

A PMBoK<sup>®</sup> guide process concerned with estimating the cost of performing an [activity](#).

Praxis covers estimating generically in the [planning](#) function and makes reference to specific estimates in [budgeting and cost control](#) and [schedule management](#).

PRINCE2 combines cost and time estimating in the *prepare estimates* step of the [procedure](#) in the [plans theme](#).

**Estimate resources (4.3.16)**

This ISO21500 process identifies the resources needed to perform an [activity](#), including people, materials and equipment.

The equivalent in the PMBoK® guide is [Estimate Activity Resources](#).

In Praxis this is covered by the [planning](#) function and in PRINCE2 by the [procedure](#) in the [plans](#) theme.

**Estimate to complete**

An [estimate](#) of the [effort](#) and cost required to complete an [activity](#), [work package](#) or project.

**Estimate to completion (ETC)**

More:

- [Encyclopaedia](#)

The [earned value management](#) term for a forecast of how much is left to spend in order to complete the project. It is calculated by taking the value of work done so far ([budgeted cost of work performed](#)) from the original budget ([budget at completion](#)) and dividing by the [cost performance index](#). This assumes that the rate of progress on the remainder of the project will be the same as for the completed part of the project.

**Estimated time at completion (ETAC)**

More:

- [Encyclopaedia](#)

The estimated completion date of the project according to [earned value management](#). This is calculated by adding the time taken so far to an [estimate](#) of [remaining duration](#) that uses the [schedule performance index](#) as a guide to future performance.

**Estimating funnel**

A representation of how estimating accuracy increases through successive [phases](#) and [stages](#) in the [life cycle](#).

**Estimating techniques**

More:

- [Encyclopaedia](#)

Estimating is the activity of predicting what a piece of work will require in terms of time, [resource](#) and cost. This can range from a high level estimate of a project in a programme to detailed estimating of individual [activities](#) in a [work package](#). There are four fundamental approaches to estimating:

- [Parametric](#).
- [Comparative](#) (also known as analogous).
- Analytical (also known as [bottom-up estimating](#)).
- [Subjective](#).

These terms are not mutually exclusive. For instance, a particular method may combine parametric and subjective approaches; another may be a combination of comparative and analytical. Estimating methods are as diverse as the range of organisations who undertake projects and programmes.

## Ethics

More:

- [Knowledge](#)
- [Resources](#)

Ethics are the moral principles that govern someone's behaviour or the way they perform an activity. Ethical behaviour could be said to be the cornerstone of [competence](#) in a professional environment. For that reason, most professional bodies have a code of conduct and all members must commit to adhere to it.

In the context of Praxis, the goals of ethics are to:

- encourage ethical behaviour in the practitioners of the P3M discipline;
- raise the standards of [professionalism](#) by which P3 managers are judged and thereby raise the status of the profession.

The equivalent function in the APM BoK is ethics frameworks. The subject is not addressed in the PMBoK® guide, ISO21500 or PRINCE2.

---

## Ethics frameworks

The APM BoK function dealing with [ethics](#).

---

## Evaluate the project

An [activity](#) from the PRINCE2 [Closing a Project \(CP\) process](#) that reviews all aspects of the project including changes to the original plan, team performance and an assessment of expected [benefits](#). The outputs are an [end project report](#) and a [lessons report](#).

The equivalent in Praxis is the *review* activity in the [closure process](#).

The PMBoK® guide covers this review as part of [Close Project or Phase](#). ISO21500 doesn't make any specific reference to a review at the end of the project but does have a specific process for [Collecting lessons learned](#).

---

## Event

A point that represents the start or finish of an [activity](#) in an [activity on arrow](#) network. The event is usually represented by a circle divided into three or four sections.

---

## Event report

In addition to [time-driven](#) progress reports, progress may be reported at a particular event. This may be more applicable to certain [stakeholders](#) and will also be an input to the [go/no go](#) decision process at the end of a defined segment of work e.g. the end of a [stage](#) within a project; the end of a contractor's [work package](#); the end of a [tranche](#) within a programme or the end of a project within a portfolio.

---

## Event-driven control

Controls, in the form of progress meetings, reports and reviews, can be event-driven or [time-driven](#). An event-driven control is triggered by an event such as the end of a [stage](#) or achievement of a [milestone](#).

---

**Exception**

An actual or forecast deviation from the [baseline](#) that is outside the [tolerance](#) levels agreed between the levels of management within the project.

**Exception assessment**

A review in PRINCE2 where the [project board](#) will decide whether or not to approve an [exception plan](#).

**Exception plan**

A plan produced in situations where costs or timescales have already been exceeded or are anticipated to exceed the agreed [tolerances](#). The exception plan should demonstrate the remedial action recommended for project, [sub-project](#), [work package](#) or [stage](#) that has exceeded its [tolerances](#).

**Exception report**

A report that describes an [exception](#), provides an analysis of the exception, gives options for the way forward and identifies a recommended option. An exception typically occurs when an aspect (e.g. scope or time) or a part of project (e.g. [work package](#) or [stage](#)) exceeds the agreed [tolerances](#).

**Exclusive OR dependency**

This type of [probabilistic dependency](#) indicates that only one of the [predecessors](#) can be undertaken. Whichever one is chosen excludes all others. If probabilities are used, they must add up to 1.

The same type of rules can apply to outgoing [activities](#) as well as incoming activities.

**Execute a work package**

The activity in PRINCE2 where work gets done and products are produced. This activity is managed by the individual or team to whom the work has been delegated.

The work must be managed within the agreed [tolerances](#). If these tolerances are exceeded or forecast to be exceeded the team manager must raise an issue with the project manager.

The equivalent in Praxis is the *perform work activity* in the [development process](#).

Neither the PMBoK® guide nor ISO21500 have a defined relationship between a project manager and team manager. This could be regarded as implicit within the application of [Direct and Manage Project Work](#) (PMBoK® guide) and [Direct project work](#) (ISO21500) when these processes are applied at project and [work package](#) level.

**Executing process group (PMBOK® guide)**

A PMBoK® guide process group that includes the processes involved in producing the project’s deliverables. These processes can be applied at different levels with the project, i.e. for the project as a whole or for a stage or sub-project.

When viewed from the perspective of the project [life cycle](#), these processes are covered in Praxis by activities in the [delivery process](#), [development process](#) and elements of individual [procedures](#) such as [procurement](#) and [stakeholder management](#).

In PRINCE2 the corresponding elements at the project life cycle level are activities within the [Controlling a Stage \(CS\)](#) and [Managing Product Delivery \(MP\)](#) processes.

ISO21500 equivalent process group is called simply – [implementing](#).

**Executive**

A PRINCE2 term for the person who chairs the [project board](#) (the body that provides [sponsorship](#) in a PRINCE2 project). The executive ‘owns’ the [business case](#) and is ultimately responsible for making sure that the project meets the business’ [objectives](#).

**Expectancy theory**

Expectancy theory was an approach to motivation developed in the 1950’s. In simple terms it relates the effort an individual will put into their work to their expectation of rewards. The outcomes of doing a job are classed as intrinsic and extrinsic.

Examples of intrinsic outcomes are a sense of achievement or a feeling of having learnt something. Intrinsic outcomes come from the performance of the activity itself and are not given by someone else.

The degree to which intrinsic or extrinsic factors will motivate an individual is inherent within models such as [Maslow’s](#) hierarchy of needs.

**Expected monetary value**

Expected monetary value is a way of quantifying the value of uncertain events or a sequence of uncertain events.

In its simplest form the [risk events](#) in the [risk register](#) can be valued in terms of their monetary impact on the [objectives](#), their impact on the [budget](#) or the cost of their mitigation.

More sophisticated techniques include [decision trees](#).

**Expert judgement**

This may seem like a general term but in the PMBoK® guide it is a frequently referenced specific technique. It is defined as judgement based on expertise in an application area, [knowledge area](#), discipline, industry, etc.

---

<b>Exploit</b>	One of the four possible <a href="#">opportunity responses</a> .
<b>Extended life cycle</b>	A <a href="#">life cycle</a> that includes the achievement of <a href="#">outcomes</a> and realisation of <a href="#">benefits</a> up to the point when the <a href="#">business case</a> has been achieved.
<b>External constraint</b>	Constraints that act upon a project, programme or portfolio from outside the <a href="#">scope</a> of the work.
<b>External dependency</b>	A dependency between a project <a href="#">activity</a> and an activity external to the project.
<b>Fallback plan</b>	An alternative name for a <a href="#">contingency plan</a> .
<b>Fast tracking</b>	If a project’s overall duration needs to be shortened, one course of action is to overlap <a href="#">activities</a> or groups of activities that were previously planned as sequential. This may result in increased <a href="#">resource</a> requirements, costs and almost certainly increased risk. Compressing a project <a href="#">schedule</a> in this way is known as fast tracking.
More: – <a href="#">Encyclopaedia</a>	
<b>Feasibility study</b>	A study to assess whether a particular approach to a project or programme is possible and practical within the terms of the <a href="#">business case</a> .
<b>Feeder buffer</b>	A reserve of time applied to a non-critical chain in the <a href="#">critical chain</a> technique.
More: – <a href="#">Encyclopaedia</a>	
<b>Finance management plan</b>	Not all aspects of this plan will be relevant in some <a href="#">contexts</a> . In other contexts it may be necessary to expand this into multiple <a href="#">management plans</a> .
More: – <a href="#">Description</a> – <a href="#">Templates</a>	For example, projects that are part of a programme may not need to perform <a href="#">investment appraisal</a> or establish <a href="#">funding</a> . Major infrastructure programmes may need to develop a management plan for funding that is separate to the management plan for financial control.

## Financial management

More:

- [Knowledge](#)
- [Competence](#)
- [Capability maturity](#)
- [Resources](#)

Financial management covers all aspects of obtaining, deploying and controlling financial resources. The goals of financial management are to:

- [estimate](#) the cost of achieving the [objectives](#);
- assess the viability of achieving the objectives;
- secure funds and manage their release throughout the [life cycle](#);
- set up and run financial systems;
- monitor and [control](#) expenditure.

This Praxis summary function has three component functions for use in more [complex](#) contexts:

- [Investment appraisal](#).
- [Funding](#).
- [Budgeting and cost control](#).

In the PMBoK® guide these aspects are covered by the [project cost management](#) knowledge area and in ISO21500 by the [cost](#) subject group.

PRINCE2 does not have a theme dedicated to financial matters but these are mentioned in the [plans](#) theme and [progress](#) theme.

## Finish activity

An [activity](#) in a [precedence diagram](#) which deliberately has no [succeeding activities](#), i.e. it represents a finish point in the [network](#). Networks can have multiple finish activities.

## Finish event

The event at the end of an [activity](#) in an [activity on arrow diagram](#). Also known as a [j-node](#).

## Finish float

Float normally indicates that the start and finish of an [activity](#) can be delayed without affecting the [critical path](#). In certain circumstances the start of an activity may be on the critical path but its finish is not. The activity is then said specifically to have finish float. This situation arises from the use of [finish to finish](#) links in [precedence networks](#) and [dummies](#) linking the finishes of activities in an [activity on arrow](#) network.

## Finish to finish link

A type of [dependency link](#) in a [precedence diagram](#) which indicates that the [successor](#) may not finish until the [predecessor](#) has finished. Also known as an FF link.

## Finish to start link

A type of [dependency link](#) in a [precedence diagram](#) which indicates that the [successor](#) may not start until the [predecessor](#) has finished. Also known as an FS link.

**Firm fixed price contract**

See [firm price contract](#).

**Firm price contract**

More:

- [Encyclopaedia](#)

A [payment method](#) where a fixed price is agreed for a fixed specification. The difference between a firm price and a [fixed price](#) is that a firm price contract does not permit changes to the agreed specification.

**Fishbone diagram**

See [Ishikawa diagram](#).

**Fixed duration**

Some [scheduling](#) software allows [activity durations](#) to fluctuate for different scheduling purposes. For example, some [resource limited scheduling](#) algorithms will adjust resource usage profiles within an activity in order to match supply with demand. This results in changes to the activity duration.

A fixed duration activity is defined to prevent the duration being changed to anything other than the period specified.

**Fixed finish**

See [imposed finish](#).

**Fixed formula method**

A method in [earned value management](#) for allocating a proportion of the [budget](#) value of an [activity](#) or [work package](#) to the start of the work and the remaining value to the end of the work.

See also [earning rules](#).

**Fixed price contract**

More:

- [Encyclopaedia](#)

A [payment method](#) where a fixed price is agreed for a fixed specification. Any changes to the agreed specification are often paid on a time and materials basis.

**Fixed price incentive fee contract**

More:

- [Encyclopaedia](#)

A [payment method](#) where the [customer](#) pays the [supplier](#) a fixed price but the supplier can earn additional fees if defined performance criteria are met.

**Fixed price with economic price adjustment contract**

See [variation of price contract](#).

**Fixed start**

See [imposed start](#).



**Float**

A measure of the time flexibility available in the performance of an [activity](#). Three degrees of flexibility are known as [total float](#), [free float](#) and [independent float](#). Total float and free float are useful in performing [resource limited scheduling](#). Independent float is rarely calculated, either manually or electronically.

The term total float is often reduced to simply ‘float’.

In [precedence networks](#) that use [start to start](#) or [finish to finish](#) links the float at the beginning of an activity ([start float](#)) may be different to that at the end of the activity ([finish float](#)).

**Flow-based**

An [agile](#) approach where [backlog items](#) are pulled from the [backlog](#) as [resources](#) become available without breaking the work into [timeboxes](#).

**Follow-on actions**

A project or component of a project ([stage](#), [work package](#), [sub-project](#)) may be closed despite there being some outstanding [activities](#) to perform or [issues](#) to resolve.

These are collectively known as [follow-on actions](#) and must be documented in a follow-on actions report for [handover](#) to another team or [plan](#).

**Follow-on actions recommendations**

The PRINCE2 term for [follow-on actions](#) that are included in an [end stage report](#) or [end project report](#).

**Follow-on actions report**

The nature of a follow-on actions report will vary considerably according to its context. In simple terms it must list the actions that remain outstanding when the project or programme team is [demobilised](#). Such actions could relate to unfinished [deliverables](#), [corrective action](#) on existing deliverables or tidying up managerial loose ends such as final payments.

**Forecast expenditure**

The future, [estimated](#) costs for a project, programme or portfolio.

**Forecast final cost**

See [estimated cost at completion](#).

**Forensic schedule analysis**

The study of how actual events caused delay in a [schedule](#). Typically used to build, justify or counter a contractual claim for additional payments.

**Forming**

The first stage of team building in the [Tuckman](#) model.

### Forward pass

The first phase of [critical path analysis](#). It calculates the [earliest starts](#) and [earliest finishes](#) of [activities](#).

The calculation starts by assuming that the earliest start of the first activity is 0. [Durations](#) are then added to the earliest starts to calculate the earliest finishes. The earliest start for an activity with more than one predecessor is equal to the latest of the earliest starts of the [predecessor](#) activities.

The principle is exactly the same for both [precedence](#) and [activity on arrow](#) networks.

---

### Fragnet

Template sections of a [network diagram](#) or [schedule](#) that represent repetitive sections of a schedule, e.g. the floors of a multi storey building.

This term was initially coined by the Primavera scheduling application to describe a feature unique to that product. Since used by guides such as the [APM PSMC](#) to refer generally to sections of a schedule that can be cut and pasted.

---

### Free float

The amount of time an [activity](#) may be delayed without causing any knock on delay to [successor](#) activities.

The formula for calculating the free float of an activity 'A' is:

Free float<sub>A</sub> = Earliest [latest start](#) of all successor activities - [earliest start](#)<sub>A</sub> - [duration](#)<sub>A</sub>

---

### Function

Both the APM BoK and the knowledge section of Praxis are based on a functional analysis of project, programme and portfolio management. Individual components in both guides (such as [risk management](#) or [stakeholder management](#)) are therefore known as functions.

Much of the information covered in APM BoK and Praxis functions is included in the PMBoK® guide as the tools and techniques of the various [processes](#).

ISO21500 processes do not contain tools and techniques and therefore it omits most of this information.

In PRINCE2 the [themes](#) are effectively the same as functions but are not as extensive.

**Function point**

More:

- [Encyclopaedia](#)

A characteristic of a software programme that can be used to perform [parametric estimating](#) in [function point analysis](#). The function points fall into one of five categories. For each function point, a score is given depending upon its degree of complexity. This results in a table where the number of function points in each degree of complexity is shown.

---

**Function point analysis**

More:

- [Encyclopaedia](#)

A [parametric estimating](#) technique for software development that was developed by A.J. Albrecht while working for IBM in the early 1980s.

The principle of this approach is that software is made up of a number of [function points](#) that fit into one of five types. For each function point a score (the multiplier) is given depending upon its degree of complexity.

---

**Function point count**

The number of [function points](#) in a software program weighted to account for their differing degrees of complexity. Part of the [parametric estimating](#) technique [function point analysis](#).

---

**Functional manager**

A manager who is responsible for a specialised technical department in an organisation, e.g. Marketing, Accounting, Engineering etc. When combined with cross functional projects these managers form one side of a [matrix organisation](#).

---

**Functional organisation**

An organisation that has clear boundaries between the different hierarchical groupings in the company e.g. Finance, Marketing, Engineering etc. In the context of a [matrix organisation](#) the term is used to represent a traditional organisation that has little or no cross functional co-ordination of projects.

---

**Functional specification**

A [specification](#) of requirements for a [product](#), based on the functions that the product is intended to perform. A lower level of specification detail than a performance specification.

A [user story](#) is a form of functional specification.

---

## Funding

More:

- [Knowledge](#)
- [Competence](#)
- [Capability maturity](#)
- [Resources](#)

Funding is the means by which the finance required to undertake a project, programme or portfolio is secured and made available to perform the work. Its goals are to:

- determine the best way to fund the work;
- secure commitment from the fund holders;
- manage the release of funds throughout the [life cycle](#).

Funding is also a function in the APM BoK but the different types of funding and their acquisition is not covered in PRINCE2, ISO21500 or the PMBoK® guide.

## Funding profile

An [estimate](#) of a project's [funding](#) requirements against time.

## Furlong

More:

- [Encyclopaedia](#)

Gary Furlong provides a comprehensive model for [conflict resolution](#) in his book 'The Conflict Resolution Toolbox'<sup>8</sup> at the heart of which is the circle of conflict.

The circle has six elements, which Furlong identifies as the main drivers for conflict.

## Gamma distribution

A statistical distribution which some practitioners maintain is more accurate than the [beta distribution](#) when used in [PERT](#) analysis.

## Gantt chart

More:

- [Encyclopaedia](#)

Henry Gantt was an American engineer working at the Frankford Arsenal in the early part of the 20th century. In 1917 he developed the Gantt Chart which still bears his name today.

Also known as a bar chart, the Gantt Chart simply shows bars on a horizontal time scale. The basic format is applicable at all levels in the P3 environment. At the project level, the bars represent [activities](#); at programme level they primarily represent projects and at a portfolio level they primarily represent projects and programmes.

On the simplest of projects it may be sufficient to schedule activity simply by drawing a Gantt Chart but on most projects the chart would be showing the results of [critical path analysis](#), including highlighting [critical activities](#) and [float](#).

## Gate

It is common for the points between [phases](#) or [stages](#) in a [life cycle](#) to be used to review the status of the project or programme and make a [go/no go](#) decision on whether or not it should continue. These decision points are usually known as gates.

<sup>8</sup> Furlong, G., (2005), The Conflict Resolution Toolbox, Wiley and Sons, Ontario.

<b>Gate review</b>	A review of the <a href="#">business case</a> performed at the end of a <a href="#">phase</a> or <a href="#">stage</a> .
<b>Generalised activity network</b>	A form of <a href="#">probabilistic network</a> .
<b>Give ad hoc direction</b>	<p>This activity from the PRINCE2 <a href="#">Directing a Project (DP) process</a> is concerned with the help and assistance that the <a href="#">project board</a> give to the project manager as and when required. Hence the term 'ad-hoc direction'.</p> <p>In Praxis this is covered by the <i>provide management support</i> activity in the <a href="#">sponsorship process</a>.</p>
<b>Go/ no go</b>	<p>The form of <a href="#">control</a> used at a decision point where a choice is made whether to continue a course of action or stop.</p> <p>In projects and programmes, the points in where a go/no go decision is made are usually known as <a href="#">gates</a>. These occur at the end of each <a href="#">phase</a> and <a href="#">stage</a> or <a href="#">tranche</a> and the decision is based on whether or not the <a href="#">business case</a> remains viable.</p>
<b>Goals</b>	<p>Every <a href="#">function</a> and <a href="#">process</a> in the Praxis Framework have a set of goals. These explain the purpose of the function or process but are also important aspects of <a href="#">capability maturity</a>. The Praxis capability maturity model is based on the CMMI® approach in which the achievement of goals is an indicator of level 1 capability and maturity.</p> <p>The goals are also restated in each competency, providing a baseline across the four areas of knowledge, process, competence and capability maturity.</p>

## Governance

More:

- [Knowledge](#)
- [Resources](#)

The word ‘governance’ clearly derives from the practice of governing a political state by its government. In recent years the concept of corporate governance has taken the term and applied it to the commercial world. There are many different definitions of governance but they all include certain key elements, all of which can be adapted and applied to the governance of projects, programmes and portfolios. The goals of P3 governance are therefore to:

- provide a system of good practice by which projects, programmes and portfolios will be managed;
- balance the differing needs of all [stakeholders](#);
- monitor the actions of management to mitigate the risk of inappropriate actions;
- clearly define roles and responsibilities and ensure they are performed by competent people;
- ensure [ethical behaviour](#) and promote transparency.

---

## Governance process

More:

- [Method](#)
- [Competence](#)
- [Maturity](#)

In Praxis, this portfolio management process brings together all the [governance](#) and [professionalism](#) functions and applies them across the portfolio. Its goals are to:

- provide [sponsorship](#) of the objectives of the portfolio;
- oversee [assurance](#) of the portfolio;
- promote the discipline and profession of P3 management.

---

## Graphical Evaluation and Review Technique

A more complex form of [PERT](#) where probability distributions are used to represent the current state and ‘transitions’ (rates of progress) of [activities](#). This form of [network diagram](#) also allows [probabilistic dependencies](#).

---

## Group resource

See [skill group](#).

---

## Hammock

More:

- [Encyclopaedia](#)

An [activity](#) that spans between two points in a [network diagram](#). It has no [duration](#) of its own but derives one from the time difference between the two points to which it is connected.

## Hand over

The formal transfer of ownership of a [deliverable](#) from the project to the [customer](#). This should include confirmation that all the [acceptance criteria](#) have been met.

In the case of the handover of a programme or project's final [output](#) it should also include agreement on a list of outstanding items to be completed even though the project or programme has been formally closed.

---

## Hand over products

The [activity](#) in the PRINCE2 [Closing a Project](#) (CP) process which is the main focus for the [handover](#) of the project's final [output](#). Although this appears in the closing a project process, PRINCE2 recognises that handover may be staged.

The equivalent activity in Praxis is the *hand over* activity in the [closure process](#).

Instead of hand over, the PMBoK® guide refers to the 'transition of the final product' that is an output of the process [Close a Project or Phase](#).

ISO21500 makes no specific reference to the transfer of ownership of the project's products but this should be seen as implicit in [Close project phase or project](#).

---

## Hersey and Blanchard

More:

- [Encyclopaedia](#)

Paul Hersey and Ken Blanchard first developed their 'Life cycle theory of leadership' in 1969<sup>9</sup>. They subsequently renamed the theory 'situational leadership' and continued to develop it both together and individually.

The theory describes four different leadership styles and four levels of individual or team maturity or readiness. It then combines these to suggest which style of [leadership](#) best suits which level of maturity.

---

<sup>9</sup> Hersey, P. and Blanchard, K.H., Life cycle theory of leadership, Training and Development Journal, 23 (5), (1969).

## Hertzberg

More:

- [Encyclopaedia](#)

Frederick Hertzberg first described his two-factor theory in his book 'The Motivation to Work'<sup>10</sup>. In it, he identified the principle that the factors that create dissatisfaction at work are not the same as, and not opposite to, those that create satisfaction.

Herzberg classified the things that mainly affect dissatisfaction as hygiene factors. The name reflects the medical analogy that good hygiene can prevent illness but doesn't necessarily improve health. The factors that produce satisfaction are known as motivators.

If hygiene factors are poorly addressed on the project, they can make the team member dissatisfied. However, if they are well addressed they do not necessarily motivate. Conversely, if motivational factors are well addressed they motivate but their absence does not necessarily produce dissatisfaction.

---

## Hierarchy of networks

Networks, whether they are [precedence](#) or [activity on arrow](#), can become very large. One way to manage this is to develop a hierarchy of networks, which ideally will reflect the [work breakdown structure](#).

At the highest level, boxes in the network represent major sections of work. Each of these is broken down into a [sub-network](#) where the boxes represent smaller sections of work, which are in turn broken down. At the lowest level the boxes represent [activities](#).

In a [critical path analysis](#) the duration of a higher level box (and hence its early dates and late dates) will be calculated from the dates at the beginning and end of its sub-network.

---

## Highlight Report

A PRINCE2 report prepared by the project manager at intervals determined by the [project board](#). It reviews progress to date and highlights any actual or potential problems which have been identified during the period it covers.

Praxis and ISO21500 both refer to [progress reports](#).

---

## Histogram

See [resource histogram](#).

---

## Holiday

All scheduling software packages provide [calendars](#) for [activities](#) and/or [resources](#). These usually allow the definition of a standard working week, e.g. Monday to Friday. A holiday is then any non-working day which is normally part of the working week, e.g. national holidays.

---

<sup>10</sup> Hertzberg, Frederick (1959) The Motivation to Work, Wiley, New York.



**Horizontal integration**

A term used by the [APM PSMC](#) to refer to one aspect of the [assurance](#) of a project [schedule](#).

This form of schedule assurance follows the paths through the [network diagram](#) to ensure, for example, that there are no missing [dependency links](#), the schedule covers the full scope of the project and all necessary [interfaces](#) are included.

See also [vertical integration](#).

---

**Host organisation**

The majority of projects fall into one of two environments. Some projects are performed by one company (the contractor) on behalf of another (the client).

Most projects are performed by an organisation for itself using mainly internal resources. This is the host organisation.

---

**Human resource management plan**

A PMBoK® guide document that sets out the policies and procedures to be used in the project human resource management knowledge area. It is a section within the project management plan.

---

**Hygiene factors**

See [Hertzberg](#).

---

**Hygiene theory**

See [Hertzberg](#).

---

**Hypercritical**

See [supercritical](#).

---

**i/ j numbers**

In [activity on arrow](#) networks it is necessary to number the [events](#) (or nodes) so that logical relationships can be defined. Each [activity](#) can then be described in terms of the event where it starts and the event where it finishes. The [start event](#) contains the 'i' number and the [finish event](#) the 'j' number. These are sometimes referred to as the i-node and the j-node, giving rise to the term i/ j network as an alternative to activity on arrow.

## Identification process

More:

- [Method](#)
- [Competence](#)
- [Maturity](#)
- [Resources](#)

This Praxis process manages the first [phase](#) of the project or programme [life cycle](#). Its goals are to:

- develop an outline of the project or programme and assess whether it is likely to be justifiable;
- determine what effort and investment is needed to define the work in detail;
- gain the [sponsor's](#) authorisation for the definition phase.

Some initial idea or need for a project or programme will generate a [mandate](#). This can take many forms ranging from a client's invitation to tender to a strategic objective in a corporate plan or simply a verbal instruction. The term mandate is applied to whatever information is used to trigger a project or programme.

The equivalent process in PRINCE2 is [Starting Up a Project \(SU\)](#). [Develop Project Charter](#) is the equivalent in both the PMBoK® guide and ISO21500.

---

## Identification team

The team that manages the [identification process](#) in Praxis.

On smaller projects the same team will manage the work through its entire [life cycle](#). On more complex projects and programmes the management team may change in its make up between the identification, definition and deliver [phases](#) of the life cycle.

See also: [definition team](#).

---

## Identify Risks (11.2)

The PMBoK® guide process that identifies [risk events](#), both [threats](#) and [opportunities](#). Its output is the [risk register](#).

The equivalent in both Praxis and PRINCE2 is the *identify* step in the respective [risk management](#) procedures.

In ISO21500 the equivalent process is [Identify risks](#).

---

## Identify risks (4.3.28)

The ISO21500 process that identifies [risk events](#), both [threats](#) and [opportunities](#). Its output is the [risk register](#).

The equivalent in both Praxis and PRINCE2 is the identify step in the respective [risk management](#) procedures.

In the PMBoK® guide the equivalent process is [Identify Risks](#).

**Identify Stakeholders (13.1)**

This PMBoK® guide process deals with the identification of [stakeholders](#) and recording information about them in the [stakeholder register](#).

The equivalent in Praxis are the *identify and assess* steps in the [stakeholder management](#) procedure.

PRINCE2 covers all aspects of stakeholder management as part of the [organisation theme](#).

The equivalent process in ISO21500 is [Identify stakeholders](#).

**Identify stakeholders (4.3.9)**

This ISO21500 process deals with the identification of [stakeholders](#) and recording information about them in the [stakeholder register](#).

The equivalent in Praxis are the *identify and assess* steps in the [stakeholder management](#) procedure.

PRINCE2 covers all aspects of stakeholder management as part of the [organisation](#) theme.

The equivalent process in the PMBoK® guide is [Identify Stakeholders](#).

**Impact**

Used in [qualitative risk analysis](#) as one part of the assessment of a [risk event](#) (the other being probability). Impact is an assessment of the effect the risk event would have on [objectives](#) should it occur.

The detail with which impact is expressed could be as simple as a subjective 'high/medium/low' rating or as a numeric scale with detailed explanations of time and cost consequences.

**Impact analysis**

A collective term for techniques to assess the impact on the project or programme's objectives of a [risk event](#), a [change request](#) or an [issue](#).

**Implementing (ISO21500)**

An ISO21500 process group that includes the processes involved in performing the work of the project. These processes can be applied at different levels with the project, i.e. for the project as a whole or for a [stage](#) or [sub-project](#).

When viewed from the perspective of the project [life cycle](#), these processes are covered in Praxis by the [delivery process](#), [development process](#) and elements of [procedures](#) in various [functions](#).

In PRINCE2 the corresponding elements at the project life cycle level are activities within the [Controlling a Stage](#) (CS) and [Managing Product Delivery](#) (MP) processes.

The equivalent in the PMBoK® guide is the [executing process group](#).

**Imposed dates**

Start and finish dates for **activities** in a **network diagram** are normally calculated from the **forward pass** and **backward pass** of **critical path analysis**. Sometimes it is necessary to take external influences into account. These could include material delivery dates, approval meeting dates, contractual delivery dates and so on.

**Imposed finish**

An **imposed date** on the finish of an **activity**.

**Imposed start**

An **imposed date** on the start of an **activity**.

**Inclusive OR dependency**

This type of **probabilistic dependency** indicates that if any one of an activity's **predecessors** is completed then the **activity** can start.

Probabilities can be attached to each of the emerging activities to indicate their chance of occurring. Unlike the **exclusive OR dependency**, the probabilities do not have to add up to 1.

**Independent estimate**

An **estimate** that is externally sourced to check internal estimates produced by the project or programme team.

**Independent float**

The degree of flexibility which an **activity** has which does not affect the **float** available to any **predecessor** or **successor**.

**Indirect costs**

Overhead costs associated with a project which cannot be directly attributed to any **activity** or discrete group of activities, e.g. the cost of a **project support office**.

**Influence diagrams**

More:

- [Encyclopaedia](#)

A decision support tool comprising a series of linked nodes. There are various conventions around the shape and colour of the nodes but a basic influence diagram comprises arrows and three shapes.

Rectangles indicate decisions or things that are controllable. Ovals represent uncertainties and diamonds represent values or the required outputs of the system being modelled. Arrows show the way these nodes influence each other.

## Influencing

More:

- [Knowledge](#)
- [Competence](#)
- [Resources](#)

P3 managers will often be in a position where the exercise of direct authority is either inappropriate or impossible. In these situations the manager must seek to affect the behaviours and actions of others through influence rather than authority. The goals of influencing are to:

- develop and maintain a high performing team;
- persuade [stakeholders](#) to support the [objectives](#);
- persuade stakeholders to support the achievement of the objectives.

The APM BoK also contains influencing as a [function](#). The PMBoK® guide mentions it as a technique in [Manage Project Team](#).

---

## Information management

More:

- [Knowledge](#)
- [Competence](#)
- [Capability maturity](#)
- [Resources](#)

Information management is the collection, storage, dissemination, archiving and eventual destruction of information. Its goals are to:

- capture data accurately and consistently;
- develop usable information from raw data;
- maintain information securely and accessibly during its useful life;
- support effective decision making and [communication](#).

The APM BoK also contains information management as a [function](#). The PMBoK® guide has a section on project information (3.8) although this is more about specific information flows than a general discussion of information management.

Similarly, PRINCE2 contains many references to the handling of specific project documentation but does not have a general explanation of information management.

---

## Information management plan

More:

- [Description](#)
- [Templates](#)

There is an information management element to all other [management plans](#) that deals with the format and distribution of specific documentation.

This management plan should not duplicate those policies. Rather, it is about general approaches to the creation, storage and dissemination of information.

---

## Information required register

A [schedule](#) detailing the [baseline](#), forecast and actual dates for the provision of information on a project.

This is principally applicable where a [client](#), or their agents, are responsible to providing information to a contractor.

**Infrastructure**

A function in the APM BoK that deals with the overall infrastructure that supports the management of projects, programmes and portfolios. This encompasses concepts such as [PMOs](#), [communities of practice](#), [centres of excellence](#), planning departments etc.

**Inherent risk**

A term used in PRINCE2 for the exposure arising from identified [risk event](#) before any [risk response](#) action has been taken.

**Initiating (ISO21500)**

An ISO21500 [process group](#) that includes the processes involved in getting the project underway. These processes can be applied at different levels with the project, i.e. for the project as a whole or for a [stage](#) or [sub-project](#).

When viewed from the perspective of the project [life cycle](#), these processes are covered in Praxis by the [identification process](#) and elements of individual functional [procedures](#).

In PRINCE2 the equivalent process at the project life cycle level is [Starting Up a Project \(SU\)](#).

The equivalent in the PMBoK® guide is the [initiating process group](#).

**Initiating a Project (IP)**

This is the second [process](#) in the PRINCE2 method. Its main output is the [project initiation documentation](#). This is initially used by the [project board](#) to assess whether approval should be given for the first delivery [stage](#) of the project and subsequently as a [baseline](#) for managing the project.

The equivalent in Praxis is the [definition process](#).

Although the approach in the PMBoK® guide and ISO21500 is different, they both contain an integration process that is very similar in scope to Initiating a Project. In the PMBoK® guide this is [Develop Project Management Plan](#) and in ISO21500 it is [Develop project plans](#).

**Initiating process group (PMBoK® guide)**

A PMBoK® guide [process group](#) that includes the processes involved in getting the project underway. These processes can be applied at different levels with the project, i.e. for the project as a whole or for a [stage](#) or [sub-project](#).

When viewed from the perspective of the project [life cycle](#), these processes are covered in Praxis by the [identification process](#) and elements of individual functional [procedures](#).

In PRINCE2 the equivalent process at the project life cycle level is [Starting Up a Project \(SU\)](#).

The equivalent ISO21500 process group is called simply – [initiating](#).

### Initiation process

More:

- [Method](#)
- [Competence](#)

This is usually a one-off process in Praxis that manages the set-up of a portfolio.

It represents the point at which the [host organisation](#) makes the decision to manage its projects and programmes as a portfolio.

The goals of the process are to:

- decide what type of portfolio is required;
- design the portfolio infrastructure;
- obtain senior level approval and commitment;
- implement the portfolio.

### Initiation stage

In PRINCE2 this is defined as the period between the authorisation of initiation by the [project board](#) and when they subsequently authorise or cancel the project. This stage is managed by the [Initiating a Project \(IP\)](#) process. The reason PRINCE2 includes this definition is so that initiation is seen as a [management stage](#) and therefore invokes associated documentation such as a [stage plan](#).

### i-node

The node at the start of an [activity](#) in an [activity on arrow](#) network. Also known as a start event.

See also [i/ j numbers](#).

### Integrated assurance

The coordination of [assurance](#) activities that are provided by a range of internal, external and specialist assurance bodies.

### Integrated cost/ schedule reporting

See [earned value management](#).



This [video](#) explains how Praxis integrates knowledge, method, competence and capability maturity into a single framework.

**Integration  
(ISO21500 subject  
group)**

An ISO 21500 subject group that provides a set of high level [processes](#) that co-ordinate the processes of individual [subject groups](#). At the project level these processes align closely with the project [life cycle](#). The processes comprise:

- [Develop project charter.](#)
- [Develop project plans.](#)
- [Direct project work.](#)
- [Control project work.](#)
- [Control changes.](#)
- [Close project phase or project.](#)
- [Collect lessons learned.](#)

The Praxis processes serve an equivalent purpose when applied to the project life cycle. The same is true of the PRINCE2 processes.

The PMBoK® guide and ISO21500 share a very similar structure and the equivalent [knowledge area](#) in the PMBoK® guide is [project integration management](#).



Featured article: [Managing multicultural teams](#)



## Integrative management

More:

- [Knowledge](#)

The topics in this Praxis [function](#) do not directly address the fundamental components of delivery, i.e. [scope](#), [schedule](#), cost, risk, change and [resource](#). They are integrative functions that act across those components.

The overall goals of the integrative management functions are to:

- plan all aspects of the work;
- develop and maintain the justification for the work;
- monitor and control performance;
- ensure information is accurate, current and accessible;
- establish and maintain a management team;
- identify and communicate with people affected by the work;
- ensure that the management of the work is relevant and effective.

The integrative functions are:

- [Organisation management](#).
- [Stakeholder management](#).
- [Business case management](#).
- [Planning](#).
- [Control](#).
- [Information management](#).
- [Assurance](#).

The APM BoK has a similar group of integrative functions.

---



Featured article: [The human side of risk management](#)

## Interface

The APM BoK contains a section called interfaces. This describes general management functions that are not part of the field of P3 Management but have to interface with it. These interface functions are: Accounting, Health and safety; Human resource management; Law; Security and Sustainability. These are considered to be out of scope by the other guides.

It is worth noting that the scope of the APM BoK function on human resource management is organisational - as opposed to the PMBoK® guide [knowledge area](#) of the same name which only deals with the management of human resources within the project team.

In the [APM PSMC](#) the term is used to indicate a point of contact between two or more parties working on a project, e.g. between [client](#) and contractor, [prime contractor](#) and sub-contractor or [management team](#) and design team.

In effect, managing these is an aspect of [stakeholder management](#). The PSMC specifically addresses interfaces from the planning point of view and their effect on [schedules](#) in particular.

---

## Interface activity

An [activity](#) that indicates a logical connection to another [network diagram](#) or page.

When networks become large they may stretch across multiple sheets of paper. Interfaces are used to indicate the links between sheets. In a complex network, interfaces may also be used to indicate links between activities on a different part of the sheet where a link drawn normally would cross too many other lines.

Interfaces are normally indicated by being drawn with a double line.

---

## Interfering float

See [Independent float](#).

---

## Internal rate of return

More:

- [Encyclopaedia](#)

When using [discounted cash flows](#), the internal rate of return (IRR) is the [discount rate](#) that gives a [net present value](#) of zero.

Broadly speaking the IRR is the rate of growth delivered by a project or programme. The higher the IRR the more attractive the [business case](#). In pure financial investment terms, if the IRR for a project or programme is not greater than the return that could be achieved by investing the equivalent sum of cash in the financial markets, it isn't worth undertaking the work.

### Interpersonal skills

More:

- [Knowledge](#)

When the complexities of human behaviour are sub-divided into distinct functions it can inevitably become somewhat artificial and theoretical. But P3 sponsors, managers and team members need to understand the mechanisms by which people relate to, and interact with, other people.

Simple models such as the ones referenced in this Praxis function are a useful starting point for each individual as they build their own interpersonal skill-set. The component functions are:

- [Communication.](#)
- [Conflict management.](#)
- [Delegation.](#)
- [Influencing.](#)
- [Leadership.](#)
- [Negotiation.](#)
- [Teamwork.](#)

---

### Investment appraisal

More:

- [Knowledge](#)
- [Competence](#)
- [Capability maturity](#)
- [Resources](#)

Investment appraisal is a collection of techniques used to identify the attractiveness of an investment. Its goals are:

- assess the viability of achieving the [objectives](#);
- support the production of a [business case](#).

Investment appraisal is very focused on the early [phases](#) of a project or programme and is performed in parallel with the early work on [management plans](#) and [delivery plans](#).

The APM BoK also contains an investment appraisal function.

PRINCE2 mentions various related techniques in the [business case](#) theme.

The PMBoK® guide mentions investment appraisal techniques in the [Plan Cost Management](#) process and while ISO21500 refers to investment appraisal it does not mention specific techniques.

---

### Invitation to bid

See [Invitation to tender](#).

---

### Invitation to tender

A document distributed to prospective suppliers inviting them to provide bids for a package of work. Usually synonymous with the terms [request for quotation](#) and [request for proposal](#).

### **Ishikawa diagram**

Also known as a fishbone diagram or a cause and effect diagram, these diagrams are used to relate many causes to one effect.

Causes are grouped under headings on the left side of the diagram with the ultimate effect on the right. Commonly used as a tool for risk identification to identify sources of risk or in [quality management](#) to identify causes of [product](#) failure.

---

### **Island of stability**

If a programme is implementing multiple changes in one business area, the programme team should consider planning the [schedule](#) so that there are periods of consolidation after major change. The programme should do this by rotating its focus from one area to another and not implementing all the changes to a particular business area at once.

---

### **ISO21500**

ISO21500 is the guidance on project management published by the International Standards Organisation. The version referred to in this glossary is the first edition as implemented by the British Standards Institute in 2012.

The ISO Guidance is very similar in appearance to the [PMBok® guide](#) published by the Project Management Institute. It provides a set of processes that are arranged in a matrix to show how they relate to the knowledge and method elements of the [P3 management framework](#).

The key difference between ISO21500 and the [PMBok® guide](#) is that ISO21500 processes do not contain tools and techniques. The standard does therefore not explain what the [PMBok® guide](#) calls tools and techniques, PRINCE2 calls [themes](#) and Praxis and the [APM BoK](#) call [functions](#).

**Issue**

An issue is something that has occurred and needs to be addressed (as opposed to a risk, which is something that could potentially occur).

Issues are recorded in an [issue register](#) and assessed to determine how they should be dealt with.

Different sources define issues in different ways. Praxis and the APMBok define an issue as a problem that needs to be [escalated](#) to the [sponsor](#), e.g. when progress is outside of approved [tolerances](#).

PRINCE2 has a very broad definition of issues where anything from a major quality failure, through to a routine [change request](#) to a [stakeholder enquiry](#), are all classed as issues.

The PMBoK® guide regards an issue as a point of dispute or matter that is under discussion.

ISO21500 has an issues log and often mentions issues without being specific about what constitutes an issue.

**Issue log**

The PMBoK® guide and ISO21500 term for an [issue register](#).

**Issue owner**

The person who is responsible for ensuring that an [issue](#) is resolved.

**Issue register**

More:

- [Description](#)

The issue register records issues and contains detailed information about the nature, ownership and resolution of [issues](#). In the various guides the exact content of the register will depend upon the particular definition of what constitutes an issue.

**Issue report**

In PRINCE2, the issue report contains a bit more information about specific issues than is contained in the [issue register](#).

**Iterative life cycle**

A project [life cycle](#) where the overall scope is defined early on but the detail is developed iteratively and incrementally throughout the life cycle.

An iterative life cycle must be supported by correspondingly iterative development methods such as [scrum](#) for IT development.

**j-node**

The node at the end of an [activity](#) in an [activity on arrow](#) network. Also known as a finish event.

See also [i/ j numbers](#).

**Kanban board**

More:

- [Encyclopaedia](#)

Kanban is a Japanese word that can be literally translated as signboard or billboard. In the 1950s Taiichi Ohno at Toyota developed a production control system using cards that provide a visual signal to trigger an action.

Originally this was used to maintain high levels of efficiency in production lines and for the implementation of ‘Just in time’ (JIT) production.

---

**Katzenbach and Smith**

More:

- [Encyclopaedia](#)

Jon Katzenbach and Douglas Smith<sup>11</sup> define a team as:

“a small group of people with complementary skills who are committed to a common purpose, performance goals and approach for which they are mutually accountable”.

This simple definition brings together team role models such as [Belbin](#) and [Margerison-McCann](#) (complementary skills) with P3 management (common purpose and performance goals) and models of leadership such as [Hersey and Blanchard](#) and [McGregor](#) (mutually accountable).

---

**Key event schedule**

See [milestone plan](#).

---

**Key performance indicators (KPIs)**

Measurable indicators, chosen to reflect performance in working towards the main [objectives](#) of the project or programme, which will be used to report on progress.

Any indicator can be chosen provided it is a key factor in the performance of the project. For example, performance indices based upon time and cost performance are a function of [earned value management](#).

---

**Kick-off**

An event where those participating in a piece of work (e.g. project, [stage](#), [work package](#) etc.) assemble for the first time.

---

**Knowledge area (PMBok<sup>®</sup> guide)**

See [project management knowledge area](#).

---

<sup>11</sup> Katzenbach, J. R. and Smith, D.K., (1993), The Wisdom of Teams: Creating the High-performance Organisation, Harvard Business School, Boston.

## Knowledge management

More:

- [Knowledge](#)
- [Resources](#)

Knowledge management involves the systematic identification, recording, and distribution of insights and experiences that enables their adoption in new situations.

The goals of knowledge management are to:

- capture useful knowledge from the management of projects, programmes and portfolios;
- make tacit knowledge from experienced practitioners available to all;
- support [capability maturity](#) management and continuous improvement in P3 management.

Knowledge management is also a topic in the APM Body of Knowledge but is not covered in the PMBoK® guide, ISO21500 or PRINCE2 other than indirectly through references to the capture of [lessons learned](#).

## Kotter

More:

- [Encyclopaedia](#)

In 'Leading Change', John Kotter<sup>12</sup> introduced his "eight steps to transforming your organisation".

The eight steps can be placed in three categories: plan, deliver and embed. These correlate to the phases and processes of the project/programme [life cycle](#). The planning steps align with the [identification process](#) and the [definition process](#), the deliver steps are synonymous with the [delivery process](#) and embed is a key element of the [benefits realisation](#) process.

## Ladder

More:

- [Encyclopaedia](#)

When drawing a [network diagram](#) it is common to come across a situation where [activities](#) are performed in parallel. For example if a new cable were being laid in a trench, the three activities: Dig Trench, Lay Cable, Backfill, may not run sequentially. This is called a ladder.

## Lag time

[Dependency links](#) in a [precedence diagram](#) can have time allocated to them in order to indicate a waiting period between the points connected by the link. This time is referred to as a lag. Some sources use the term to apply specifically to the time allocated to [finish to start](#) or [finish to finish](#) links, preferring the term [lead](#) for time allocated to a [start to start](#) link.

[Dummies](#) in an [activity on arrow](#) network can similarly have time allocated and these are generally referred to as lags.

## Late event time

The latest time an [event](#) could occur. Calculated during the [backward pass](#) of [critical path analysis](#).

<sup>12</sup> Kotter, J. P., (1995), Leading Change, Harvard Business School Press, Boston MA.

**Latest finish** The latest time an [activity](#) can finish. Calculated during the [backward pass](#) of [critical path analysis](#).

**Latest start** The latest time an [activity](#) can start. Calculated during the [backward pass](#) of [critical path analysis](#).

**Lead contractor** See [prime contractor](#).

**Lead time** Commonly used to represent the waiting time between order and delivery of materials.

Also used to refer to time allocated to a [start to start](#) link in a [precedence diagram](#). See also [lag time](#) and [ladders](#).

The [APM PSMC](#) glossary states that a lead is “A negative lag. By definition an illogical condition”. However, the text of the guide additionally uses the term in its more conventional meaning described above.

In [agile](#) the lead time may represent the time taken between taking an item from the [backlog](#) and delivering a [product](#). In traditional planning terms this is not dissimilar to an [activity duration](#) but arises from the similarities between agile and a production environment. An alternative term is [cycle time](#).

## Leadership

More:

- [Knowledge](#)
- [Competence](#)
- [Resources](#)

The verb *to lead* is derived from the word *laed*, a term common to ancient Northern European languages. It means a path, road, journey or course of a ship at sea. By implication a leader is one who guides those travelling the path.

Leadership has many definitions because it is exercised in so many different contexts. In simple terms in the context of P3 management, leadership is best defined by its goals, which are to:

- provide focus and promote commitment to [objectives](#);
- inspire team members to successfully achieve the objectives.

The APM BoK also contains a function on leadership. The PMBoK® guide has a brief section on leadership in the tools and techniques section of the [Manage Project Team](#) process.

Neither PRINCE2 nor ISO21500 address the principles of leadership.



## Learning and development

More:

- [Knowledge](#)
- [Resources](#)

Learning and development encompasses the continual improvement of competence at all levels of an organisation. The goals of learning and development in an organisation are to:

- develop competent individuals;
- encourage an environment of continual professional development;
- promote the contribution of learning and development to the [capability maturity](#) of the organisation.

The APM BoK also has a function for learning and development but it is not covered by PRINCE2, ISO21500 or the PMBoK® guide.

---

## Lessons learned

Knowledge gained in the course of performing work that can be recorded and disseminated to improve the management of projects, programmes and portfolios in the future.

---

## Lessons learnt

See [lessons learned](#).

---

## Lessons log

More:

- [Description](#)

A lessons log for a particular project or programme will have two distinct sections. The first is created in the *review previous lessons* activity during the [identification process](#) where [lessons learned](#) from previous work that are applicable to the current work are logged. The second section records lessons that have arisen in the conduct of the current work and may be applicable in the future.

---

## Lessons report

In Praxis, a lessons report is a section of a [progress report](#) or [event report](#). It is a review of what went well, what went badly and suggestions for lessons to be included in the [lessons log](#).

In PRINCE2 the lessons report is derived from the [end project report](#) that is produced by the [evaluate the project](#) activity of the [Closing a Project \(CP\) process](#).

The PMBoK® guide does not specify a similar document but makes general references to [lessons learned](#) documentation.

ISO21500 defines the lessons learned document as an output of the [Collect lessons learned](#) process.

---

## Level of effort

A type of [activity](#) in [earned value management](#) that represents an activity that does not produce a specific end [product](#) and is measured by the passage of time.

### Level of quality

An [agile](#) term relating to the overall quality level of a project's outputs. For example, in [PRINCE2 Agile](#) this is defined by the [customer's quality expectations](#) and [acceptance criteria](#) in the [project product description](#).

### Lewin

More:

- [Encyclopaedia](#)

Lewin's<sup>13</sup> model for the management of change is one of the simplest, comprising three steps: unfreeze, change and refreeze. These align closely with the 'prepare, implement and sustain' steps in the Praxis [change management](#) procedure.

### Life Cycle

More:

- [Knowledge](#)
- [Resources](#)

A P3 life cycle illustrates the distinct [phases](#) that take an initial idea, capture [stakeholder](#) requirements, develop a set of [objectives](#) and then deliver those objectives.

The goals of life cycle management are to:

- identify the phases of a life cycle that match the [context](#) of the work;
- structure [governance](#) activities in accordance with the life cycle phases.

The APM BoK also has a function for the life cycle. PRINCE2 doesn't explicitly describe a life cycle but the process model implicitly supports the typical life cycle by having a process for each phase.

Similarly, in the PMBoK® guide the processes in the project integration management knowledge area support the typical life cycle. The same is true of the processes in the integration subject group of ISO21500.

### Life cycle cost

The cost of a project over the whole of its [life cycle](#).

### Life cycle costing

When considering alternative projects, [life cycle](#) costing considers all the associated costs of the whole product life cycle, including acquisitions, operation and termination (or de-commissioning). When considering costs over a long period of time, the cost of money must be taken into account for valid comparisons of cost and revenue.

### Likelihood

Used in [qualitative risk analysis](#) as an alternative term to [probability](#).

### Likely cost

The middle of the three cost estimates used in [PERT/ Cost](#). In the view of the estimator this is the most likely cost of the [activity](#).

### Likely duration

The middle of the three duration estimates used in [PERT](#). In the view of the estimator this is the most likely cost of the [activity](#).

<sup>13</sup> Lewin, K., (1951), Field Theory in Social Science, Harper and Row, New York.

**Line of balance**

More:

- [Encyclopaedia](#)

A [time scheduling](#) technique that is typically used in situations where skilled [resources](#) are performing the same [activity](#) on multiple products within a project.

Line of balance charts are sometimes combined with physical layouts of the work on the vertical axis, and may be referred to as a [time chainage chart](#).

**Linear sequential model**

See [waterfall](#).

**Linked bar chart**

A [Gantt chart](#) that shows the [dependency links](#) between [activities](#). On all but the simplest bar charts this format becomes very confusing.

Unfortunately many scheduling software packages do not offer [network diagrams](#) and the linked bar chart is the only way of viewing dependencies.

**Links**

See [dependency links](#).

**Logic density**

The average number of [dependency links](#) per [activity](#) in a [network diagram](#).

**Logic diagram**

An alternative name for a [network diagram](#).

**Logic link**

See [dependency links](#).

**Logical relationship**

See [dependency links](#).

**Logistics planning**

The planning of movement of physical [resources](#) such as materials, plant and equipment.

**Loop**

A circular sequence of [activities](#) which cannot be resolved as part of a [critical path analysis](#).

Some forms of [network diagram](#) (e.g. [GERT](#)) allow loops in order to model repeated sequences of activities. These must allow the number of repetitions to be defined or a condition that allows for exit of the loop.

**Maccoby and Scudder**

More:

- [Encyclopaedia](#)

In their book 'Leading in the heart of conflict'<sup>14</sup>, Michael Maccoby and Tim Scudder identify a five step process for [conflict management](#). Its component activities have many parallels in P3 management.

**Make or buy**

More:

- [Encyclopaedia](#)

At one level, as the name suggests, this is a simple decision about whether to make something in-house or buy it from an external [supplier](#). It also suggests that it only relates to physical products but the principles are equally applicable to services, i.e., should they be provided by in-house resources or external contractors.

**Make ready needs**

Things, other than [dependency links](#), that must be in place for an [activity](#) to start, e.g. specifications, approvals, materials etc.

This is similar to the term [definition of ready](#) used in [agile](#).

**Manage Communications (10.2)**

A PMBoK® guide [executing](#) process concerned with creating, collecting, distributing, storing, retrieving and archiving of communications throughout the project organisation.

In Praxis this area is covered by the [information management](#) and [stakeholder management](#) procedures.

There is not a single equivalent in ISO21500. It would be more accurate to say that the [Distribute information](#) and [Manage communications](#) collectively cover the same ground as the PMBoK® guide processes [Manage Communications](#) and [Control Communications](#). (Note: when drawing comparisons it is somewhat confusing that Manage Communications is an Executing process in the PMBoK® guide and the process of the same name in ISO21500 is a [controlling](#) process)

PRINCE2 doesn't have a specific theme for communication and addresses this area primarily through the description of [stakeholder engagement](#) in the [organization](#) theme.

---

<sup>14</sup> Maccoby, M. & Scudder, T., (2011), Leading in the heat of conflict.

**Manage communications (4.3.40)**

An ISO21500 [controlling](#) process concerned with managing communications throughout the project organisation.

In Praxis this area is covered by the [information management](#) and [stakeholder management](#) procedures.

There is not a single equivalent in PMBoK® guide. It would be more accurate to say that the [Manage Communications](#) and [Control Communications](#) processes collectively cover the same ground as the ISO21500 [Distribute information](#) and [Manage communications](#) processes. (Note: when drawing comparisons it is somewhat confusing that Manage Communications is an [executing process](#) in the PMBoK® guide and the process of the same name in ISO21500 is a [controlling](#) process).

PRINCE2 doesn't have a specific theme for communication and addresses this area primarily through the description of [stakeholder engagement](#) in the [organisation](#) theme.

---

**Manage project team (4.3.20)**

This ISO21500 process is concerned with managing individual members of the [project team](#) through a variety of interpersonal skills.

The equivalent in the PMBoK® guide is [Manage Project Team](#).

In Praxis, this area is covered by the interpersonal skills such as [influencing](#) and [conflict management](#).

PRINCE2 does not go into any detail about the management of individuals.

---

**Manage Project Team (9.4)**

This PMBoK® guide process is concerned with managing individual members of the [project team](#) through a variety of [interpersonal skills](#).

The equivalent in ISO21500 is [Manage project team](#).

In Praxis, this area is covered by the interpersonal skills such as [influencing](#) and [conflict management](#).

PRINCE2 does not go into any detail about the management of individuals.

---

**Manage Stakeholder Engagement (13.3)**

This PMBoK® guide process deals with [communication](#) and working with [stakeholders](#). Its aim is to keep stakeholders engaged and resolve any issues that arise.

The equivalent in Praxis is the *engage* step in the [stakeholder management](#) procedure.

In ISO 21500 the equivalent is [Manage stakeholders](#).

In PRINCE2 this area is covered by the stakeholder section of the [organization](#) theme.

**Manage stakeholders (4.3.10)**

This ISO 21500 process deals with [communication](#) and working with [stakeholders](#). Its aim is to keep stakeholders engaged and resolve any issues that arise.

The equivalent in Praxis is the *engage* step in the [stakeholder management](#) procedure.

In the PMBoK® guide the equivalent is [Manage Stakeholder Engagement](#).

In PRINCE2 this area is covered by the stakeholder section of the [organization](#) theme.

**Management plans**

In Praxis these documents set out the way a [function](#) will be managed.

The two main sections cover the policy and procedure of the function with the detail being adapted to the [context](#) of the work. This is distinct from a [delivery plan](#), which explains the detail of how a specific piece of work will be delivered.

Policy includes sections on roles and responsibilities, [information management](#), [assurance](#), budget and interfaces to other functions. Procedure begins with defining the steps to be used in performing the function, followed by detailed recommendations on the tools and techniques to be used in each step.

Both the PMBoK® guide and ISO21500 also refer to management plans while PRINCE2 uses the term management strategy.

**Management process**

More:

- [Method](#)
- [Competence](#)
- [Maturity](#)
- [Resources](#)

This Praxis process deals with the high level management of a portfolio. The activities will be applied according to the type of portfolio and its context. Its goals are to:

- assess the suitability of projects and programmes for inclusion in the portfolio;
- maintain a beneficial and manageable mix of projects and programmes.

Although primarily a portfolio management process, the activities described here are also relevant to the application of the [delivery process](#) for large, [complex](#) programmes.

**Management products**

In PRINCE2 the documents used to manage the project are known as management products as opposed to the products that make up the project's end result, which are known as [specialist products](#).

**Management reserve**

A reserve of time or cost that is provided to accommodate cost increases or [risk events](#) that were not foreseen.

<b>Management stage</b>	<p>PRINCE2 and Praxis both break the delivery phase of the project <a href="#">life cycle</a> into <a href="#">stages</a>. In PRINCE2 these are further described as management stages to emphasise that they are created to facilitate the management of delivery and are not necessarily discrete technical stages.</p>
<b>Management team</b>	<p>Praxis makes a distinction between the management team and the <a href="#">delivery team</a>. The management team includes all those who are responsible for managing the project or programme rather than performing the <a href="#">activities</a> that deliver <a href="#">products</a>.</p>
<b>Managing a Stage Boundary (SB)</b>	<p>Management of the boundaries between <a href="#">stages</a> is PRINCE2's primary form of <a href="#">go/no go control</a>. This process covers the work that is done as one stage comes to an end and the next is being planned.</p> <p>The equivalent in Praxis is the <a href="#">boundaries process</a>.</p> <p>The PMBoK® guide and ISO21500 take a different approach to component <a href="#">phases</a> or stages of a project. Rather than use specific processes for these components of a project, they simply apply the main process model in a scaled down form, i.e. integration processes that closely align to a project <a href="#">life cycle</a> can be applied to an individual phase or stage.</p>
<b>Managing Product Delivery (MP)</b>	<p>The PRINCE2 process that covers the work of the person responsible for a <a href="#">work package</a>, often referred to as a <a href="#">team manager</a>. It includes the receipt of requirements from the project manager, the execution of the work and the <a href="#">handover</a> of the completed <a href="#">products</a>.</p> <p>The equivalent in Praxis is the <a href="#">development process</a>.</p> <p>The PMBoK® guide and ISO21500 do not have separate processes for <a href="#">delegated</a> work. Instead, they take the view that the <a href="#">processes</a> they define can be applied at different levels, e.g. at project level and at <a href="#">work package</a> level. It is up to the project manager to decide how the application of the same processes at different levels should interface.</p>
<b>Mandate</b>	<p>The term mandate applies to whatever information is used to trigger the <a href="#">initiating process</a> or a project or a programme. It could be a minute in a management meeting, the award of a <a href="#">contract</a> to supply or simply an email from a senior manager.</p> <p>In PRINCE2 the project mandate triggers the <a href="#">Starting up a Project (SU)</a> process.</p> <p>There is no obvious equivalent point of conception of the idea that leads to a project in the PMBoK® guide or ISO21500.</p>

**Mandatory dependencies**

[Dependency links](#) that are an inherent part of the work being done. For example, an [activity](#) to put a roof on a house must follow the construction of the walls. This is a mandatory dependency.

Deciding to paint the doors before the windows would be a [discretionary dependency](#).

**Margerison-McCann**

More:

- [Encyclopaedia](#)

Charles Margerison and Dick McCann developed their team development profile and team wheel based on the personality theories of Jung. Its advocates cite its basis on psychometric testing as its main advantage over other team profiles such as [Belbin](#).

**Maslow**

More:

- [Encyclopaedia](#)

Abraham Maslow proposed his hierarchy of needs in 1943<sup>15</sup>. The theory has been widely accepted and quoted even though Maslow never did any empirical research to support it.

The hierarchy shows a progression of motivational factors. It starts at basic human survival and progress to higher intellectual needs. The hierarchy starts with basic physiological needs such as food, water, oxygen, exercise. It then progresses through another four levels culminating with self-actualisation which is about satisfying yourself that you have fulfilled your potential. As each of these needs is satisfied it ceases to become a motivator.

**Master network**

The top level network in a [hierarchy of networks](#).

**Master schedule**

A [schedule](#) of dates that shows only [activities](#) and [milestones](#) from the [master network](#).

**Matrix organisation**

More:

- [Encyclopaedia](#)

The matrix organisation gets its name from the fact that projects and programmes cross [business-as-usual](#) departments to form a matrix. At the intersections of the matrix are the staff who constitute the [resources](#) of both projects, programmes and business-as-usual.

Broadly speaking there are three types of matrix organisation: [weak](#), [balanced](#) and [strong](#). These principally apply to projects where the departmental resources make up the [delivery team](#) but the same principles may apply to project and programme [management teams](#).

**Maximum resource limit**

Some computer based [resource scheduling](#) methods allow for [normal resource limits](#) and [maximum resource limits](#). If [activities](#) cannot be levelled within the normal resource limit, the scheduler is allowed to make use of extra resources up to the maximum resource limit.

<sup>15</sup> Maslow A.H., (1943), A theory of human motivation, Psychological Review, 50(4), 370–96.



**McGregor**

More:

- [Encyclopaedia](#)

Douglas McGregor is most famous for his Theory X and Theory Y as described in his book ‘The Human Side of Enterprise’<sup>16</sup>.

McGregor identified two extreme views of [leadership](#). Theory X managers assume that people fundamentally dislike work and need authoritarian leadership. Theory Y managers assume that people can be ambitious and self-motivated and see their role as developing each individual’s potential.

**Mean cost**

The probable cost of an [activity](#) as calculated from the [optimistic](#), [pessimistic](#) and [most likely](#) estimates.

In [PERT](#) analysis the mean cost is calculated using a [beta distribution](#).

**Mean duration**

The probable [duration](#) of an [activity](#) as calculated from the [optimistic](#), [pessimistic](#) and [most likely](#) estimates.

In [PERT](#) analysis the mean cost is calculated using a [beta distribution](#).

**Merge event**

An [event](#) in an [activity on arrow](#) network which has more than one activity leading into it.

**Milestone**

More:

- [Encyclopaedia](#)

Milestones are useful as a means of focusing on important events within a [schedule](#). They can serve a number of purposes, such as:

- creating initial high level schedules during the identification phase of a project or programme;
- facilitating summary schedules for communication with [stakeholders](#) during the delivery phase;
- highlighting inter-dependencies between projects within a programme schedule.

**Milestone definition sheet**

A sheet that records the details of a [milestone](#), including description, forecast and actual dates, [acceptance criteria](#) etc.

**Milestone plan**

Milestone plans can take a number of different forms. In the early stages of a project, before any detailed scheduling has been done, a milestone plan may be drawn to show the key deliverables of the project and their relationship.

Once a detailed [network diagram](#) incorporating the [milestones](#) has been developed, a [Gantt chart](#) containing only milestones may be the best format.

---

<sup>16</sup> McGregor D., (1960), The Human Side of Enterprise, McGraw-Hill, New York.

**Milestone schedule**

A schedule of dates that shows only **milestones**. Typically this is used to communicate progress to senior **stakeholders**.

---

**Milestone slip chart**

A form of **milestone plan** that shows changes in the schedule dates of **milestones** from one progress update to the next. Useful for seeing trends in progress.

---

**Minimum viable product (MVP)**

A version of a **product** that has the core features that enable it to be deployed by **early adopters**. It provides a high return on investment and reduces risk.

It can be viewed as a working **prototype** that is delivered to early adopters.

---

**Mitigation**

The process of taking action to counter the effect of identified **threats**, i.e. the implementation of **risk responses**.

---

**Mobilisation**

More:

- [Knowledge](#)
- [Competence](#)
- [Capability maturity](#)

Mobilisation makes sure that appropriate organisational and technical infrastructures are in place for acquiring and deploying **resources**. It also ensures that these are **demobilised** when no longer required.

The goals of mobilisation are to ensure that:

- capital assets are operational and accessible;
- facilities are operational and accessible;
- **delivery team** members are competent and capable;
- resources are redeployed, returned or disposed of, when no longer required.

The APM BoK also has a **function** for mobilisation. Neither the PMBoK® guide, ISO21500 nor PRINCE2 directly address the issues covered by mobilisation and demobilisation.

**Monitor and Control Project Work (4.4)**

This is the high level [integration](#) process that co-ordinates performance information from the more detailed processes in the [monitoring and controlling](#) process group and develops recommendations that are then input to [Perform Integrated Change Control](#).

In ISO21500 the equivalent process is [Control project work](#).

PRINCE2 defines processes that manage the delivery of the project in a different way. At a broad level a combination of the [Direct and Manage Project Work](#), [Monitor and Control Project Work](#) and [Perform Integrated Change Control](#) processes from the PMBoK® guide is equivalent to the [Controlling a Stage \(CS\)](#) and [Managing Product Delivery \(MP\)](#) processes in PRINCE2.

Praxis takes a similar approach to PRINCE2 and the corresponding combination is formed of the [delivery](#) and [development processes](#).

---

**Monitoring and controlling process group (PMBoK® guide)**

A PMBoK® guide [process group](#) that includes the processes involved in tracking progress and taking action where necessary. These processes can be applied at different levels with the project, i.e. for the project as a whole or for a [stage](#) or [sub-project](#).

When viewed from the perspective of the project [life cycle](#), these processes are covered in Praxis by the [delivery process](#) and [development process](#).

In PRINCE2 the equivalent processes at the project life cycle level are [Controlling a Stage \(CS\)](#) and [Managing Product Delivery \(MP\)](#).

The equivalent ISO21500 process group is called simply – [controlling](#).

---

**Montana and Charnov**

More:

- [Encyclopaedia](#)

---

**Monte Carlo analysis**

More:

- [Encyclopaedia](#)

Patrick Montana and Bruce Charnov<sup>17</sup> set out seven forms of power involved in leadership and influencing in an organisational setting.

Monte Carlo analysis uses a [three point estimate](#) of the [duration](#) for each [activity](#) in a [network diagram](#). It then performs multiple [critical path analyses](#) to arrive at a range of probabilities for a project [schedule](#).

---

<sup>17</sup> Montana, Patrick J., and Charnov, Bruce H., (2008), Management, Barron's Educational Series, Hauppauge, New York.

**Morgan**

More:

- [Encyclopaedia](#)

In his book 'Images of Organisation', Gareth Morgan<sup>18</sup> identifies eight organisational metaphors.

These metaphors can help understand the nature of an organisation and the best way to manage change within it. Each type of organisation will respond to change in a different way and business change managers in particular need to be sensitive to these different needs.

---

**MoSCoW prioritisation**

More:

- [Encyclopaedia](#)

A form of prioritisation that classifies objectives as: 'must have', 'should have', 'could have' and 'would like to have'. Some sources suggest the 'W' stands for 'Won't have'.

---

**Most likely cost**

The most likely estimate of cost for use in [PERT/ Cost](#).

---

**Most likely duration**

The most likely estimate of an [activity's duration](#) for use in [PERT](#) analysis or [Monte Carlo analysis](#).

---

**Mourning**

A final additional stage of the [Tuckman](#) model where team members may suffer a feeling of loss due to the [adjourning](#) of the team.

---

**Must finish earlier than**

A form of [imposed finish](#) date indicating that an [activity](#) cannot finish after the specified date.

---

**Must finish on**

A form of [imposed finish](#) date indicating that an [activity](#) must finish on the specified date.

---

**Must start later than**

A form of [imposed start](#) date indicating that an [activity](#) must start after the specified date.

---

**Must start on**

A form of [imposed start](#) date indicating that an [activity](#) must start on the specified date.

---

**Near critical activity**

An [activity](#) with little float that could become part of the [critical path](#) with a slight delay. This could potentially make a significant change to the sequence of activities that form the critical path.

Near critical activities should be monitored closely. What is classed as 'near' is up to those managing the project. It will depend upon the general length of activities and volatility of the [schedule](#).

---

<sup>18</sup> Morgan, G (1986), Images of Organisation, Sage, Thousand Oaks, CA.

### Negative float

Where a path in a [network diagram](#) becomes [hypercritical](#) the [activities](#) on that path have [float](#) of less than zero, i.e. negative float. The quantity of float then indicates the amount of time that must be picked up in order to achieve an [imposed date](#).

### Negotiation

More:

- [Knowledge](#)
- [Competence](#)

Negotiation is a collective term for various mechanisms that seek to resolve differences between individuals, groups or companies. Its goals are to:

- find solutions to issues involving two or more parties;
- develop beneficial relationships between two or more parties.

The principles of negotiation are used in many different contexts. Two obvious applications are in [conflict management](#) and [procurement](#).

The APM BoK also includes the negotiation function. It is not a subject covered by PRINCE2 or ISO21500. The PMBoK mentions it briefly as a tool used in the [Acquire Project Team](#) and [Conduct Procurements](#) processes.

### Net cash flow

In [discounted cash flow](#) techniques this is the net income/expenditure in a particular year that is multiplied by the relevant [discount factor](#) to give the discounted cash flow, i.e. the value of a future year's net income or expenditure at today's prices.

### Net present value

The [present value](#) of a future income less the initial capital investment.

### Network analysis

A generic term for the various techniques of analysing [network diagrams](#) including [PERT/Time](#), [PERT/ Cost](#), [Monte Carlo analysis](#) and [critical path analysis](#).

### Network diagram

More:

- [Encyclopaedia](#)

Networks diagrams are, in effect, method statements in pictorial form. They represent the way that [activities](#) will be performed in order to achieve the [objectives](#). These techniques were first used in the 1950's and variants were simultaneously developed on both sides of the Atlantic.

There are two main formats for preparing a network diagram: [activity-on-node](#) (the most common form of which is the [precedence diagram](#)) and [activity-on-arrow](#). Both formats achieve the same result but since 1985 precedence has become by far the more widely used, mainly due to the widespread use of scheduling software.

### Network path

A sequence of interconnected [activities](#) in a [network diagram](#).

### Node

A generic term for [events](#) in an [activity on arrow](#) diagram and [activities](#) in a [precedence diagram](#).

**Nominal group technique**

More:

- [Encyclopaedia](#)

A form of collective decision making.

There are numerous situations where a P3 manager needs to collate ideas from a group of individuals and arrive at a decision. It may be a group of [stakeholders](#) discussing [benefits](#), a project team identifying major risks or a technical team debating alternative technical solutions.

**Nonaka and Takeuchi**

More:

- [Encyclopaedia](#)

Ikujiro Nonaka and Hirotaka Takeuchi<sup>19</sup> set out their spiral model of [knowledge management](#) in 1995. Sometimes known as the 'SECI model' it addresses the links between tacit and explicit knowledge and illustrates how knowledge is expanded and enhanced through the process of converting tacit knowledge to explicit knowledge and back again.

**Non-splittable activity**

An [activity](#) that must not be split during [resource limited scheduling](#).

**Normal distribution**

A statistical distribution that is symmetrical about the mean. The project [duration](#) calculated by [PERT](#) analysis is assumed to be the mean of a normal distribution. This enables ranges of completion dates and their probabilities to be calculated.

For example, there is a 99.7% probability that a project will finish between  $\pm 3$  standard deviations from the mean.

**Normal resource limit**

The preferred limit for [resource availability](#) when performing [resource levelling](#).

See also [maximum resource limit](#).

**Norming**

The third stage of team building in the [Tuckman](#) model.

**Not earlier than**

A form of [imposed date](#) placed on an [activity](#) that indicates that it may not start or finish earlier than the specified date.

**Not later than**

A form of [imposed date](#) placed on an activity that indicates that it may not start or finish later than the specified date.

**Objectives**

The objectives of a project or programme are what is required to be delivered. Objectives can be defined in terms of [outputs](#), [outcomes](#) or [benefits](#) or any combination of the three.

<sup>19</sup> Nonaka, I., Takeuchi, H., (1995), The knowledge creating company: how Japanese companies create the dynamics of innovation, Oxford University Press, New York.

---

<b>Off-specification</b>	A PRINCE2 term that refers to a situation where a <a href="#">product</a> does not (or is not forecasted to) meet the specification laid out in the <a href="#">product description</a> . It is also used in the case of a missing product.
<hr/>	
<b>Operational costs</b>	Costs expended on operational resources as opposed to those expended on capital investment.
<hr/>	
<b>Operations management</b>	A function in the APM BoK that describes the management of <a href="#">business as usual</a> . This is considered to be out of scope by the other guides.
<hr/>	
<b>Opportunity</b>	A <a href="#">risk event</a> that could have a positive effect on the project or programme. Historically, the term risk has usually been seen as possible <a href="#">threat</a> to the objectives of the project or programme but uncertain events can also be potential opportunities which have their own set of <a href="#">opportunity responses</a> .
<hr/>	
<b>Opportunity response</b>	<p>There are four ways of responding to an <a href="#">opportunity</a> (positive risk event). These are:</p> <p>Exploit: Find a way of maximising the positive effect of the opportunity.</p> <p>Share: Work with a partner or supplier to maximise the positive effect of the opportunity.</p> <p>Enhance: Find a way of increasing the probability of the opportunity occurring or the impact it will have.</p> <p>Reject: Reject the opportunity as being unworthy of further action.</p>
<hr/>	
<b>Optimistic cost</b>	The optimistic <a href="#">estimate</a> of cost for use in <a href="#">PERT/Cost</a> .
<hr/>	
<b>Optimistic duration</b>	The optimistic <a href="#">estimate</a> of an <a href="#">activity's</a> duration for use in <a href="#">PERT</a> analysis or <a href="#">Monte Carlo analysis</a> .
<hr/>	
<b>Optioneering</b>	The comparison of cost estimates for different options in order to determine which is the best value.
<hr/>	
<b>OR relationship</b>	<p>A type of <a href="#">dependency link</a> between <a href="#">activities</a> in a <a href="#">probabilistic network</a>.</p> <p>OR relationships can take two forms. An <a href="#">inclusive OR</a> relationship is where any or all of the preceding or succeeding activities may occur. An <a href="#">exclusive OR</a> relationship is where only one of the <a href="#">preceding</a> or <a href="#">succeeding</a> activities may occur.</p>

**Order of magnitude estimate**

An initial high level [estimate](#) intended to give an indication of project cost. The precise meaning of order of magnitude varies widely but typically, it may represent a variance on the estimate of  $\pm 40\%$ . This type of estimate is usually the first step in [top down estimating](#).

**Ordinal date schedule**

Ordinal numbers are 1, 2, 3. Therefore ordinal dates would be day 1, day 2, day 3.

Cardinal numbers are 1<sup>st</sup>, 2<sup>nd</sup>, 3<sup>rd</sup>. Therefore, cardinal dates would be 1<sup>st</sup> February, 2<sup>nd</sup> February etc.

Sometimes a [schedule](#) is prepared using ordinal dates when a start date is not known. Starts and finishes are then expressed in terms of 'day 47' or 'week 17'.

**Organisation management**

More:

- [Knowledge](#)
- [Competence](#)
- [Capability maturity](#)
- [Resources](#)

Organisation management is concerned with creating and maintaining a management structure applicable to the project, programme or portfolio and the [context](#) in which it operates. Its goals are to:

- design an organisation appropriate to the [scope](#) of work to be managed;
- identify and appoint members of the [management team](#);
- maintain and adapt the organisation throughout the [life cycle](#).

In PRINCE2 the element of this topic that deals with the management team is covered by the [organisation theme](#), in the PMBoK® guide it is the [project human resource management](#) knowledge area and in ISO21500 the [resource](#) subject group.

**Organisation management plan**

More:

- [Description](#)
- [Templates](#)

The organisation management plan sets out the preferred procedures, tools and techniques to be used in [organisation management](#).

**Organisational breakdown structure**

A [breakdown structure](#) that shows a hierarchical representation of the [management team](#) and [delivery team](#) of a project, programme or portfolio.

**Organisational Process Assets**

An all-encompassing term used by the PMBoK® guide for a project's [plans](#), [processes](#), policies, [procedures](#) and knowledge bases.



**Organization  
(PRINCE2 theme)**

The organisation theme addresses the design and creation of the project management structure, including definition of roles and responsibilities.

This theme also covers stakeholder management.

Praxis has an [organisation management](#) topic and also a dedicated topic for [stakeholder management](#).

In ISO21500 the equivalents are the [resource](#) and [stakeholder](#) subject groups. The PMBoK® guide equivalent [knowledge areas](#) are [project human resource management](#) and [project stakeholder management](#).

**Original duration**

See [baseline duration](#).

**Out of sequence progress**

When an [actual start date](#) is entered against an [activity](#) that's [predecessor](#) has not yet been completed the progress is out of sequence with the logical [dependencies](#).

**Outcome**

More:

- [Knowledge](#)

One of the three types of [objective](#) of a project or programme.

An outcome is a change in working practices that result from using an output. An outcome should lead to measurable benefits as it becomes part of business as usual.

**Outline business case**

In the first phase of the project [life cycle](#), there will not be sufficient information available to develop a detailed [business case](#). Typically, an outline business case will be included in a project [brief](#). This should justify the project sufficiently to warrant the investment in more detailed planning.

In Praxis the outline business case is developed during the [identification process](#), in PRINCE2 it is developed during the [Starting Up a Project \(SU\)](#) process.

**Output**

More:

- [Knowledge](#)

There are two common uses of the term:

Firstly, an output may simply be the output of a management process, e.g. the [brief](#) is an output of the [identification process](#) in Praxis.

Secondly, an output is one of three ways of defining the [objectives](#) of a project or programme. In this context it is a [product](#) or combination of products that are created by a project.

**Output rate**

Data that enables a planner to estimate the [duration](#) of an [activity](#), e.g. cubic metres per hour for an excavator or bricks per hour for a bricklayer.

**Overlap**

See [lead time](#) and [lag time](#).

**Overload**

The amount of [resource](#) required by the project [schedule](#) which exceeds the [resource limit](#).

**P2 process model**

In Praxis the generic process model for both projects and programmes (hence P2) is based on [life cycle](#) phases with an additional [process](#) to address the [sponsorship](#) function. All these can, and should, be tailored to the specific [context](#) of the work.

Each process is supported by competence and maturity definitions that remain relevant even if the Praxis process is replaced with a corresponding process from another guide such as [PRINCE2](#).

**P3 assurance**

The APM BoK topic that deals with [assurance](#).

**P3 management**

More:

- [Knowledge](#)
- [Resources](#)

Project, programme and portfolio management (P3M) is the application of methods, procedures, techniques and competence to achieve a set of defined [objectives](#).

The goals of P3 management are to:

- deliver the required objectives to [stakeholders](#) in a planned and controlled manner;
- govern and manage the [processes](#) that deliver the objectives effectively and efficiently.

Investment in effective P3 management will provide benefits to both the [host organisation](#) and the people involved in delivering the work. It will:

- increase the likelihood of achieving the desired results;
- ensure effective and efficient use of [resources](#);
- satisfy the needs of different stakeholders.



Featured article: [The human side of earned value management](#)

### **P3 management framework**

More:

- [Video](#)

Project, programme and portfolio (P3) management can be described as a framework of four interconnected elements:

- **Knowledge:** Describes the functions that make up the discipline of [P3 management](#).
- **Method:** Describes the processes and documentation that are used to manage the [life cycle](#)
- **Competence:** Describes the knowledge and performance criteria required by individuals involved in P3 management.
- **Capability maturity:** Describes the attributes of an organisation as it progresses through 5 levels of capability and maturity.

Praxis addresses all four of these elements in a single integrated framework.

The PMBoK® guide and PRINCE2 cover knowledge and method. ISO21500 focusses on method.

### **Parallel life cycle**

A [life cycle](#) where [phases](#) are conducted in parallel.

### **Parametric estimating**

More:

- [Encyclopaedia](#)

This approach to [estimating](#) looks for parameters common to projects of a certain type. It calculates effort and cost for one project or programme based on parametric information from past, similar projects or programmes.

A more detailed example is [function point analysis](#).

### **Pareto principle**

More:

- [Encyclopaedia](#)

In 1906 Vilfredo Pareto observed that 80% of the land in Italy was owned by 20% of the population. The principle was adapted to [quality management](#) by Joseph Juran who observed that 80% of the faults in a system arise from 20% of the causes. It was Juran who is credited with coining the term 'the 80-20' rule. In [P3 management](#) this can be applied as a rule of thumb that helps the team focus on the 'vital few' in terms of [stakeholders](#), [risk events](#) or [suppliers](#) to name but three.

### **Path**

A sequence of [activities](#) in a [network diagram](#) that are connected by [dependency links](#).

### **Path float**

See [shared float](#).

### **Payback method**

More:

- [Encyclopaedia](#)

The payback method is one of the simplest forms of [investment appraisal](#). It is most suited to projects of lower [complexity](#) in [contexts](#) where liquidity is important. The method is easy to apply and simple to communicate to [stakeholders](#).

**Payment methods**

More:

- [Encyclopaedia](#)

Payment methods define the basis on which a [client](#) will pay a [supplier](#) for work done or goods or services provided. The main difference between methods is where the risk lies.

**Peer review**

A review of a project or programme that provides an independent assessment of the management [processes](#) and/or [products](#). This kind of review forms part of the [assurance](#) function.

**Percent complete**

The amount of work that has been completed on an [activity](#) expressed as a percentage of the current [estimate](#). It is used in conjunction with [actual costs](#) and [actual effort](#) to predict the eventual cost and [duration](#) of an activity. Poor estimation of percentage complete can lead to highly inaccurate [progress reports](#).

**Percent complete rule**

See [earning rules](#).

**Perform Integrated Change Control (4.5)**

Change control is often used just in relation to changes to the scope of a project. This PMBoK® guide process takes a broader view and deals with any request to modify a document, [deliverable](#) or [baseline](#).

In Praxis the [change control](#) function is focused on scope change control, albeit that requests to change scope impact many other aspects of the project. The fully integrated approach comprises change control, the more general [control](#) topic and the [delivery process](#).

In PRINCE2 the [change theme](#) and [Controlling a Stage \(CS\)](#) process achieve the same ends.

In ISO 21500, the equivalent process is [Control changes](#).

**Perform Qualitative Risk Analysis (11.3)**

The PMBoK® guide separates the analysis of [risk events](#) and overall risk into two [processes](#) – one for [qualitative techniques](#) and one for [quantitative techniques](#) ([Perform Quantitative Risk Analysis](#)).

Both Praxis and PRINCE2 combine these in a single *assess* step in the [risk management](#) procedure.

ISO21500 only has one risk analysis process – [Assess risks](#). The text only explicitly refers to qualitative risk but it is reasonable to assume that quantitative risk analysis is implicit in this process.

**Perform quality assurance (4.3.33)**

This ISO21500 process audits quality requirements and the results from [quality control](#) measurements. It facilitates the improvement of quality processes and supports continuous improvement.

The equivalent in Praxis is the [assurance](#) function.

The equivalent in the PMBoK® guide is [Perform Quality Assurance](#).

In PRINCE2 assurance is divided into [quality assurance](#) and [project assurance](#). In simple terms project assurance provides confidence to stakeholders that the project is being conducted appropriately and properly while quality assurance does the same for the wider [corporate or programme organisation](#).

---

**Perform Quality Assurance (8.2)**

This PMBoK® guide process audits quality requirements and the results from [quality control](#) measurements. It facilitates the improvement of quality processes and supports continuous improvement.

The equivalent in Praxis is the [assurance](#) function.

The equivalent in ISO21500 is [Perform quality assurance](#).

In PRINCE2 assurance is divided into [quality assurance](#) and [project assurance](#). In simple terms project assurance provides confidence to stakeholders that the project is being conducted appropriately and properly while quality assurance does the same for the wider [corporate or programme organisation](#).

---

**Perform quality control (4.3.34)**

This ISO21500 [process](#) monitors and records the results of [activities](#) that assess performance. This applies to both the [outputs](#) of the project and the processes used to manage their delivery. It is conducted in accordance with the [quality management plan](#).

The equivalent in the PMBoK® guide is [Control Quality](#).

The Praxis approach sees quality as inherent in all aspects of P3 management rather than a separate topic. Therefore, all references to [control](#) (whether they refer to outputs or processes) are manifestations of [quality control](#).

In PRINCE2 quality control is covered by a series of steps in the 'quality audit trail' in the [quality](#) theme.

**Perform Quantitative Risk Analysis (11.4)**

The PMBoK® guide separates the analysis of [risk events](#) and overall risk into two processes – one for [quantitative techniques](#) and one for [qualitative techniques](#) ([Perform Qualitative Risk Analysis](#)).

Both Praxis and PRINCE2 combine these in a single *assess* step in the [risk management](#) procedure.

ISO21500 only has one risk analysis process – [assess risks](#). The text only explicitly refers to qualitative risk but it is reasonable to assume that quantitative risk analysis is implicit in this process.

**Performance measurement baseline**

The combined [baselines](#) for [schedule](#), cost and [scope](#) against which performance will be tracked.

In Praxis these are part of the [delivery documents](#), in PRINCE2 they are contained in the [project initiation documentation](#) and in the PMBoK® guide and ISO21500 they are part of the [project management plan](#).

**Performing**

The fourth and final stage of team building in the standard [Tuckman](#) model.

**Performing organisation**

A term sometimes used to represent the company or organisation that is most directly involved in the provision of the [resources](#) that are performing the project.

**PERT/ Cost**

In the same way that the [program evaluation and review technique](#) (PERT) uses three estimates for the [duration](#) of an [activity](#), PERT/Cost uses three estimates for the cost of an activity. The calculation is the same as that used in PERT but using money instead of time.

**Pessimistic cost**

The pessimistic estimate of cost for use in [PERT/Cost](#).

**Pessimistic duration**

The pessimistic estimate of an [activity's](#) duration for use in [PERT](#) analysis or [Monte Carlo analysis](#).

**PESTLE analysis**

More:

- [Encyclopaedia](#)

When assessing the [context](#) of a project, programme or portfolio there are many different aspects to consider. A common checklist of the external influences to consider comprises:

- Political.
- Environmental.
- Social.
- Technological.
- Legal.
- Economic.

**Phase**

The terms [phase](#) and [stage](#) are used to represent elements of the [life cycle](#). Some authorities have stages as part of phases and others vice-versa.

The approach taken in Praxis is that a phase represents an element in the project or programme life cycle. Phases represent parts of the life cycle that have different management needs and can therefore be performed by different management processes, e.g. the identification phase is managed using the [identification process](#) and the definition phase is managed using the [definition process](#).

**Phase budget**

The [budget](#) for a specified [phase](#) of the project.

**PI table**

See [probability/impact](#) table.

**Plan**

A generic term used for a statement of intentions for a project or programme as a whole or for a specific aspect of a project such as a [stage](#) or [sub-project](#). Plans generally take one of two forms:

[Management plans](#) (e.g. [risk management plan](#) or [quality management plan](#)) explain how a particular aspect of the project will be managed. These are a statement of policy and intent that set the management standards for the project or programme.

PRINCE2 uses the term strategy instead of plan in this context, e.g. [risk management strategy](#).

[Delivery plans](#) (e.g. a [stage plan](#) or a [team plan](#)) explain the content of a part of the project or programme for the purposes of day-to-day [control](#).

**Plan communications (4.3.38)**

This ISO21500 process develops the [communications plan](#) which schedules [activities](#) concerned with [stakeholder](#) communication.

In Praxis the equivalent communication plan is produced by the *plan communications* step in the [stakeholder management](#) procedure.

Both the PMBoK® guide and PRINCE2 include the timing of communications activities with the policies and procedures of communications management.

The PMBoK® guide produces its [communications management plan](#) in [Plan Communications Management](#) and the PRINCE2 equivalent is the [Prepare communications management strategy](#) activity in the [Initiating a Project \(IP\)](#) process.

**Plan  
Communications  
Management (10.1)**

This PMBoK® guide process develops the [communications management plan](#) that describes the policies, procedures and documents that will be used when engaging with [stakeholders](#).

In Praxis the equivalent document is the [stakeholder management plan](#) which is produced during the *prepare governance documents* activity in the [definition process](#).

The tools and techniques of this PMBoK® guide process explain communications models and in Praxis and the APM BoK these are covered by the [communication](#) function.

The PRINCE2 equivalent is the [Prepare communications management strategy](#) activity in the [Initiating a Project \(IP\)](#) process.

ISO21500 has a [Plan communications](#) process but this is aimed more at planning the actual communications activities rather than policies and procedures which are covered in general terms by [Develop project plans](#).

---

**Plan Cost  
Management (7.1)**

This PMBoK® guide process develops the [cost management plan](#) that describes the policies, procedures and documents that will be used to monitor and control project costs.

In Praxis the equivalent document is the [financial management plan](#) which is produced during the *prepare governance documents* activity in the [definition process](#). The main difference is that the Praxis document allows for income as well as expenditure.

PRINCE2 does not have cost specific procedures and simply refers to the management of costs in [themes](#) and [processes](#) throughout the method.

In ISO21500 policies and procedures relating to cost management are covered in general terms by [Develop project plans](#).



**Plan Human Resource Management (9.1)**

This PMBoK® guide process develops the [human resource management plan](#) that describes the policies, procedures and documents that will be used to manage the [project team](#).

In Praxis the equivalent documents are the [organisational management plan](#) for the [management team](#) and the [resource management plan](#) for the [delivery team](#) which are produced during the *prepare governance documents* activity in the [definition process](#).

The nearest equivalents in ISO21500 are the general references to management planning in [Develop project plans](#) and the specific creation of staff assignments and contracts in [Establish project team](#).

PRINCE2 provides a management team structure and roles in the [organization](#) theme but does not go into detail on policies and procedures for the management of delivery [resources](#).

---

**Plan Procurement Management (12.1)**

This PMBoK® guide process develops the [procurement management plan](#) that describes the policies, procedures and documents that will be used to manage the procurement of goods and services.

In Praxis the equivalent document is the [resource management plan](#) which is produced during the *prepare governance documents* activity in the [definition process](#).

The equivalent process in ISO21500 is [Plan procurements](#).

PRINCE2 does not contain specific [procurement](#) processes.

---

**Plan procurements (4.3.35)**

This ISO21500 process develops the [procurement management plan](#) that describes the policies, procedures and documents that will be used to manage procurement of goods and services.

In Praxis the equivalent document is the [resource management plan](#) which is produced during the *prepare governance documents* activity in the [definition process](#).

The equivalent process in the PMBoK® guide is [plan procurement management](#).

PRINCE2 does not contain specific procurement processes.

**Plan quality (4.3.32)**

This ISO21500 process develops the [quality plan](#) that describes the policies, procedures and documents that will be used to manage the quality of both the project [deliverables](#) and the project management [processes](#).

Praxis takes the view that quality is not a separate topic but is inherent in all [planning](#) and [control](#) related topics, procedures and documents.

The PMBoK® guide equivalent is [Plan Quality Management](#), which develops the [quality management plan](#).

The equivalent in PRINCE2 is the [Prepare quality management strategy](#) activity in the [Initiating a Project \(IP\)](#) process.

---

**Plan Quality Management (8.1)**

This PMBoK® guide process develops the [quality management plan](#) that describes the policies, procedures and documents that will be used to manage the quality of both the project [deliverables](#) and the project management [processes](#).

Praxis takes the view that quality is not a separate topic but is inherent in all [planning](#) and [control](#) related topics, [procedures](#) and documents.

The ISO21500 equivalent is [Plan quality](#), which develops the [quality plan](#).

The equivalent in PRINCE2 is the [Prepare quality management strategy](#) activity in the [Initiating a Project \(IP\)](#) process.

---

**Plan Risk Management (11.1)**

This PMBoK® guide process develops the [risk management plan](#) that describes the policies, procedures and documents that will be used to manage risk throughout the project.

In Praxis the equivalent document is the risk management plan that is produced during the *prepare governance documents* [activity](#) in the [definition process](#).

In ISO21500 policies and procedures relating to [risk management](#) are covered in general terms by [Develop project plans](#).

The equivalent in PRINCE2 is the [Prepare risk management strategy](#) activity in the [Initiating a Project \(IP\)](#) process.

---

**Plan Risk Responses (11.5)**

This PMBoK® guide process evaluates the identified [risk events](#) (both [threats](#) and [opportunities](#)) and decides how best to respond to them. The [project management plan](#) will be updated accordingly.

The equivalent in Praxis is the *plan risk responses* step in the [risk management](#) procedure; In PRINCE2 it is the plan step in the [risk](#) theme; in ISO21500 it is [Treat risks](#).

### **Plan Schedule Management (6.1)**

This PMBoK® guide process develops the [schedule management plan](#) that describes the policies, procedures and documents that will be used to manage [schedules](#) throughout the project.

In Praxis the equivalent document is the schedule management plan that is produced during the *prepare governance documents activity* in the [definition process](#).

In ISO21500 policies and procedures relating to scheduling are covered in general terms by [Develop project plans](#).

PRINCE2 does not have an equivalent document but there are many common elements in the *design the plan* step in the [plans](#) theme.

---

### **Plan Scope Management (5.1)**

This PMBoK® guide process develops the [scope management plan](#) that describes the policies, procedures and documents that will be used to manage [scope](#) throughout the project.

In Praxis the equivalent document is the scope management plan that is produced during the *prepare governance documents activity* in the [definition process](#).

In ISO21500 policies and procedures relating to scope management are covered in general terms by [Develop project plans](#).

PRINCE2 does not have an equivalent document but there are many references to how scope may be managed throughout the method.

---

### **Plan Stakeholder Management (13.1)**

This PMBoK® guide process develops the [stakeholder management plan](#) that describes the policies, procedures and documents that will be used to manage [stakeholders](#) throughout the project.

In Praxis the equivalent document is the stakeholder management plan that is produced during the *prepare governance documents activity* in the [definition process](#).

In ISO21500 policies and procedures relating to [stakeholder management](#) are covered in general terms by [Develop project plans](#).

The closest equivalent in PRINCE2 is the [communications management strategy](#).

**Plan the initiation stage**

An [activity](#) from the PRINCE2 [Starting Up a Project \(SU\) process](#) that plans the execution of the initiation stage of the project.

The equivalent in Praxis is the *prepare definition plan* in the [identification process](#).

Neither ISO21500 nor the PMBoK® guide have a formal approach to [stages](#) built into their processes. The equivalent planning for a stage of a project would simply be the application of the [initiating](#) and [planning](#) processes at stage level instead of project level.

**Plan the next stage**

This PRINCE2 [activity](#) from the [Managing a Stage Boundary \(MP\) process](#) is triggered as the current [stage](#) nears its end. Its output is the next [stage plan](#) which will be used to help the [project board](#) decide whether or not to approve the next stage.

The equivalent in Praxis is the *plan next stage/tranche* activity in the [boundaries process](#) which works for both project stages and programme tranches.

Neither ISO21500 nor the PMBoK® guide have a formal approach to [stages](#) built into their processes. The equivalent planning for a stage of a project would simply be the application of the [initiating](#) and [planning](#) processes at stage level instead of project level.

**Planned cost**

See [baseline cost](#).

**Planned duration**

See [baseline duration](#).

**Planned expenditure**

See [baseline cost](#).

**Planned finish date**

Generally used synonymously with the [baseline finish date](#).

**Planned start date**

Generally used synonymously with the [baseline start date](#).

**Planned value**

See [budget cost of work scheduled](#).

## Planning

More:

- [Knowledge](#)
- [Resources](#)

Planning determines what is to be delivered, how much it will cost, when it will be delivered, how it will be delivered, who will carry it out and how all this will be managed. It occurs broadly at two levels: [governance](#) and [delivery](#).

The goals of [management plans](#) used in governance are to:

- describe the principles that should be used to manage the work;
- provide consistency with flexibility across multiple projects and programmes.

The goals of [delivery plans](#) are to:

- describe the [objectives](#) of the project, programme or portfolio;
- define the work required to achieve the objectives and describe how it will be performed;
- [estimate](#) the [resources](#) and finance needed to perform the work;
- document the plans and update them throughout the [life cycle](#).

The APM BoK has a similar planning [function](#).

In PRINCE2, delivery planning is covered by the [plans](#) theme. Most management planning is included in the [Initiating a Project](#) (IP) process.

In the PMBoK® guide both management and delivery planning are covered by the processes in the [planning process group](#). In ISO21500 the equivalent is also the [planning](#) process group.

---

### Planning (ISO21500)

The most extensive [process group](#) in ISO21500 containing 16 [processes](#), from nine of the ten subject groups. These processes can be applied at different levels with the project, i.e. for the project as a whole or for a [stage](#) or [sub-project](#).

When viewed from the perspective of the project [life cycle](#), these processes are covered in Praxis by the [definition process](#). More detailed planning is covered by the [planning](#) function and the *plan* step of individual functional [procedures](#).

In PRINCE2 the equivalent process at the project life cycle level is [Initiating a Project](#) while the details of planning are covered in the [plans theme](#).

The equivalent in the PMBoK® guide is the [planning process group](#).

---

### Planning horizon

The time period for which it is practical to plan accurately. This is the boundary between detailed and outline planning in [rolling wave planning](#).

### Planning package

Packages of work that are not yet well enough defined to be classed as a [work package](#). These are usually used to define the future work in [rolling wave planning](#).

---

### Planning process group (PMBOK® guide)

The most extensive [process group](#) in the PMBoK® guide containing 24 [processes](#), from all ten [knowledge areas](#). These processes can be applied at different levels with the project, i.e. for the project as a whole or for a [stage](#) or [sub-project](#).

When viewed from the perspective of the project [life cycle](#), these processes are covered in Praxis by the [definition process](#). More detailed planning is covered by the [planning](#) function and the *plan* step of individual functional [procedures](#).

In PRINCE2 the equivalent process at the project life cycle level is [Initiating a Project](#) while the details of planning are covered in the [plans](#) theme.

The equivalent ISO21500 process group is called simply – [planning](#).

---

### Plans (PRINCE2 theme)

The plans theme covers the preparation of [delivery plans](#) at various levels and with specific purposes, e.g. [project plan](#), [team plan](#) and [exception plan](#). It focuses on [product-based planning](#) and the creation of [schedules](#).

Praxis covers this in the [planning](#) and [schedule management](#) functions.

In ISO21500 the equivalent [subject area](#) is time and in the PMBoK® guide the equivalent [knowledge area](#) is [project time management](#).

---

### PMBoK® guide

Often referred to simply as the PMBoK® guide the full title of this ANSI standard produced by the Project Management Institute is *A Guide to the Project Management Body of Knowledge*.

The significance of this title is often missed. The PMBoK® guide is not the complete body of knowledge, it is a *guide* to the body of knowledge.

**PMO**

More:

- [Encyclopaedia](#)

The acronym PMO can stand for Project Management Office, Programme Management Office or even Portfolio Management Office.

In order for an organisation to achieve the higher levels of [capability maturity](#) it needs to have a central focus for the discipline and profession of P3 management. Somewhere in the organisation there should be a body that has overall responsibility for developing and maintaining standards, development of P3 managers and staff and continuous improvement of project, programme and portfolio delivery.

Typically, this is called a PMO.

---

**Pool resource**

Depending upon the computer package being used, this could be equivalent to a [skill group](#) or a [consumable resource](#).

**Portfolio**

More:

- [Knowledge](#)

Praxis defines two types of portfolio.

A 'standard portfolio' comprises a set of independent projects and/or programmes. The main objective of co-ordinating a standard portfolio is to ensure that the component projects and programmes are managed in a consistently effective way. An example of a standard portfolio would be a construction firm's portfolio of separate building contracts for separate clients.

A 'structured portfolio' comprises a set of projects and/or programmes that are united by a set of common strategic [objectives](#). Structured portfolios have many more inter-relationships between the component projects and programmes and governance must be more rigorous. An example of a structured portfolio would be an organisation that repeatedly implemented the objectives of its strategic planning cycle through a rolling portfolio [life cycle](#).

---

**Portfolio Management Office**

See [PMO](#).

---

**Portfolio process model**

More:

- [Method](#)

A series of [processes](#) aimed at managing both standard and structured [portfolios](#). The model includes four processes:

- [Initiation process](#).
- [Governance process](#).
- [Management process](#).
- [Co-ordination process](#).

<b>Possessions</b>	Period where a project needs to take over a <a href="#">business as usual</a> environment and stop normal operational activity. This could be a road, production line or computer system.
<b>Post control</b>	A form of <a href="#">control</a> that reviews what has occurred with the intention of <a href="#">learning lessons</a> for the future. In the project and programme context, this is performed as parts of reviews such as a <a href="#">post project review</a> or <a href="#">post programme review</a> .  Post control also occurs at various points within the <a href="#">life cycle</a> where reviews such as an <a href="#">end stage assessment</a> conducted.
<b>Post implementation review</b>	A review 6-12 months after a product has become operational to see that the project (or programme) has met its <a href="#">objectives</a> and the outputs continue to meet <a href="#">user</a> requirements.
<b>Post programme review</b>	A review of the management of a programme for the purposes of improving future processes.
<b>Post project appraisal</b>	See <a href="#">post project review</a> .
<b>Post project review</b>	A post project review is a structured <a href="#">audit</a> and review of how the project went. Its output is a report that provides learning points for the future including recommendations for process improvement and training.
<b>Post-project review plan</b>	Since <a href="#">post-project reviews</a> are conducted after the project management team has been disbanded, there is a risk that the review will never happen because people are committed to new projects. The post-project review plan reduces this risk by nominating those who will perform the review, specifying when it will be held and defining its scope.
<b>Praxis Framework</b> More:	A <a href="#">P3 management framework</a> that covers all four elements of knowledge, method, competency and capability maturity.
– <a href="#">Web site</a>	Praxis is free to access and covered by a Creative Commons licence.
<b>Precedence diagram</b> More:	In precedence diagrams the basic building block that represents an <a href="#">activity</a> is a box (or node). Activity boxes are linked to show the sequence in which the activities will be performed.
– <a href="#">Encyclopaedia</a>	
<b>Precedence diagram method</b>	See <a href="#">precedence diagram</a> .



---

<b>Precedence network</b>	See <a href="#">precedence diagram</a> .
<b>Precedence relationships</b>	See <a href="#">dependencies</a> .
<b>Preceding activity</b>	See <a href="#">predecessor</a> .
<b>Preceding float</b>	See <a href="#">start float</a> .
<b>Predecessor</b>	An <a href="#">activity</a> which logically precedes another.
<b>Preliminary estimate</b>	A high level estimate of time and/or costs made early in the project <a href="#">life cycle</a> . Preliminary estimates are usually <a href="#">parametric</a> or <a href="#">comparative</a> .
<b>Prelims</b>	A contraction of the word 'preliminaries' used predominantly in the UK construction industry to indicate overhead costs. Generally referred to as site overheads in the US.
<b>Premature closure</b>	A project or programme should be terminated if it can no longer meet the terms of its <a href="#">business case</a> . This is referred to as premature closure because the natural conclusion of the project or programme has not been reached.
<b>Prepare planned closure</b>	In PRINCE2 it is the project manager's responsibility to ensure that the expected <a href="#">objectives</a> have been achieved and delivered. Only then can a recommendation be made to the <a href="#">project board</a> that the project be closed. This <a href="#">activity</a> from the <a href="#">Closing a Project</a> (CP) process covers the preparation for the <a href="#">recommend project closure</a> activity.
<b>Prepare premature closure</b>	<p>In PRINCE2 the <a href="#">project board</a> may instruct the project manager to close a project before it has achieved its <a href="#">objectives</a>. This is usually because the <a href="#">business case</a> is no longer viable.</p> <p>In such circumstances the project manager should salvage any value possible from the work completed to date and ensure the project board understand the consequences of the premature closure. Only then can the <a href="#">closure recommendation</a> be issued.</p>

**Prepare the communication management strategy**

The **activity** in the PRINCE2 **Initiating a Project (IP)** process that ensures a document is prepared that plans how communications will be implemented.

Since communications are primarily with **stakeholders**, Praxis covers this as part of the **stakeholder management plan** with the administrative aspects covered in the **information management plan**.

PMBok® guide refers to this document as the **communications management plan** and ISO21500 refers to it as the **communications plan**.

Praxis prepares this guidance in the *planning* step of **stakeholder management** and **information management** procedures, the PMBoK® guide in the **Plan Communications Management** process and ISO21500 in the **Plan communications** process.

---

**Prepare the configuration management strategy**

The **activity** in the PRINCE2 **Initiating a Project (IP)** process that ensures a document is prepared that plans how the **configuration** will be managed.

Praxis covers this in the *planning* step of **configuration management** that prepares a **configuration management plan**.

Both PMBoK® guide and ISO21500 mention a configuration management plan but do not have a specific process to create it. It would normally be prepared as part of **Develop Project Management Plan** in the PMBoK® guide and **Develop project plans** in ISO21500.

---

**Prepare the outline business case**

An **activity** from the PRINCE2 **Starting up a Project (SU)** process which develops a high level **business case** sufficient to justify investment in the **Initiating a Project (IP)** process.

This is subsequently refined in the **refine the business case** activity which takes the outline version and updates and extends it to form a full business case.

In Praxis this expansion of the business case is covered by the *consolidate definition documentation* activity in the **definition process**.

The PMBoK® guide and ISO21500 do not have a similar two stage process for the development of the business case.

**Prepare the quality management strategy**

The **activity** in the PRINCE2 **Initiating a Project (IP)** process that ensures a document is prepared that plans how quality will be managed.

Praxis doesn't specify a dedicated **quality management plan**. It takes the approach (first promoted by ISO10500) that **quality planning** is implicit in all **planning** activity.

The PMBoK® guide develops the **quality management plan** in the **Plan Quality Management** process and ISO21500 mentions it as part of the **project management plan** produced by **Develop project plans**.

---

**Prepare the risk management strategy**

The **activity** in the PRINCE2 **Initiating a Project (IP)** process that ensures a document is prepared that plans how risk will be managed.

Praxis covers this in the *planning* step of **risk management** that prepares a **risk management plan**.

The PMBoK® guide develops the **risk management plan** in the **Plan Risk Management** process and ISO21500 mentions it as part of the **project management plan** produced by **Develop project plans**.

---

**Present value**

An **investment appraisal** techniques that calculates the value of future income at today's date.

Future income is discounted using **discount rates** that take account of the effect of inflation. The result enables the comparison of alternative investments with different periods of return.

---

**Preventive action**

A deliberate action taken in advance to ensure performance stays in line with agreed **baselines**. Preventive action is proactive whereas **corrective action** is reactive.

**Prime contractor**

A contractor who is responsible for most or all of the work on a project and manages sub-contractors on behalf of the **client**.

---

**PRINCE2**

Projects IN Controlled Environments is a project management methodology published by Axelos Ltd. a joint venture company between the UK Government's Cabinet Office and Capita plc.

PRINCE2 is not designed to cover the detailed tools and techniques used in managing projects. What it is designed to do is provide a consistent and well-structured methodology based on the project **life cycle**.

---

**PRINCE2 Agile**

A guide published by Axelos Ltd. that shows in detail how **PRINCE2** can be used in conjunction with **agile** development methods.

### **PRINCE2 principles**

PRINCE2 defines seven principles, which all aspects of the method are designed to achieve. These are:

1. Continued business justification.
2. Learn from experience.
3. Defined roles and responsibilities.
4. Manage by stages.
5. Manage by exception.
6. Focus on products.
7. Tailor to suit the project environment.

PRINCE2 is often criticised for being prescriptive and bureaucratic. This is usually because people don't read the chapter relating to the seventh principle.

---

### **PRINCE2 themes**

PRINCE2 themes are aspects of project management that must be managed throughout the project [life cycle](#). They support the [PRINCE2 processes](#) which provide a structure to implement the themes.

In Praxis and the APM BoK the equivalent type of material is contained in the knowledge functions, albeit that these guides are much more comprehensive.

The equivalents in the PMBoK® guide are the [knowledge areas](#) and in ISO21500 the [subject groups](#).

---

### **Prioritise**

The [phase](#) of a portfolio [life cycle](#) where priorities are set for the [objectives](#) of the portfolio.

In Praxis, this phase is managed as part of the [portfolio management process](#).

---

### **Probabilistic dependencies**

[Dependency links](#) between [activities](#) in a [network diagram](#) that model alternative sequences of logic. These include:

- [Inclusive OR dependency](#).
- [Exclusive OR dependency](#).

### Probabilistic networks

More:

- [Encyclopaedia](#)

Normal [precedence](#) and [activity on arrow](#) networks are known as [deterministic networks](#). This is because the sequences of [activities](#) are determined by the person constructing the network. No allowance is made for alternative courses of action as the project progresses.

Multiple dependencies in deterministic networks only have one combined effect, known as an [AND relationship](#). This simple assumption is not always sufficient to accurately model the true situation. [Probabilistic dependencies](#) provide the means of modelling much more complex relationships between activities.

---

### Probability

Usually used in the context of risk as a measure of the chance that a [risk event](#) may occur.

---

### Probability chart

A chart showing the probability of an instance occurring. For example, following [Monte Carlo analysis](#), a probability chart would show the probability of multiple project completion dates.

---

### Probability-impact assessment

More:

- [Encyclopaedia](#)

Every [risk event](#), whether it is a [threat](#) or an [opportunity](#), has two characteristics: the [probability](#) that it might happen and the [impact](#) it would have if it did happen.

Even on the simplest of projects, risk events should be assessed for their probability and impact using a scale such as high, medium and low. As the [complexity](#) of the work increases, the sophistication of the assessment should increase.

A thorough assessment of risk events for projects of higher complexity and for programmes would have a five point scale with guidelines and numerical values for each point on the scale.

---

### Probability-impact grid

See [probability-impact table](#).

---

### Probability-impact scores

The [probability](#) and [impact](#) of a [risk event](#) can be given values that are relative (e.g. high, medium, low) or numeric scores (e.g. 0.05 to 0.95)

Using numeric scoring has a number of advantages:

- [Risk events](#) can be aggregated by elements of the [work breakdown structure](#).
- [Tolerances](#) for risk can be set.
- Alternative strategies can be compared.
- Trends in changing risk can be identified once the project is underway.

### Probability-impact table

A tool used for [qualitative risk analysis](#) which comprises a matrix of risks with estimated [probabilities](#) on one axis and [impacts](#) on the other.

References to individual [risk events](#) are placed in the matrix and the resulting distribution provides a visual representation of where the bulk of risk lies on both the probability and the impact axes.

---

### Procedure

The terms procedure and [process](#) are common throughout all guides to project management.

In common English they are often used interchangeably but there are two key differences.

- A procedure is normally more detailed than a process.
- A procedure is more linear and not as focused on inputs and outputs as a process.

The PMBoK® guide and ISO21500 define all management activity as processes regardless of the level of detail. In the PMBoK® guide all processes describe tools and techniques that convert inputs into outputs. ISO21500 processes do not define tools and techniques.

Praxis and PRINCE2 use both terms. Process is used when describing the activities that manage a [phase](#) of the [life cycle](#), such as the [definition process](#) in Praxis or the [Starting Up a Project \(SU\)](#) process in PRINCE2.

Procedure is used when describing the steps used to perform a [function](#) such as [risk management](#) or [stakeholder management](#).

---

### Process

The terms process and [procedure](#) are common throughout all guides to project management.

In common English they are often used interchangeably but there are two key differences.

- A process is normally higher level than a procedure.
- A process converts inputs into outputs.

The PMBoK® guide and ISO21500 define all management activity as processes regardless of the level of detail. In the PMBOK® GUIDE all processes describe tools and techniques that convert inputs into outputs. ISO21500 processes do not define tools and techniques.

Praxis and PRINCE2 use both terms. Process is used when describing the activities that manage a [phase](#) of the [life cycle](#), such as the [definition process](#) in Praxis or the [Starting Up a Project \(SU\)](#) process in PRINCE2.

Procedure is used when describing the steps used to perform a [function](#) such as [risk management](#) or [stakeholder management](#).

**Process groups (PMBok® guide)**

See [project management process groups](#).

**Procurement**

More:

- [Knowledge](#)
- [Competence](#)
- [Capability maturity](#)
- [Resources](#)

Procurement covers the acquisition from a [supplier](#) of the products and services required for completion of a project, programme or portfolio. Its goals are to:

- identify potential external suppliers;
- select external suppliers;
- obtain commitment to provision of internal resources.

An 'external source' represents any supplier from outside the [host organisation](#). 'Internal sources' are departments or divisions within the host organisation.

**Procurement (ISO21500 subject group)**

An ISO21500 subject group that provides a set of processes for managing procurement. The processes comprise:

- [Plan procurements](#).
- [Select suppliers](#).
- [Administer procurements](#).

The equivalent in Praxis is the [procurement](#) and [contract management](#) functions.

PRINCE2 doesn't go into any detail on the procurement of external products and services.

The PMBoK® guide and ISO21500 share a very similar structure and the nearest equivalent [knowledge area](#) in the PMBoK® guide is [project procurement management](#).

**Procurement management plan**

The [procurement](#) management plan sets out the preferred procedures, tools and techniques to be used in procuring products and services.

**Procurement statement of work**

A PMBoK® guide term for a [statement of work](#) of an item or [work package](#) that will be subject to [procurement](#).

In Praxis this would simply be a [specification](#) attached to any bidding documents.

**Procurement strategy**

The APM PSMC term for a [procurement management plan](#).

**Produce an exception plan**

If a PRINCE2 project [stage](#) is outside, or forecast to be outside, its agreed [tolerances](#), then an [issue](#) must be escalated to the [project board](#). The project board may request that an [exception plan](#) be prepared to show how the issue may be dealt with. This activity covers the production of this plan.

Praxis addresses this in the *corrective action activity* in the [delivery process](#).

The nearest equivalent in the PMBoK® guide and ISO21500 is the more general term: corrective action. Poor performance on a project may result in a [change request](#) for [corrective action](#) but since the PMBoK® guide and ISO21500 do not have the formal organisational relationships as PRINCE2, there is no equivalent 'exception' mechanism.

**Producer**

The name PRINCE2 gives to the person or group responsible for developing a [product](#). The term is normally used in the context of a [quality review](#).

**Product**

A self-contained component of a project's [output](#). Each product will have a set of [acceptance criteria](#) and is only recorded as complete when a [quality review](#) confirms that the acceptance criteria have been met.

Some products may be delivered for use and therefore referred to as a [deliverable](#). Some may be gathered together to create a [work package](#) that is [delegated](#) to an individual, team or [supplier](#).

The PRINCE2 definition goes further and stipulates that a product may be an input or an output, tangible or intangible, that can be described, created and tested. In PRINCE2 there are [management products](#) and [specialist products](#).

**Product backlog**

See [backlog](#).

**Product breakdown structure**

The PRINCE2 term for a [breakdown structure](#) that breaks down the [products](#) of a project into increasing levels of detail.

**Product checklist**

The PRINCE2 term for a list of the [products](#) contained in the [product breakdown structure](#).

**Product code**

The code given to a [product](#) that denotes its position in a [product breakdown structure](#).



### Product description

In Praxis and PRINCE2 this document describes the purpose, form and components of a [product](#). The product description should be used as the basis for [acceptance](#) of the product by the [customer](#).

In the PMBoK® guide this is known as the [product scope description](#).

### Product documents

More:

- [Method](#)

The extent and detail of [product](#) documentation is very dependent upon the [context](#) of the work. Rather than prescribe separate documents, Praxis provides a list of fields from which suitable documents should be constructed according to the needs of the project or programme. This may result in a simple approach with one document per product or a more extensive approach with separate documents for [product descriptions](#), [configuration items](#) and quality records.

- [Product description](#).
- [Configuration item record](#).
- [Product status account](#).
- [Quality register](#).
- [Project product description](#).

### Product flow diagram

A PRINCE2 [planning](#) tool that shows the sequence in which the [products](#) of a project are developed.

### Product life cycle

More:

- [Knowledge](#)

The complete [life cycle](#) of a product, from its development via a project life cycle, through its operation and eventual disposal.

If expressed in the form of the Praxis generic project life cycle, the product life cycle has two additional [phases](#) covering the period that the [output](#) of a project is operated and the its final disposal.

### Product life cycle

A [life cycle](#) that spans from the initial idea, through the creation, operation and finally, termination of a product.

### Product scope

A PMBoK® guide term for the features and functions that characterise a [product](#).

### Product scope description

A PMBoK® guide term for the description of the features and functions that characterise a [product](#).

In Praxis and PRINCE2 this is known as the [product description](#).

### Product status account

Status accounting is a component of [configuration management](#). In PRINCE2 a status report on all, or a selection of, the project's [products](#) is called a product status account.

**Product-based planning**

This is the approach to planning recommended by PRINCE2. It first involves the development of a [product breakdown structure](#) and a [product description](#) for each [product](#). The sequence of product development is then shown in a [product flow diagram](#). [Activities](#) are then identified as the work needed to transform one product into the next.

**Product-based work breakdown structure**

A term sometimes used to explicitly represent a [work breakdown structure](#) made up of [products](#) rather than [activities](#).

**Product-based work breakdown structure**

See [work breakdown structure](#).

**Professionalism**

More:

- [Knowledge](#)
- [Resources](#)

There is a constant and often heated debate within the community about whether P3 management is a profession or not. Those who argue against it are talking about a Profession with a capital 'P' where 'Professionals' need a licence to practice and can be sued for negligence. Doctors, Lawyers, Accountants amongst others fall into this category of Professional.

This debate is largely academic. What is important is the attitude of people who manage projects, programmes and portfolios.

In Praxis the professionalism function is sub-divided into:

- [Communities of practice](#).
- [Competence](#).
- [Ethics](#).
- [Learning and development](#).

The APM BoK has an almost identical function but this is not an area covered in detail in any of the other guides.



The printed version of the Praxis framework is published by the Association for Project Management.

[Click here](#) to go to the APM book store.

**Program evaluation and review technique (PERT)**

More:

- [Encyclopaedia](#)

The program evaluation and review technique (PERT) was developed for the Polaris project in 1956. It is based on the idea of estimating three [durations](#) for each [activity](#) rather than the single estimate used in [critical path analysis](#). It bears no relation to the current use of the term programme in the context of programme management.

In PERT analysis three estimates are made for each activity:

- Optimistic (very unlikely that the activity will take shorter than this).
- Pessimistic (very unlikely that the activity will take longer than this).
- Most likely (this is what we really think it will take).

These durations are assumed to lie on a [beta distribution](#). A mean duration is calculated and used in a critical path analysis. The project end date is then assumed to lie on a normal distribution and potential end dates can be calculated for various standard deviations from the mean.

**Programme**

More:

- [Knowledge](#)

The term programme has different meanings to different people. Historically, the term has been used to describe a simple [bar chart](#) and this is still in common use in many industries (e.g. construction).

In other fields it is now generally accepted that a programme is a collection of projects managed in a co-ordinated way to create [benefits](#) for the [host organisation](#).



Featured article: [Projects, programmes, portfolios and the discontinuous mind](#)

**Programme and project support office (PPSO)**

An organisation set up to provide combined programme [support](#) and project support. This could be a team set up for the support of a specific programme and its projects or an organisation-wide team that supports all the projects and programmes in a portfolio.

**Programme assurance**

See [assurance](#).

**Programme management**

More:

- [Knowledge](#)

The day to day management of a programme by a programme management team.

The central elements of programme management are:

- having a clear reason why the work is necessary;
- capturing requirements, specifying [objectives](#), estimating [resources](#) and timescales;
- preparing a [business case](#) to explain that the work is desirable, achievable and viable;
- securing [funding](#) for the work;
- developing and implementing [management plans](#);
- leading and motivating the [management team](#) and [delivery teams](#);
- monitoring and controlling [scope](#), [schedule](#), finance, risk and resources;
- maintaining good relations with [stakeholders](#);
- closing the project or programme in a controlled manner when appropriate.

**Programme management office**

See [PMO](#).

**Programme manager**

The individual with overall responsibility for the day-to-day management of a [programme](#).

**Programme mandate**

See [mandate](#).

**Programme sponsor**

See [sponsor](#).

**Programme support**

See [support](#).

**Programme support office (PSO)**

An organisation giving programme [support](#) to the programme [management team](#).

**Progress (PRINCE2 theme)**

The progress theme establishes and implements mechanisms to monitor progress and ensure appropriate [corrective action](#) is taken.

The equivalent in Praxis is the [control](#) topic.

The closest equivalent in the PMBoK® guide is the combination of processes in the [monitoring and controlling](#) process group. In ISO21500 it is a similar combination of the processes in the [controlling](#) process group.

**Progress date**

The base date used for estimating progress of a project or programme. All [estimates to complete](#) or [remaining durations](#) should be assessed in relation to the status of [activities](#) on this date.

Computer scheduling packages will then schedule any work not yet complete after this date.

The PMBoK® guide refers to this as the [data date](#).

---

**Progress payment**

An interim payment made to a [supplier](#) on the basis of agreed work performed or [products](#) delivered. Payment could be triggered by the passage of time (i.e. monthly valuation of work completed) or by completion of a [milestone](#) or [deliverable](#). Progress payments are often subject to [retention](#).

The PMBoK® guide calls this retainage.

---

**Progress report**

Progress needs to be communicated at regular intervals. This may be, for example, from an individual to their team manager; from a [supplier](#) to a project manager; from a project manager to a programme manager. A progress report may cover a small [work package](#), [change management](#) activity in a business area or an entire programme in a portfolio.

Progress reports are typically produced at regular intervals as opposed to an [event report](#) that is produced when a [milestone](#), or other specific event, is achieved.

---

**Progress reporting**

The process of gathering information on work done and revised estimates, updating the [delivery plans](#) and distributing the revised plan with a commentary on progress and forecasts.

---

**Progressive elaboration**

The PMBoK® guide term for the process of increasing the amount of detail in the [project management plan](#) as more information and hence better estimates become available.

---

## Project

There are many definitions of a project in the available literature. Every published standard and method makes a new attempt at defining a project in a succinct way. For instance:

"A unique set of co-ordinated [activities](#), with definite starting and finishing points, undertaken by an individual or organisation to meet specific [objectives](#) within defined [schedule](#), cost and performance parameters." - BS6079.

"A temporary endeavour undertaken to create a unique [product](#), service or result" - PMBoK® guide.

"A temporary organisation that is created for the purpose of delivering one or more business products according to the specified [business case](#)" - PRINCE2.

---

## Project and programme process model

More:

- [Method](#)

Praxis has a process model that can be used for both projects and programmes.

While this may seem odd when compared to other guides, a comparison of life cycles and processes in project and programme guides from sources such as Axelos or the Project Management Institute reveals that their project and programme [life cycles](#) are fundamentally the same. Therefore they can be managed with the same, adaptable, [processes](#).

---

## Project approach

A PRINCE2 document that describes the chosen delivery approach for a project. Options considered could be: bespoke solution vs. ready-made solution; in-house development vs. contracted out development; modify current assets vs. replace with new and so on.

The document should explain the reasons for rejecting options as well as justifying the chosen option.

---

## Project assurance

PRINCE2 distinguishes between project assurance and [quality assurance](#). Project assurance refers to the responsibility of the members of the [project board](#) to assure themselves that the area of the project, on which they focus, is being managed correctly.

Praxis covers this in the [assurance](#) function.

---

## Project authorization notification

In PRINCE2 this is a formal notification to appropriate [stakeholders](#) that the project has started. It also requests that any necessary logistical support be provided.

This is an output of the [authorize the project](#) activity in the [Directing a Project \(DP\) process](#).

## Project board

An element of the PRINCE2 project organisation comprising three senior management roles that combine to provide [sponsorship](#) for the project. The roles are:

- Executive (representing those who are paying for the project).
- Senior user (representing those who will use the end product).
- Senior supplier (representing those who will perform the work).

The project manager reports to the project board on matters outside his or her span of control. The principal of the relationship between the manager and the board is one of management by exception. The board is there to support the project manager, not manage the project. Most of the responsibilities of the board are laid out in the [Directing a Project \(DP\) process](#) in PRINCE2.

The board will approve each stage of the project based on a viable [business case](#).

Praxis simply refers to the sponsor role which may be performed by an individual or a group such as the project board.

---

## Project brief

See [brief](#).

The APM PSMC uses the term in a different way to PRINCE2 and Praxis. In this guide the project brief is produced by a [client](#) to define their requirements.

---

## Project budget

The overall [budget](#) for the project showing income as well as expenditure.

---

## Project buffer

A reserve of time applied to the [critical chain](#).

---

## Project calendar

A [calendar](#) which defines global project working and non-working periods such as public holidays.

---

## Project charter

This is a key document in the PMBoK® guide and ISO21500. It is the document that is developed by the [sponsor](#) and gives the project manager authority to apply [resources](#) to project [activities](#). It is an output of the [Develop Project Charter](#) process in the PMBoK® guide and [Develop project charter](#) in ISO21500.

The broad equivalent in Praxis and PRINCE2 is the [brief](#). The key difference between the project charter and the brief is the responsibility for its development, i.e. the charter is developed by the sponsor while the brief is developed by the project manager.

**Project closure notification**

A PRINCE2 notification from the [project board](#) to all [stakeholders](#) informing them of the closure of the project. This notification triggers the disbandment of the project management team and the [demobilisation of resources](#). A date should be given beyond which no costs can be charged to the project.

**Project closure recommendation**

A recommendation prepared by the Project Manager of a PRINCE2 project that the [project board](#) uses as the basis of a [project closure notification](#).

This is the output of the [recommend project closure](#) activity.

**Project communications management**

A PMBoK® guide [knowledge area](#) that provides a set of [processes](#) for managing [procurement](#). The processes comprise:

- [Plan Communications Management](#).
- [Manage Communications](#).
- [Control Communications](#).

In Praxis, the principles of communication are covered in the [communication](#) function; the practicalities of communication are covered in [information management](#) and the key function of communicating with [stakeholders](#) is covered in [stakeholder management](#).

PRINCE2 doesn't have a specific communications theme but covers the subject in areas such as [organisation](#) and the activities in the [PRINCE2 processes](#).

ISO21500 and the PMBoK® guide share a very similar structure and the nearest equivalent [subject group](#) in ISO21500 is simply [communication](#).

**Project cost management**

A PMBoK® guide [knowledge area](#) that provides a set of [processes](#) for managing time. The processes comprise:

- [Plan Cost Management](#).
- [Estimate Costs](#).
- [Determine Budget](#).
- [Control Costs](#).

The equivalent in Praxis are the [financial management](#) function and their component [procedures](#).

PRINCE2 doesn't have a dedicated section on costs but addresses cost and budgeting issues in many different areas.

ISO21500 and the PMBoK® guide share a very similar structure and the nearest equivalent [subject group](#) in ISO21500 is simply [cost](#).



**Project director**

Often used to describe the manager of a very large project that demands a senior level of responsibility. May also refer to a person at board level within an organisation who has overall responsibility for projects and their management.

---

**Project execution plan**

See [project management plan](#).

---

**Project human resource management**

A PMBoK® guide [knowledge area](#) that provides a set of [processes](#) for managing internal project [resources](#). The processes comprise:

- [Plan Human Resource Management](#).
- [Acquire Project Team](#).
- [Develop Project Team](#).
- [Manage Project Team](#).

Praxis covers these areas in the [resource management](#) and [organisation management](#) topics and the process activities that implement them such as *appoint definition team* and *mobilise* in the [definition process](#).

The nearest equivalent in PRINCE2 is the [organisation](#) theme.

The equivalent subject group in ISO21500 is called simply - [resource](#).

---

**Project initiation**

The PMBoK® guide defines this as the launch of a process that can result in the authorisation of a new project but doesn't provide any further detail.

It could be equated to whatever process produces a [mandate](#) in Praxis and PRINCE2.

---

**Project initiation documentation**

In PRINCE2 this documentation is approved by the [project board](#) at the end of the [Initiating a Project \(IP\) process](#). It provides a single source of reference about the [objectives](#) of the project and how they will be achieved.

All the management strategies are included along with the [business case](#), organisation structure, [project plan](#) and various other documents.

The equivalent in Praxis is the definition documentation produced by the [definition process](#).

The corresponding documentation in the PMBoK® guide and ISO21500 is broadly a combination of the [project charter](#), [project management plan](#) and the outputs of other planning processes such as the project [schedule](#).

**Project initiation notification**

A communication from the [project board](#) of a PRINCE2 project to inform [stakeholders](#) that the project is being initiated. This notification will request all necessary support for the initiation [stage](#) from the stakeholders.

**Project integration management**

A PMBoK® guide [knowledge area](#) that provides a set of high level processes that co-ordinate the processes of individual knowledge areas. At the project level these [processes](#) align closely with the project [life cycle](#). The processes comprise:

- [Develop Project Charter](#).
- [Develop Project Management Plan](#).
- [Direct and Manage Project Work](#).
- [Monitor and Control Project Work](#).
- [Perform Integrated Change Control](#).
- [Close Project or Phase](#).

The Praxis processes serve an equivalent purpose when applied to the project life cycle. The same is true of the PRINCE2 processes.

ISO21500 and the PMBoK® guide share a very similar structure and the equivalent subject group in ISO21500 is [integration](#).

**Project management**

The day to day management of a project by a project manager or project management team.

More:

- [Knowledge](#)

The central elements of project management are:

- having a clear reason why the work is necessary;
- capturing requirements, specifying [objectives](#), estimating [resources](#) and timescales;
- preparing a [business case](#) to explain that the work is desirable, achievable and viable;
- securing [funding](#) for the work;
- developing and implementing [management plans](#);
- leading and motivating the [management](#) and [delivery teams](#);
- monitoring and controlling scope, schedule, finance, risk and resources;
- maintaining good relations with [stakeholders](#);
- closing the project or programme in a controlled manner when appropriate.

**Project management knowledge area**

In the PMBoK® guide this is an identifiable area of the discipline of project management that is defined by its knowledge requirements.

The equivalent in Praxis are the [functions](#) described in the knowledge section of the framework. PRINCE2 refers to these as [themes](#) and ISO21500 as [subject groups](#).

**Project management office**

See [PMO](#).

**Project management plan**

This document summarises or brings together all the [management plans](#) for the project or programme. It may be a single, self-contained document with a section for each relevant function or a collection of separate management plans.

Praxis, ISO21500 and the PMBoK® guide all use this term.

In PRINCE2 the term [project initiation documentation](#) covers all the management plans but also some delivery documentation as well.

**Project management process groups**

Both ISO21500 and the PMBoK® guide collect their component [processes](#) into five broadly compatible groups.

In ISO21500 these are referred to as:

- [Initiating.](#)
- [Planning.](#)
- [Implementing.](#)
- [Controlling.](#)
- [Closing.](#)

In the PMBoK® guide they are referred to as the:

- [Initiating process group.](#)
- [Planning process group.](#)
- [Executing process group.](#)
- [Monitoring and controlling process group.](#)
- [Closing process group.](#)

**Project management staff**

The PMBoK® guide term for the project management team and any other staff involved in the project management activities. It could, for example, include members of a [support](#) office.

In PRINCE2 and ISO21500 this would be the project management team and in Praxis, the [management team](#).

**Project management team**

In the PMBoK® guide this term includes the members of the project team who are directly involved in project management activities.

The [management team](#) in Praxis, PRINCE2 and ISO21500 are the same and hence broader than the PMBoK® guide project management team.

**Project manager**

In simple terms this is the person responsible for day to day management of the project. In practice this can cover many different role descriptions.

The Project Manager of a major project may have a broader range of responsibilities but have a [project support office](#) performing detailed administrative and [planning](#) duties.

Conversely, the manager of a small project may have a narrower remit but be responsible for the project support functions as well as management.

**Project mandate**

See [mandate](#).

**Project network diagram**

See [network diagram](#).

**Project office**

Usually used synonymously with [project support office](#).

**Project organisation**

A generic term to describe the structure, roles and responsibilities of the project's [management team](#) and its interfaces to the outside world.

**Project plan**

Both PRINCE2 and ISO21500 use this term to represent the document that contains [baselines](#) for scope, time, cost and resources.

Neither Praxis nor the PMBoK® guide describe an all-encompassing project plan but Praxis refers generically to the delivery documentation which will contain [schedules](#) and [budgets](#) for the project.

### **Project procurement management**

A PMBoK® guide [knowledge area](#) that provides a set of processes for managing procurement. The processes comprise:

- [Plan Procurement Management.](#)
- [Conduct Procurements.](#)
- [Control Procurements.](#)
- [Close Procurements.](#)

The equivalent in Praxis are the [procurement](#) and [contract management](#) functions.

PRINCE2 doesn't go into any detail on the procurement of external products and services.

ISO21500 and the PMBoK® guide share a very similar structure and the equivalent [subject group](#) in ISO21500 is simply [procurement](#).

---

### **Project product description**

A PRINCE2 document that explains what the project must achieve in order to gain customer [acceptance](#).

Praxis uses the more generic term [specification](#) which is more easily adaptable to different [contexts](#) and [environments](#).

In the PMBoK® guide and ISO21500 the equivalent document is the [project scope statement](#).

---

### **Project programme**

In modern terminology, this seems like a contradiction in terms. The words project and programme now have distinct meanings.

Historically, the programme was equivalent to a [schedule](#) and was most often manifested by a [Gantt chart](#). There are parts of the profession that still use this term.

---

### **Project quality management**

A PMBoK® guide [knowledge area](#) that provides a set of [processes](#) for managing quality. The processes comprise:

- [Plan Quality Management.](#)
- [Perform Quality Assurance.](#)
- [Control Quality.](#)

The equivalent in Praxis are the planning steps in every functional [procedure](#), the [assurance](#) function and the [control](#) function.

PRINCE2 covers this in the [quality](#) theme.

ISO21500 and the PMBoK® guide share a very similar structure and the equivalent [subject group](#) in ISO21500 is simply [quality](#).

## Project risk management

A PMBoK® guide [knowledge area](#) that provides a set of processes for managing risk. The processes comprise:

- [Plan Risk Management.](#)
- [Identify Risks.](#)
- [Perform Qualitative Risk Analysis.](#)
- [Perform Quantitative Risk Management.](#)
- [Plan Risk Responses.](#)
- [Control Risks.](#)

The equivalent in Praxis is the [risk management](#) function and its component [procedure](#).

PRINCE2 covers this in the [risk](#) theme.

ISO21500 and the PMBoK® guide share a very similar structure and the equivalent [subject group](#) in ISO21500 is simply [risk](#).

---

## Project scope

The PMBoK® guide makes a clear distinction between [product scope](#) and project scope. The former is the features and functions of the project's final [output](#) whilst the latter is the work that must be done to deliver the final output.

---

## Project scope management

A PMBoK® guide [knowledge area](#) that provides a set of [processes](#) for managing [scope](#). The processes comprise:

- [Plan Scope Management.](#)
- [Collect Requirements.](#)
- [Define Scope.](#)
- [Create WBS.](#)
- [Validate Scope.](#)
- [Control Scope.](#)

The equivalents in Praxis are the [scope management](#) functions and their component [procedures](#).

PRINCE2 doesn't have a section devoted to scope and the subject is covered in a variety of areas including the [plans](#) theme and [product-based planning](#) in particular. The control of scope change is covered by the [change](#) theme.

ISO21500 and the PMBoK® guide share a very similar structure and the equivalent [subject group](#) in ISO21500 is simply [scope](#).

**Project scope management plan**

A PMBoK® guide document that describes how the detailed [scope](#) of the project should be defined, how the [work breakdown structure](#) will be maintained and approved, and how scope [change requests](#) will be processed.

The equivalent in Praxis is the [scope management plan](#).

The nearest equivalent in PRINCE2 is the [quality management strategy](#) and elements of the project controls contained in the [project initiation documentation](#).

**Project Scope Statement**

A PMBoK® guide and ISO21500 document that describes the detailed [scope](#) of a project. This includes [product descriptions](#), [constraints](#), [assumptions](#) and [acceptance criteria](#) as well as the initial project organisation and risks.

Praxis uses the more generic term [specification](#) which excludes the organisation and risks but can be adapted to different [contexts](#).

The equivalent in PRINCE2 is the [project product description](#) although this also excludes organisation and risks.

**Project sponsor**

See [sponsor](#).

**Project stakeholder management**

A PMBoK® guide [knowledge area](#) that provides a set of [processes](#) for managing stakeholders. The processes comprise:

- [Identify Stakeholders](#).
- [Plan Stakeholder Management](#).
- [Manage Stakeholder Engagement](#).
- [Control Stakeholder Engagement](#).

The equivalent in Praxis is the [stakeholder management](#) function and its component [procedure](#).

In PRINCE2, stakeholders are covered in the [organization](#) theme.

ISO21500 and the PMBoK® guide share a very similar structure and the equivalent [subject group](#) in the ISO21500 is simply [Stakeholder](#).

**Project support**

See [support](#).

**Project support office**

An organisation set up to provide [support](#) to a project.

**Project team**

The PMBoK® guide term for everyone involved in delivering a project including management and delivery staff.

Praxis refers to these as the [management team](#) and the [delivery team](#).

In ISO21500 the term represents only those who perform the project activities, i.e. the delivery team.

**Project time management**

A PMBoK® guide [knowledge area](#) that provides a set of [processes](#) for managing time. The processes comprise:

- [Plan Schedule Management.](#)
- [Define Activities.](#)
- [Sequence Activities.](#)
- [Estimate Activity Resources.](#)
- [Estimate Activity Durations.](#)
- [Develop Schedule.](#)
- [Control Schedule.](#)

The equivalents in Praxis are the [schedule management](#) functions and their component [procedures](#).

PRINCE2 covers this in the [plans](#) them.

ISO21500 and the PMBoK® guide share a very similar structure and the nearest equivalent [subject group](#) in ISO21500 is simply [time](#).

**Projectized organization**

A PMBoK® guide term for a [strong matrix](#).

**Projects, programmes and portfolios**

More:

- [Knowledge](#)
- [Resources](#)

Project, programme and portfolio are terms used to describe typical combinations of [complexity](#) and [environment](#) that require distinguishable approaches to [governance](#).

The terms have been used in various ways since the origins of modern project management in the 1950s. Many argue that there is no need to distinguish between the three and that the term 'project' is sufficient to cover the entire range of initiatives that an organisation may undertake.

The APM BoK contains a function of the same name. Most other guides address only one of the three, i.e. they are project or programme or portfolio guides.

**Prolongation**

The amount of time a project is extended beyond its planned duration.

**Prolongation cost**

The additional costs incurred on a project due to [prolongation](#).



**Prompt list**

A prompt list raises questions about risk on a project or programme that should be considered. Rather than containing specific suggestions such as those contained in a [check list model](#), it asks open questions such as: "Are there potential legal risks on this project?"

---

**Prototype**

A prototype is produced to prove or disprove the achievability or viability of a requirement. It may subsequently be developed into a real [product](#) or discarded.

---

**Provider**

The APM BoK term for a person or company that supplies goods or services to a project.

Referred to in Praxis, PRINCE2 and ISO21500 as the [supplier](#) and in the PMBoK<sup>®</sup> guide as a seller.

---

**Provider selection and management**

An APM BoK function dealing with the acquisition of external [resources](#).

The equivalent in Praxis is the [procurement](#) function, in the PMBoK<sup>®</sup> guide it is the [project procurement management](#) knowledge area and in ISO21500 the [procurement](#) subject group.

---

**Proximity**

A term used to indicate the likely timescale of a [risk event](#), i.e. if it occurs, will it be next week or next month.

---

**Pull system**

An approach where work is pulled into a system as capacity becomes available. [Kanban](#) is a pull system.

---

**Push system**

An approach where work is added to a system without considering the available capacity – see also [pull system](#).

### Q-sort method

An approach to the agreement of priorities for projects in a portfolio developed by W.E. Souder. The decision makers are grouped together and each is given the project names on separate cards. They are then asked to go through the following steps:

- split the cards into high and low priority;
- take some of the cards from the two packs and create a medium priority pack;
- split the high priority pack into two to give a very high pack;
- repeat the last step with the low priority pack to create one of very low;
- review the selections and make any final changes.

These steps help get over the natural tendency to give everything a high priority by forcing successive levels of breakdown.

The Q-sort method can be combined with the [Delphi technique](#) to reach consensus on priorities at each stage before going on to the next.

---

### Qualitative risk analysis

A range of tools for examining specific risks based on considered judgement rather than statistical analysis. It includes techniques such as:

- [Probability-impact tables.](#)
- [Probability-impact scores.](#)
- [Check list model.](#)

---

### Quality (ISO21500 subject group)

An ISO 21500 [subject group](#) that provides a set of [processes](#) for managing quality. The processes comprise:

- [Plan quality.](#)
- [Perform quality assurance.](#)
- [Perform quality control.](#)

The equivalent in Praxis are the planning steps in every functional [procedure](#) and the [assurance](#) and [control](#) functions.

PRINCE2 covers this in the [quality](#) theme.

The PMBoK® guide and ISO21500 share a very similar structure and the nearest equivalent [knowledge area](#) in the PMBoK® guide is [project quality management](#).

### Quality (PRINCE2 theme)

This theme is concerned with the means by which products are created and verified to meet the project objectives. It covers [quality planning](#) and [quality control](#). [Assurance](#) is split into [project assurance](#) (internal checking of quality procedures) and [quality assurance](#) (external checking of quality procedures).

In Praxis, quality is deemed to be inherent in all other functions and processes. Quality planning is therefore achieved through all references to [planning](#), quality control is achieved through all references to [control](#) and quality assurance is achieved through all references to [assurance](#).

The equivalent in the APM BoK is the [quality management](#) function.

The equivalent in ISO21500 is the [quality](#) subject group and in the PMBoK® guide it is the [project quality management](#) knowledge area.

---

### Quality assurance

The boundaries of this area are least well defined in quality literature. It is really all about confidence, i.e. making sure that the [quality planning](#) and [quality control](#) systems are working.

Quality audits are a key part of this process by periodically checking and validating the quality planning and quality control processes.

In Praxis this is primarily covered by the [assurance](#) topic.

The PMBoK® guide addresses this in the process [Perform Quality Assurance](#) and ISO21500 in the process [Perform quality assurance](#).

In PRINCE2 assurance is split into [project assurance](#) (internal checking of quality procedures) and [quality assurance](#) (external checking of quality procedures).

---

### Quality control

This comprises the [processes](#) and [activities](#) undertaken to check whether actual work and [products](#) meet the specified standards. It includes techniques of statistical sampling and physical testing.

In Praxis this is covered by the [control](#) function and activities within the [delivery](#) and [development processes](#).

PRINCE2 covers quality control in its [quality](#) theme.

ISO21500 covers this in [Perform quality control](#) and the PMBoK® guide in [Control Quality](#).

---

### Quality criteria

The characteristics of a [product](#) or [deliverable](#) which determine whether it meets the [customer's](#) requirements.

See also [acceptance criteria](#).

**Quality function deployment**

A technique for transforming qualitative user requirements into prioritised, quantitative parameters.

**Quality log**

A document that lists the various quality control checks that are expected on a project. For each check, the log will record the name of the [product](#) being checked, the [quality control](#) techniques to be applied, the staff responsible and the results of the check.

**Quality management**

Quality management is an umbrella term for a range of approaches to managing quality:

- [Quality Planning](#).
- [Quality Control](#).
- [Quality Assurance](#).

Quality management is a function in the APM BoK.

In Praxis, quality is deemed to be inherent in all other [functions](#) and [processes](#). Quality planning is therefore achieved through all references to planning, quality control is achieved through all references to [control](#) and quality assurance is achieved through all references to [assurance](#).

PRINCE2 distinguishes between quality assurance and [project assurance](#) which are covered by the [quality](#) theme.

The PMBoK® guide addresses quality management in the processes that make up the [project quality management](#) knowledge area and ISO21500 in the processes that make up the [quality](#) subject group.

**Quality management plan**

A document setting out how [quality planning](#), [quality assurance](#) and [quality control](#) will be achieved on a project or programme.

**Quality management strategy**

The PRINCE2 term for a [quality management plan](#).

**Quality plan**

The ISO21500 term for a [quality management plan](#).

**Quality planning**

This work that plans the performance of [quality assurance](#) and [quality control](#).

**Quality register**

A PRINCE2 document that summarises all planned and completed quality activities.

**Quality review**

A form of [quality control](#) applied to [products](#) where physical testing is not appropriate. For example, a test of the quality of concrete in a foundation may constitute a sample being crushed and its strength being measured. However, if the product is a process definition, document or a user interface of a software package, the testing will be more subjective and performed by a panel of reviewers in a quality review.

---

**Quality tolerance**

The acceptable range of values in the definition of [acceptance criteria](#) for a [product](#).

---

**Quantitative risk analysis**

Quantitative risk analysis revolves around numerical and statistical techniques. Some of these, such as [Monte Carlo](#), focus on statistical predictions of project timescales. Techniques such as [decision trees](#) and [sensitivity analysis](#) focus on particular [risk events](#).

---

**Quantitative schedule risk analysis**

A formalised approach to the application of statistical risk analysis techniques.

---

**RACI**

An acronym for four types of involvement that might be used to populate a [responsibility assignment matrix](#).

The letters stand for responsible, accountable, consult and inform.

---

**RAG reports**

More:

- [Encyclopaedia](#)

RAG is an acronym for Red, Amber, Green and is a form of report where measurable information is classified by colour. For each colour there is some pre-determined action. This usually constitutes escalation to a higher level of management.

---

**Rapid application development (RAD)**

More:

- [Encyclopaedia](#)

Rapid application development is a software development process that seeks to deliver software applications more quickly and with lower costs than more traditional methods.

The principle of RAD is to limit the amount of time spent on up-front planning and rely on prototypes that are developed into a finished product through a close working relationship between [users](#) and developers.

**Receive completed work packages**

This PRINCE2 activity from the [Controlling a Stage \(IP\)](#) process deals with the project manager’s work involved in receiving a work package from the team it was delegated to in [authorising a work package](#). This will include updates to the [quality register](#) and [configuration item records](#).

In Praxis this is covered by the *accept completed work activity* in the [delivery process](#) and in the PMBoK® guide the nearest equivalent is [Validate Scope](#).

There is no explicit reference to the [validation](#) or [acceptance](#) of [deliverables](#) in ISO21500.

**Recommend project closure**

This PRINCE2 activity in the [Closing a Project \(CP\)](#) process is where the project manager closes the project files and brings the work to an administrative closure. A [closure recommendation](#) is sent to the [project board](#) so that they can issue a formal [closure notification](#).

In Praxis, this would be performed as part of the *demobilise* activity in the [closure process](#).

The PMBoK® guide includes this administrative closure in the [Close Project or Phase](#) process. In ISO 21500 it is covered by the [Close project phase or project](#) process.

**Reduce**

One of the four possible [threat responses](#). The PMBoK® guide prefers the term [mitigation](#).

**Redundant logic**

Dependencies in a [network diagram](#) that are duplicated through an alternative path.

**Refine the business case**

In a PRINCE2 project an [outline business case](#) is produced by the [Starting Up a Project \(SU\)](#) process. In the [Initiating a Project \(IP\)](#) process this [activity](#) takes the outline version and updates and extends it to form a full [business case](#).

In Praxis this expansion of the business case is covered by the *consolidate definition documentation* in the [definition process](#).

The PMBoK® guide and ISO21500 do not have a similar two stage process for the development of the business case.

**Reforming**

An additional stage that some sources have added to the standard [Tuckman](#) model.

This stage represents a repeat forming stage caused by team or project changes.

<b>Reject</b>	One of the four possible <a href="#">opportunity responses</a> .
<b>Release</b>	A <a href="#">product</a> or set of products in a handover. These are managed, tested and deployed as a single entity. Could also be termed a <a href="#">deliverable</a> .
<b>Remaining duration</b>	The estimate of time remaining to complete an <a href="#">activity</a> . A far more useful measure of progress than <a href="#">percentage complete</a> .
<b>Report highlights</b>	<p>This activity from the <a href="#">Controlling a Stage (CS)</a> process covers the development of <a href="#">highlight reports</a>.</p> <p>In a PRINCE2 project, the <a href="#">project board</a> will be periodically presented with a progress summary for the project and current <a href="#">stage</a>. The frequency for these highlight reports is defined in the <a href="#">communication management strategy</a>.</p> <p>The equivalent in Praxis is the <i>update and communicate</i> activity in the <a href="#">delivery process</a>.</p> <p>There is no direct equivalent in the PMBoK® guide or ISO21500. This kind of formal communication between the project manager and sponsor would be part of <a href="#">Manage Communications</a> or <a href="#">Manage communications</a> respectively.</p>
<b>Report stage end</b>	<p>This PRINCE2 activity brings one <a href="#">stage</a> to a conclusion and requests approval for the next stage. It produces an <a href="#">end stage report</a> and a <a href="#">lessons report</a>.</p> <p>The equivalent in Praxis is the <i>assemble documentation</i> activity in the <a href="#">boundaries process</a>.</p> <p>Since ISO21500 and the PMBoK® guide are not structured around stages there is no direct equivalent. However, the intention in both guides is that the processes can be applied at different levels, e.g. to a project or a stage within a project. Therefore, the end of a stage in a PMBoK® guide or ISO21500 project would invoke <a href="#">closing processes</a> to close the stage and <a href="#">initiating processes</a> to start the next stage.</p>
<b>Request for change</b>	The PRINCE2 term for a <a href="#">change request</a> .
<b>Request for information (RFI)</b>	A request sent to a supplier to gather information about their capability and interest in bidding for a <a href="#">contract</a> .
<b>Request for proposal (RFP)</b>	A bid document used to obtain proposals from prospective suppliers. Usually synonymous with the terms <a href="#">request for quotation</a> and <a href="#">invitation to tender</a> .

**Request for quotation (RFQ)**

A bid document used to obtain proposals from prospective suppliers. Usually synonymous with the terms [request for proposal](#) and [invitation to tender](#).

**Requirements management**

More:

- [Knowledge](#)
- [Competence](#)
- [Capability maturity](#)
- [Resources](#)

Requirements management establishes [stakeholders'](#) wants and needs, and then reviews these to create a set of [baseline](#) requirements for use in [solutions development](#) and [benefits management](#). Its goals are to:

- ensure that all relevant stakeholders have the opportunity to express their wants and needs;
- reconcile multiple stakeholder requirements to create a single viable set of objectives;
- achieve stakeholder consensus on a baseline set of requirements.

A clear and agreed expression of requirements and their [acceptance criteria](#) is essential for the success of any project, programme or portfolio.

**Requirements management plan**

A management plan that sets out the preferred procedures, tools and techniques to be used in [requirements management](#). This will usually include [solutions development](#) as well.

**Requirements traceability matrix**

A matrix that connects requirements with the [products](#) that satisfy them. Used in product validation.

**Reserve**

A sum of money or time, set aside to deal with costs that may or may not be incurred. Sometimes referred to as a [budget](#).

See also [contingency reserve](#), [change budget](#), [management reserve](#).

**Residual risk**

The risk remaining after a [risk response](#) has been implemented.

**Resource**

A resource is anything that is required to perform an [activity](#). It could be machinery, materials or manpower. Resources are inevitably limited and [resource limited scheduling](#) activities that take account of these limitations can be a lengthy and involved process.



**Resource (ISO21500 subject group)**

An ISO21500 subject group that provides a set of processes for managing resources. The processes comprise:

- [Establish project team.](#)
- [Estimate resources.](#)
- [Define project organization.](#)
- [Develop project team.](#)
- [Control resources.](#)
- [Manage project team.](#)

The equivalent in Praxis are the [resource management](#) and [organisation management](#) functions and their component [procedures](#).

The nearest equivalent in PRINCE2 is the [organisation](#) theme.

The PMBoK® guide and ISO21500 share a very similar structure and the nearest equivalent [knowledge area](#) in the PMBoK® guide is [project human resource management](#).

**Resource aggregation**

The process of summing [resource](#) demand across activities on a day-by-day, or week-by-week, basis. Usually presented as a [histogram](#).

**Resource allocation**

More:

- [Encyclopaedia](#)

Resource allocation (sometimes called resource assignment) is deciding what skills are required to complete an [activity](#) and [estimating](#) the quantity needed.

An activity may require a single [resource](#) or multiple resources. These may be required uniformly for the [duration](#) of the activity or may have a fluctuating requirement profile.

**Resource availability**

See [Resource limit](#).

**Resource breakdown structure**

A hierarchical representation of [resources](#) by category and type. This [breakdown structure](#) will contain all resources as opposed to the [organisational breakdown structure](#) that only covers members of the [management](#) and [delivery teams](#), i.e. human resources.

**Resource calendar**

A [calendar](#) that defines the working and non-working patterns for a specific [resource](#).

**Resource code**

The code given to a [resource](#) that denotes its position in a [resource breakdown structure](#).

**Resource histogram**

More:

- [Encyclopaedia](#)

[Resource allocation](#) identifies what [resources](#) are needed to complete [activities](#) and [critical path analysis](#) calculates when the activities can be performed. Combining these two sets of data allows the demand for each type of resource to be aggregated over time. This information is typically represented as a resource histogram.

**Resource levelling**

The process of rescheduling [activities](#) such that the requirement for [resources](#) on the project does not exceed specified [resource limits](#). The project completion date calculated from [critical path analysis](#) will probably be delayed in the process.

**Resource limit**

The amount of a particular [resource](#) available to the project at a point in time.

**Resource limited schedule**

The [schedule](#) of [activity](#) start and finish dates which are calculated by [resource scheduling](#). The opposite to an [unlimited schedule](#).

**Resource limited scheduling**

More:

- [Encyclopaedia](#)

Resource limited scheduling is based on [critical path analysis](#) but schedules [activities](#) according to the availability of [resources](#).

It comprises two approaches: [resource levelling](#) and [resource smoothing](#).

**Resource management**

More:

- [Knowledge](#)
- [Competence](#)
- [Capability maturity](#)
- [Resources](#)

Resource management covers all aspects of the deployment of [resources](#) that deliver the project, programme or portfolio. Its goals are to:

- determine the best way to resource the work;
- acquire and mobilise the necessary resources;
- control resources throughout the [life cycle](#);
- [demobilise](#) resources at the end of the life cycle;
- finalise all contractual arrangements.

For more complex projects, resource management can be broken down into its component functions:

- [Procurement](#).
- [Contract management](#).
- [Mobilisation](#).

<b>Resource management plan</b>	A management plan that sets out the preferred procedures, tools and techniques to be used in managing <a href="#">resources</a> .
More:	
<ul style="list-style-type: none"> <li>- <a href="#">Description</a></li> <li>- <a href="#">Templates</a></li> </ul>	
<b>Resource optimisation</b>	A generic term for <a href="#">resource levelling</a> and <a href="#">resource smoothing</a> . See also <a href="#">resource scheduling</a> .
<b>Resource profile</b>	The pattern of fluctuating allocation of a <a href="#">resource</a> on a single <a href="#">activity</a> , i.e. a situation where the allocation of a resource is not constant throughout the <a href="#">duration</a> of the activity.
<b>Resource scheduling</b>	Resource scheduling is a collection of techniques used to analyse the <a href="#">resources</a> required to deliver the work and when they will be required. The goals of resource scheduling are to ensure:
More:	
<ul style="list-style-type: none"> <li>- <a href="#">Knowledge</a></li> <li>- <a href="#">Resources</a></li> </ul>	<ul style="list-style-type: none"> <li>• efficient and effective utilisation;</li> <li>• confidence that the <a href="#">schedule</a> is realistic;</li> <li>• early identification of resource capacity bottlenecks and conflicts.</li> </ul>
<b>Resource smoothing</b>	The process of rescheduling <a href="#">activities</a> such that the requirement for <a href="#">resources</a> on the project is as smooth as possible whilst still finishing by a specified date. Sometimes referred to as time limited resource scheduling.
<b>Responsibility assignment matrix</b>	A responsibility assignment matrix (RAM) is a chart showing the relationship between people and elements of work. It is created by combining two <a href="#">breakdown structures</a> , the <a href="#">work breakdown structure</a> and the <a href="#">organisational breakdown structure</a> . If required, the work breakdown structure could be replaced with a <a href="#">product breakdown structure</a> .
More:	
<ul style="list-style-type: none"> <li>- <a href="#">Encyclopaedia</a></li> </ul>	
<b>Responsibility chart</b>	An alternative name for the <a href="#">responsibility assignment matrix</a> .
<b>Responsibility matrix</b>	An alternative name for the <a href="#">responsibility assignment matrix</a> .
<b>Responsible authority</b>	A PRINCE2 term for the person or group that commission the project. They have the authority to commit <a href="#">resources</a> and funds on behalf of the commissioning organisation.
<b>Retainage</b>	See <a href="#">retention</a> .

<b>Retention</b>	A sum of money, usually a percentage of the <a href="#">contract</a> sum, retained by the customer from each stage payment, which is paid at the end of the project when the final <a href="#">output</a> is accepted. Known in the USA as retainage.
<b>Retrospective</b>	A regular review that looks at how the process of doing the work can be improved. It is a more frequent and less formal approach than events such as stage reviews or <a href="#">post project reviews</a> .
<b>Re-usable resource</b>	A <a href="#">resource</a> that can be used time and time again, e.g. while an item of equipment is reusable, consumable materials are not.
<b>Review</b>	A critical (but constructive) assessment of a <a href="#">product</a> , document, <a href="#">procedure</a> or <a href="#">process</a> .
<b>Review the stage status</b>	<p>This PRINCE2 activity from the <a href="#">Controlling a Stage</a> (CS) process performs a review of the progress of a <a href="#">stage</a>. This involves reviewing many documents such as <a href="#">checkpoint reports</a>, the <a href="#">quality register</a> and the <a href="#">benefits review plan</a> to name but three.</p> <p>This review will result in updates to documents such as the <a href="#">stage plan</a>, <a href="#">risk register</a> and <a href="#">lessons log</a>. The frequency of stage reviews is defined in the stage plan.</p> <p>The equivalent in Praxis is the <i>update and communicate</i> activity from the <a href="#">delivery process</a>; in the PMBoK® guide it is the <a href="#">Monitor and Control Project Work</a> process and in ISO21500 it is the <a href="#">Control project work</a> process.</p>
<b>Review work package status</b>	<p>An activity from the PRINCE2 <a href="#">Controlling a Stage</a> (CS) process that monitors the progress of delegated <a href="#">work packages</a> and updates the <a href="#">stage plan</a> accordingly.</p> <p>The equivalent in Praxis is the <i>co-ordinate and monitor progress</i> activity in the <a href="#">delivery process</a>.</p> <p>The PMBoK® guide and ISO21500 don't have the same formal approach to the <a href="#">delegation</a> of work packages. In these guides the management of delegated work is covered by a smaller scale application of the <a href="#">process groups</a>. Communication of progress between different levels in the project structure is therefore implicit within processes such as <a href="#">Monitor and Control Project Work</a> (PMBoK® guide) and <a href="#">Control project work</a> (ISO21500).</p>
<b>Reviewer</b>	In a <a href="#">quality review</a> , the reviewers are the people who are testing the <a href="#">product</a> being reviewed.

**Risk (ISO21500 subject group)**

An ISO 21500 [subject group](#) that provides a set of processes for managing risk. The processes comprise:

- [Identify risks.](#)
- [Assess risks.](#)
- [Treat risks.](#)
- [Control risks.](#)

The equivalent in Praxis is the [risk management](#) function and its component [procedure](#).

PRINCE2 covers this in the [risk](#) theme.

The PMBoK® guide and ISO21500 share a very similar structure and the nearest equivalent [knowledge area](#) in the PMBoK® guide is [project risk management](#).

**Risk (PRINCE2 theme)**

The risk theme covers the risk management [procedure](#) from identification of risks through to the implementation of mitigation activity.

Praxis covers this in the [risk management](#) function and its component procedure.

In ISO21500 the equivalent [subject group](#) is [risk](#) and in the PMBoK® guide the equivalent [knowledge area](#) is [project risk management](#).

**Risk actionee**

The person assigned to implement the [responses](#) to a [risk event](#) or set of risk events.

It distinguishes this role from the [risk owner](#) on the basis that the person who is accountable for making sure a risk is addressed is not necessarily the same person who is responsible for taking the detailed response actions.

**Risk analysis**

An assessment of risk events that describes their significant and potential effect on objectives. Usually divided into [quantitative risk analysis](#) and [qualitative risk analysis](#).

**Risk and opportunities register**

An alternative name for a [risk register](#) used by the APM PSMC that explicitly contains opportunities as well as threats. Strictly speaking it is a ‘[threats](#) and [opportunities](#) register’.

**Risk appetite**

See [risk context](#).

Note: PRINCE2 combines risk appetite and risk attitude into the single definition of risk appetite.

**Risk attitude**

See [risk context](#).

Note: PRINCE2 combines risk appetite and risk attitude into the single definition of risk appetite.

**Risk breakdown structure**

A hierarchical representation of [risk events](#) according to their categories and types.

**Risk cause**

The source of a [risk event](#). Some practitioners advocate the use of a ‘meta-language’ to describe risks. This takes the form of “[Risk cause] results in [Risk event] which results in [Risk effect]”.

For example:

A nail in the road (cause) results in a puncture and flat tyre (event) which results in being late for a meeting (effect).

**Risk context**

More:

- [Knowledge](#)

Risk context addresses the individual and group attitudes and behaviours that affect the way risk arises and how it may be managed.

This context can be viewed as having two components: [risk attitude](#) and [risk appetite](#).

Risk attitude describes an individual or group’s natural reaction to uncertainty of any type. Risk appetite represents the amount of risk that an individual or organisation is prepared to take in order to achieve their [objectives](#).

The APM BoK also has a function for risk context. The PMBoK® guide, PRINCE2 and ISO21500 do not address these factors in detail.

**Risk effect**

The result of a [risk event](#) occurring. Some practitioners advocate the use of a ‘meta-language’ to describe risks. This takes the form of “[Risk cause] results in [Risk event] which results in [Risk effect]”.

For example:

A nail in the road (cause) results in a puncture and flat tyre (event) which results in being late for a meeting (effect).

**Risk efficiency**

The relationship between the amount of risk taken and the [benefit](#) expected.

**Risk estimation**

The estimation of [probability](#) and [impact](#) of an individual [risk event](#).

**Risk evaluation**

PRINCE2 defines this as the process of understanding the net effect of [threats](#) and [opportunities](#) on an [activity](#).

**Risk event** An individual occurrence of risk. Some sources use the term risk in both its singular and plural sense. The term risk event unambiguously refers to an individual risk event rather than an overall level of risk.

**Risk log** The name used by the APM PSMC for a risk register. The fact that the APM PSMC also contains a definition for a [risk and opportunities register](#) suggests that this document does not contain [opportunities](#).

**Risk management** Risk management allows individual [risk events](#) and overall risk to be understood and managed proactively, optimising success by minimising [threats](#) and maximising [opportunities](#). Its goals are to:

More:

- [Knowledge](#)
- [Competence](#)
- [Capability maturity](#)
- [Resources](#)

- ensure that levels of overall risk within a project, programme or portfolio are compatible with organisational [objectives](#);
- ensure that individual risks and responses are identified;
- minimise the impact of threats to objectives;
- optimise opportunities within the [scope](#) of work.

In Praxis the risk management function has two components – [risk techniques](#) and [risk context](#).

Risk management is also a function in the APM BoK. The relevant tools and techniques are covered in the PRINCE2 [risk](#) theme and the PMBoK® guide [project risk management](#) knowledge area.

ISO21500 has the processes in the [risk](#) subject group but doesn't explain the tools and techniques.

**Risk management plan** The risk management plan sets out the preferred procedures, tools and techniques to be used in [risk management](#).

**Risk management strategy** The PRINCE2 term for a [risk management plan](#).

**Risk matrix** See [probability-impact table](#).

**Risk mitigation** The PMBoK® guide term for the [threat response](#) that reduces probability or impact or both. Known in Praxis and elsewhere as [reduce](#).

**Risk owner** The person who is accountable for the resolution of a [risk event](#). This person will be named in the [risk register](#).

Note: this is not necessarily the person who is responsible for implementing the [risk responses](#), see [risk actionee](#).

<b>Risk pot</b>	See <a href="#">contingency reserve</a> .
<b>Risk profile</b>	A description of the types and levels of risk relating to any constrained area of work. An organisation, portfolio, programme, project, <a href="#">work package</a> etc. could all have a risk profile.
<b>Risk register</b>	<p>The purpose of the risk register is to record information about identified <a href="#">risk events</a>. The amount of information that needs to be recorded will depend upon the <a href="#">context</a> of the work.</p> <p>In its simplest form (in a small self-contained project) the register will be a list of risk events and the results of <a href="#">qualitative analysis</a>. A much more sophisticated risk register will be designed to enable aggregations across multiple projects and programmes. It will also record, or cross-reference to, more specialised documentation showing <a href="#">quantitative analysis</a> of general uncertainty (e.g. <a href="#">Monte Carlo analysis</a> or <a href="#">sensitivity analysis</a>).</p>
<b>Risk reserve</b>	See <a href="#">contingency reserve</a> .
<b>Risk response categories</b>	The PRINCE2 term for the various <a href="#">risk responses</a> .
<b>Risk responses</b> More: <ul style="list-style-type: none"> <li>– <a href="#">Encyclopaedia</a></li> </ul>	<p>The actions that can be taken in response to identified risk. The exact nature of these responses will depend upon whether they are in response to a <a href="#">threat</a> (a <a href="#">risk event</a> with a negative effect) or an <a href="#">opportunity</a> (a risk event with a positive effect).</p> <p>See also <a href="#">threat responses</a> and <a href="#">opportunity responses</a>.</p> <p>PRINCE2 refers to these as risk response categories.</p>
<b>Risk techniques</b> More: <ul style="list-style-type: none"> <li>– <a href="#">Knowledge</a></li> <li>– <a href="#">Resources</a></li> </ul>	<p>Risk techniques are used in the <i>identification, assessment and response planning</i> steps of the <a href="#">risk management</a> procedure. Few of the techniques described are unique to <a href="#">P3 management</a> but they are all tailored and applied to suit the P3 <a href="#">context</a>.</p>
<b>Risk threshold</b>	The level of risk that an organisation is prepared to accept, i.e. a quantitative measure of <a href="#">risk appetite</a> .
<b>Risk tolerance</b>	The levels of risk that, if exceeded, will trigger an <a href="#">issue</a> , i.e. when a <a href="#">risk event</a> must be escalated from one level of management to the next.



**Risk value**

The result of combining the estimated [impact](#) and [probability](#) values of a risk. If subjective scales are used, examples of risk value could be high/medium or low/high. If a numeric scale is used, the value will be the product of the impact and probability estimates.

**Rolling wave planning**

More:

- [Encyclopaedia](#)

It is often impractical to plan a project in detail from beginning to end. Sensible decisions about [stages](#) in the future cannot be made until some of the current work has been completed.

Rolling wave planning is the technique of planning the short to medium term work in detail and the remainder of the project in outline. Typically, as one stage nears its completion, the detailed planning will be underway for the next stage, and so on.

**Rough order of magnitude**

An approximate estimate of costs and time performed early in the [life cycle](#) before [scope](#) has been fully defined.

**Safety management plan**

The element of a [project management plan](#) that defines how safety management is to be implemented on a project.

**Schedule**

A collection of reports showing the timing of [activities](#), the [resources](#) allocated to them and associated costs.

**Schedule baseline**

The [schedule](#) at the point where it is [baselined](#). Once the baseline is approved it can only be changed through agreement between the manager and the [sponsor](#).

**Schedule compression**

More:

- [Encyclopaedia](#)

There are many reasons that you may need to compress a [schedule](#) at some point in a project. It may be that you have been delayed and are missing an important deadline; it may be that new factors have arisen that change a [customer's](#) requirements or it may be that you can realise additional [benefits](#) if you complete a [deliverable](#) earlier than planned.

## Schedule management

More:

- [Knowledge](#)
- [Competence](#)
- [Capability maturity](#)
- [Resources](#)

A schedule is a timetable showing the work involved in a project, programme or portfolio. It is a dynamic document that is created and maintained throughout the [life cycle](#). Schedules can be created for different aspects of the work and these are an important means of [communication](#) with all team members and [stakeholders](#).

The goals of schedule management are therefore to:

- determine timescales for the work;
- calculate profiles of [resource](#) demand;
- present schedule reports in a format suitable for different stakeholders.

In Praxis, schedule management is divided into two functions – [time scheduling](#) and [resource scheduling](#).

The equivalent in PRINCE2 is the progress theme; in the PMBoK® guide it is the processes, tools and techniques in the [project time management](#) knowledge area and in ISO21500 the processes in the [time](#) subject group.

---

## Schedule management plan

More:

- [Description](#)
- [Templates](#)

[Scheduling](#) is often taken for granted as a routine well established procedure that would not justify a [management plan](#) of its own. Where simple projects are regularly performed this may well be the case although scheduling approaches should still be documented at a programme or portfolio level and assured against this standard.

As more complex projects and programmes are undertaken, more thought should be given to the range of techniques available for both [time scheduling](#) and [resource scheduling](#). This is particularly important where different parts of the work may need to use different techniques but still facilitate consolidation to produce high level schedules.

---

## Schedule performance index (SPI)

More:

- [Encyclopaedia](#)

An [earned value management](#) ratio that indicates how well the project is performing in terms of time. An index of less than 1 indicates that the project is performing worse than planned.

An index of more than 1 indicates that it is performing better. Indices have the advantage over variances of being independent of the overall size of the project.

<p><b>Schedule variance (SV)</b></p> <p>More:</p> <ul style="list-style-type: none"> <li>– <a href="#">Encyclopaedia</a></li> </ul>	<p>An <a href="#">earned value management</a> term that indicates how work is progressing in relation to the <a href="#">baseline schedule</a>. It is the value of the work done less the value of the work which should have been done by now.</p> <p>A negative number shows that less work has been done than was expected in the baseline schedule. A positive number shows that more work has been done than had been planned at this point in the project.</p>
<p><b>Schedule visibility activity</b></p>	<p>An <a href="#">activity</a> in a <a href="#">network diagram</a> that performs the same function as a <a href="#">lead</a>, <a href="#">lag</a> or <a href="#">dummy</a>. The difference is that these activities will show up on a computer generated <a href="#">Gantt chart</a> whereas leads, lags and dummies do not.</p>
<p><b>Schedule visibility task</b></p>	<p>The APM PSMC term for a <a href="#">schedule visibility activity</a>.</p>
<p><b>Schedule/ cost /performance triangle</b></p>	<p>An alternative term for what is more commonly known as the time/ cost/quality triangle.</p> <p>See also <a href="#">triple constraint</a>.</p>
<p><b>Scheduled finish date</b></p>	<p>The date an <a href="#">activity</a> is scheduled to finish must take into account many different influences. The <a href="#">earliest finish</a> dates from <a href="#">critical path analysis</a> only take <a href="#">durations</a> and <a href="#">dependency links</a> into account.</p> <p>Activity dates may be altered by <a href="#">resource scheduling</a> and <a href="#">imposed dates</a>.</p> <p>The scheduled finish is the earliest realistic date for completion of the activity taking all influences into account.</p>
<p><b>Scheduled start date</b></p>	<p>The date an <a href="#">activity</a> is scheduled to start must take into account many different influences. The <a href="#">earliest start</a> dates from <a href="#">critical path analysis</a> only take <a href="#">durations</a> and <a href="#">dependency links</a> into account.</p> <p>Activity dates may be altered by <a href="#">resource scheduling</a> and <a href="#">imposed dates</a>.</p> <p>The scheduled start is the earliest realistic date for starting the activity taking all influences into account.</p>
<p><b>Scheduling</b></p>	<p>Determination of the best means of achieving a project’s general and specific <a href="#">schedule</a> objectives. This involves identification and optimisation of <a href="#">resource availability</a>, <a href="#">constraints</a> and <a href="#">dependency links</a>.</p>
<p><b>Scope</b></p>	<p>The sum of all <a href="#">products</a> to be delivered by the project.</p>

**Scope (ISO21500 subject group)**

An ISO 21500 [subject group](#) that provides a set of [processes](#) for managing [scope](#). The processes comprise:

- [Define scope](#).
- [Create work breakdown structure](#).
- [Define activities](#).
- [Control scope](#).

The equivalent in Praxis are the [scope management](#) functions and their component [procedures](#).

PRINCE2 doesn't have a section devoted to scope and the subject is covered in a variety of areas including the [progress theme](#) and [product-based planning](#) in particular. The control of scope change is covered by the [change theme](#).

The PMBoK® guide and ISO21500 share a very similar structure and the equivalent knowledge area in the PMBoK® guide is [project scope management](#).

---

**Scope baseline**

The defined [scope](#) of the project at the point where it is [baselined](#). Once the baseline is approved it can only be changed through formal [change control](#).

---

**Scope creep**

The term often used to describe the continual extension of the scope of a project due to poor or inadequate [change control](#).

## Scope management

More:

- [Knowledge](#)
- [Competence](#)
- [Capability maturity](#)
- [Resources](#)

Scope management identifies, defines and controls [objectives](#), in the form of [outputs](#), [outcomes](#) and [benefits](#). Its goals are to:

- identify [stakeholder](#) wants and needs;
- specify outputs, outcomes and benefits that meet agreed requirements;
- maintain [scope](#) throughout the [life cycle](#).

Scope is the totality of outputs, outcomes and benefits that should be delivered. The [complexity](#) of the scope is the main distinguishing factor between work that is managed as a project, a programme or a portfolio.

For more complex projects and programmes, scope management is divided into:

- [Requirements management](#).
- [Solutions development](#).
- [Benefits management](#).
- [Configuration management](#).
- [Change control](#).

The APM BoK includes a very similar function. In the PMBoK® guide this area is covered by [project scope management](#) and in ISO21500 by the [scope](#) subject area.

---

## Scope management plan

More:

- [Description](#)
- [Templates](#)

Scope is the defining characteristic when choosing to manage work as a project or a programme. The more complex the [scope](#), the more extensive the range of [management plans](#) needed to describe how it will be managed.

An all-encompassing scope management plan will work for less complex scope. As the [complexity](#) increases some parts of scope may need their own management plan, such as a [benefits management plan](#) for example. Ultimately, the scope management plan may be replaced by management plans for each aspect of managing scope.

---

## Scope tolerance

The permissible deviation in [scope](#) that is allowed before the deviation needs to be escalated to the next level of management.

---

## Scoring methods

More:

- [Encyclopaedia](#)

Scoring methods are used in [investment appraisal](#). They have two primary purposes. Firstly they are useful where [benefits](#) are difficult to quantify objectively; secondly, they can be used to aggregate the results of multiple appraisal methods to provide an overall comparison.

**Scrum**

More:

- [Encyclopaedia](#)

The scrum process is a commonly used development process for [agile](#) projects. It was created by Jeff Sutherland in 1993 using an analogy from the sport of Rugby to represent a highly integrated, cross functional team.

**Scrumban**

An approach to [agile](#) development that combines [scrum](#) and [kanban](#).

**S-curve**

More:

- [Encyclopaedia](#)

The nature of the development of projects and programmes is that the levels of activity increase to a peak during the delivery phase and then tail off towards closure. This means that the consumption of money and [resource](#) similarly builds up to a peak and then declines.

When this is calculated cumulatively and represented graphically it usually has the shape of a horizontally stretched 'S' hence the term 'S-curve'.

**Secondary risk**

A [risk event](#) that comes about as a result of planning a [response](#) to another risk.

**Secondment matrix**

See [strong matrix](#).

**Select suppliers (4.3.36)**

An ISO21500 [implementing](#) process that is concerned with obtaining bids from [suppliers](#), selecting suppliers and awarding [contracts](#).

In Praxis these are all covered by steps in the [procurement](#) and [contract management](#) procedures.

The PMBoK® guide equivalent is [Conduct Procurements](#).

PRINCE2 does not cover this kind of external procurement in any detail.

**Select the project approach and assemble the project brief**

An [activity](#) from the PRINCE2 [Starting Up a Project \(SU\) process](#) that performs two functions. Firstly, it determines how the work to develop the project's [objectives](#) will be approached. For example, whether there will be a bought in solution or something developed in house.

This part of the activity is dealt with by the [solutions development](#) procedure in Praxis. There is no direct equivalent in the PMBoK® guide but it could be considered implicit in the [Define Scope](#) process. Similarly with [Define scope](#) in ISO21500.

The second part of this PRINCE2 activity prepares the [project brief](#). The equivalent in Praxis is the *prepare brief* activity in the [identification process](#).

The nearest equivalent in the PMBoK® guide is [Develop Project Charter](#) and in IS21500 also [Develop project charter](#).

**Seller**

The PMBoK® guide term for a person or company that supplies goods or services to a project.

Referred to in Praxis, PRINCE2 and ISO21500 as the supplier and in the APM BoK as a provider.

**Senior supplier**

This is a role on the [project board](#) of a PRINCE2 project. It is the role that has the required knowledge and experience of the main discipline(s) involved in developing the project's [specialist products](#). The senior supplier represents the interests of [suppliers](#) who provide [resources](#) to the project.

**Senior user**

This is a role on the [project board](#) of a PRINCE2 project. It is the role that represents the interests of the [users](#) of the project's [deliverables](#). This includes ensuring that specifications accurately reflect user needs and that the [specialist products](#) meet those needs.

**Sensitivity analysis**

More:

- [Encyclopaedia](#)

One of the problems with [PERT](#) and [Monte Carlo](#) is that their view of uncertainty in a project is fairly simplistic. For example: if a UK company were evaluating a project to build a factory in Eastern Europe there may be several areas of uncertainty, including currency fluctuations, raw material inflation and interest rates.

The simplest form of sensitivity analysis looks at each factor in turn and analyses the model based on upper and lower estimates. If the analysis is based on cost we would end up with variances in overall project cost in relation to each variable.

The results of sensitivity analysis are often represented as a [tornado chart](#).

**Sequence activities (4.3.21)**

This ISO21500 process deals with the preparation of a [network diagram](#). It involves deciding how [activities](#) are dependent upon one another and identifying any [leads](#) or [lags](#) between activities.

The equivalent in Praxis is the *build model* step in the [time scheduling](#) procedure.

The PMBoK® guide also has a [Sequence Activities](#) process and PRINCE2 addresses the subject in the *identify activities and dependencies* step of the [plans](#) procedure.

**Sequence Activities (6.3)**

This PMBoK® guide process deals with the preparation of a [network diagram](#). It involves deciding how [activities](#) are dependent upon one another and identifying any [leads](#) or [lags](#) between activities.

The equivalent in Praxis is the *build model* step in the [time scheduling](#) procedure.

ISO21500 also has a [Sequence activities](#) process and PRINCE2 addresses the subject in the *identify activities and dependencies* step of the [procedure](#) in the [plans](#) theme.

**Set up the project controls**

This is the activity in a PRINCE2 project where the principles and mechanisms of project control are established. It is included in the [Initiating a Project \(IP\)](#) process.

It includes establishing decision making authorities, ensuring that role descriptions include the necessary control responsibilities and monitoring resources are available.

The outputs of this activity are included in the [project Initiation documentation](#) and constitute what Praxis would call the [control management plan](#) that would be prepared in the *prepare governance documents* activity in the [definition process](#).

ISO21500 and the PMBoK® guide do not explicitly mention a control management plan but the equivalent can be taken as implicit in the [project management plan](#).

**Setting**

More:

- [Knowledge](#)

In Praxis, this topic covers the inherent nature of a project, programme or portfolio that is derived from its [objectives](#) and how they will be achieved.

It has three component topics:

- [Environment](#).
- [Projects, programmes and portfolios](#).
- [Complexity](#).

**Severity**

Sometimes used as an alternative term for impact in [qualitative risk analysis](#) and sometimes used to represent the product of numerical values for impact and probability of a [risk event](#).

**Share**

One of the four possible [opportunity responses](#).



**Shared float**

Float that is shared between all the [activities](#) on a particular path in [critical path analysis](#).

If consecutive activities have 4 days' float this does not mean that both activities could be delayed by 4 days. The float on these two activities is shared between them. If the float is used on the first it ceases to become available to the second and vice versa.

Also known as [path float](#).

**Shell**

More:

- [Encyclopaedia](#)

Richard Shell<sup>20</sup> identified five styles of [negotiation](#) which are closely based on the [Thomas-Kilmann](#) conflict model. This in turn was based on the [Blake and Mouton](#) managerial grid. Not only does this highlight the importance of negotiation in [conflict management](#) but it also shows that anyone's innate characteristics show themselves in different ways in different contexts.

**Shewhart cycle**

More:

- [Encyclopaedia](#)

The Shewhart cycle is also known as the 'plan-do-check-act' cycle and was popularised by Edwards Deming who attributed it to W.A. Shewhart.

The cycle is a form of [cybernetic control](#) in a production environment but particularly lends itself to [P3 management](#).

The cycle has four steps: Plan, Do, Check, Act. These steps are reflected in most project management methodologies.

**Should-cost estimate**

An internal estimate of the likely cost of a product or service to be used as a check against [supplier](#) quotations.

**Site overheads**

Overhead costs of a construction project. Generally referred to as 'prelims' in the UK.

**Situational leadership model**

See [Hersey and Blanchard](#).

**Skill group**

Some computer packages allow the definition of group resources or skill groups. The [resource scheduling](#) algorithm then chooses the most appropriate resource from the group, for an [activity](#), based on its availability and efficiency.

**Slack**

Originally the flexibility in the dates of an [event](#) in an [activity on arrow](#) network i.e. [late event time](#) - [early event time](#). Now frequently used synonymously with [float](#).

---

<sup>20</sup> Shell, G.R., (2006), Bargaining for advantage, Penguin Books, New York.

**Slip chart**

A schedule showing the slippage of [activities](#) or [milestones](#). The chart normally shows the [baseline](#) next to the latest forecast so that the slippage can be easily seen.

**Slippage**

The time difference between the latest scheduled dates for an [activity](#) and the [baseline](#) dates.

**Slippage report**

A report highlighting the time difference between current scheduled dates and the original [baseline](#) dates.

**SMART**

An acronym for the characteristics of well-defined delegated objectives. The letters stand for:

- Specific.
- Measurable.
- Achievable.
- Realistic.
- Time-constrained.

**Solutions development**

More:

- [Knowledge](#)
- [Competence](#)
- [Capability maturity](#)
- [Resources](#)

Solutions development determines the best way of satisfying the requirements for an output. Its goals are to:

- evaluate [baseline](#) requirements and alternative solutions to achieve them;
- select the optimum solution;
- create a [specification](#) for the solution.

[Requirements management](#) produces a clear set of [stakeholder](#) requirements but does not explain how to meet those requirements. Solutions development investigates the technical options for meeting the requirements and will work in conjunction with [investment appraisal](#) that investigates the financial implications of the different options.

The APM BoK also contains a [function](#) for solutions development. In PRINCE2 this is implicit in the selection of the [project approach](#).

The PMBoK® guide combines solutions development with requirements management in the [Collect Requirements](#) process.

ISO21500 makes no specific reference to solutions development, so this should be seen as implicit in the [Define scope](#) process.

**Span activity**

See [hammock](#).

<b>Specialist product</b>	PRINCE2 defines two types of product: specialist products and <a href="#">management products</a> . Specialist products are those that are the <a href="#">deliverable</a> components of the project's end goal.
<b>Specific analogy estimating</b>	A form of <a href="#">comparative estimating</a> where the project being estimated is compared to one other specific, but similar, project.
<b>Specification</b>	Specifications define <a href="#">outputs</a> and are created by the <a href="#">solutions development</a> procedure in Praxis. The structure and content of a specification is entirely dependent on the <a href="#">context</a> . In construction a specification may comprise layouts, elevations, bills of quantities, structural details and so on. In IT, a specification could be <a href="#">functional</a> or technical.
<b>Spike</b>	In <a href="#">agile</a> development this is a piece of work that gathers information, does research or produces a <a href="#">prototype</a> in order for a <a href="#">user story</a> to be completed.
<b>Spiral life cycle</b>	A <a href="#">life cycle</a> model, drawn in the form of a spiral, which incorporates elements of both <a href="#">iterative</a> and <a href="#">waterfall</a> development life cycles.
<b>Split activity</b>	A term used in computer based <a href="#">resource limited scheduling</a> where an <a href="#">activity</a> has been split in order to resolve a resource conflict.
<b>Splittable activity</b>	An <a href="#">activity</a> that can be split into one or more sections for the purpose of <a href="#">resource limited scheduling</a> .
<b>Sponsor</b>	If one person fulfils the role of <a href="#">sponsorship</a> , they are usually referred to as the sponsor.
<b>Sponsoring group</b>	A group formed to fulfil the function of <a href="#">sponsorship</a> .

## Sponsorship

More:

- [Knowledge](#)
- [Competence](#)
- [Capability maturity](#)
- [Resources](#)

Sponsorship provides ownership of, and accountability for, the [business case](#) and ensures that the work is governed effectively. The goals of sponsorship are to:

- provide ownership of the business case;
- act as champion for the [objectives](#) of the project, programme or portfolio;
- make [go/no go](#) decisions at relevant points in the [life cycle](#);
- address matters outside the scope of the manager's authority;
- oversee [assurance](#);
- give ad-hoc support to the [management team](#).

There are various names given to the role that provides sponsorship, such as: [executive](#), senior responsible owner or [client](#). In Praxis the role is referred to as the [sponsor](#).

The APM BoK also has a function for sponsorship. In PRINCE2 the function is performed by the [project board](#) through the [Directing a Project \(DP\) process](#).

In the PMBoK® guide sponsorship is briefly explained in the section on project stakeholders and governance. ISO21500 makes many references to the sponsor throughout the guide. These collectively describe the function of sponsorship.

---



Featured article: [Business Case, lies and gambles](#)

### Sponsorship process

More:

- [Method](#)

This [process](#) does not have an equivalent [phase](#) in the project or programme [life cycle](#). It describes the [activities](#) that a [sponsor](#) must perform to exercise overall control and make key decisions during the life cycle. It also includes aspects of the relationship between the sponsor and the manager.

This process is designed to achieve the goals of the [sponsorship](#) function, i.e. to:

- provide ownership of the [business case](#);
- act as champion for the [objectives](#) of the project or programme;
- make [go/no go](#) decisions at relevant points in the life cycle;
- address matters outside the scope of the manager's authority;
- oversee [assurance](#);
- give ad-hoc support to the [management team](#).

The corresponding process in PRINCE2 is the [Directing a Project \(DP\) process](#). Neither the PMBoK® guide nor ISO21500 have specific sponsorship processes.

### Sprint

A period ranging from two to five weeks that represents an iteration in the [scrum](#) form of [agile](#) development. See also [timebox](#).

### Sprint zero

In [agile](#) this is a [sprint](#) at the beginning of a segment of work that addresses upfront activities. For example, it may create a basic architecture for the project [output](#) so that future sprints can add incremental value in an efficient way. It may involve some [spikes](#).

### Staffing management plan

A PMBoK® guide plan that is a component of the [human resource management plan](#). This describes when team members will be acquired, how they will be acquired and how long they will be needed.

### Stage

The development phase of the project [life cycle](#) is often divided into stages. This is a management technique that introduces key [go/no go](#) points at which the continuing viability of the project can be assessed. Each [stage](#) must be authorised before it can proceed.

### Stage boundary

The point in a project at which one [stage](#) comes to an end and another begins.

See also [boundaries process](#).

### Stage budget

The [budget](#) for a [stage](#) of a project.

<b>Stage gate</b>	See <a href="#">gates</a> .
<b>Stage plan</b>	A <a href="#">delivery plan</a> for a specific <a href="#">stage</a> of a project.
<b>Stakeholder</b>	Anyone who has an interest in the performance or outcome of the project. Stakeholders are identified and a <a href="#">communications plan</a> shows how they will be kept involved or informed.
<b>Stakeholder (ISO21500 subject group)</b>	<p>An ISO21500 subject group that provides a set of processes for managing <a href="#">stakeholders</a>. The processes comprise:</p> <ul style="list-style-type: none"> <li>• <a href="#">Identify stakeholders</a>.</li> <li>• <a href="#">Manage stakeholders</a>.</li> </ul> <p>The equivalent in Praxis is the <a href="#">stakeholder management</a> function and its component procedure.</p> <p>In PRINCE2, stakeholders are covered in the <a href="#">organisation theme</a>.</p> <p>The PMBoK® guide and ISO21500 share a very similar structure and the equivalent <a href="#">knowledge area</a> in the PMBoK® guide is <a href="#">project stakeholder management</a>.</p>
<b>Stakeholder analysis</b>	The systematic collection and collation of qualitative and quantitative information about <a href="#">stakeholders</a> .
<b>Stakeholder engagement</b>	Sometimes used synonymously with the term <a href="#">stakeholder management</a> . In Praxis this is a step within the stakeholder management procedure.
<b>Stakeholder management</b> More:	<p>Stakeholder management ensures that <a href="#">stakeholders</a> are appropriately involved in all aspects of the project, programme or portfolio. Its goals are to:</p> <ul style="list-style-type: none"> <li>• ensure that the views and attitudes of all stakeholders are understood;</li> <li>• <a href="#">influence</a> stakeholders to be supportive of the work wherever possible;</li> <li>• maximise the impact of supportive stakeholders;</li> <li>• minimise the impact of unsupportive stakeholders.</li> </ul> <p>The APM BoK also has a function for stakeholder management. In PRINCE2 this is covered in the <a href="#">organisation theme</a>. ISO21500 has a <a href="#">subject group</a> called <a href="#">stakeholder</a> and the PMBoK® guide has a <a href="#">knowledge area</a> called <a href="#">project stakeholder management</a>.</p>

**Stakeholder management plan**

More:

- [Description](#)

A management plan that sets out the preferred procedures, tools and techniques to be used in managing [stakeholders](#).

**Stakeholder mapping**

More:

- [Encyclopaedia](#)

[Stakeholder management](#) requires the management team to have a thorough understanding of [stakeholders](#) and their interests. This is often achieved through stakeholder mapping.

Different things can be mapped but the first and most obvious is to map stakeholders against their interest in a project, programme or portfolio. This may result from, or be supplemented by, an [influence diagram](#).

**Stakeholder matrix**

See [stakeholder mapping](#).

**Stakeholder profile**

A document that contains information about a [stakeholder](#). This will range from the administrative (e.g. contact details) to the assessment of their areas and levels of interest.

This profile is the basis of deciding how best to engage with individual stakeholders.

**Stakeholder register**

A register of information about individuals and groups who have an interest in the work being performed.

**Standard portfolio**

See [portfolio](#).

**Stand-up meeting**

See [daily stand-up](#).

**Start activity**

An [activity](#) in a [precedence diagram](#) which deliberately has no [predecessors](#), i.e. it represents a start point in the network. Networks can have multiple start activities.

**Start event**

The event at the start of an [activity](#) in an [activity on arrow diagram](#). Also known as an [i-node](#).

**Start float**

Float normally indicates that the completion of an [activity](#) can be delayed without affecting the [critical path](#). When [start to start links](#) are used, the finish of an activity may be on the critical path but its start is not. The activity is then said to have [start float](#).

**Start to finish link**

A type of dependency link in a [precedence diagram](#) which indicates that the finish of the [successor](#) may not occur until the [predecessor](#) has started. Hardly ever used.

**Start to start link** A type of dependency link in a [precedence diagram](#), which indicates that the start of the [successor](#) may not occur until the [predecessor](#) has started. Also known as an SS link.

**Starting Up a Project (SU)** This is the first process in the PRINCE2 method and addresses the first [phase](#) of the project [life cycle](#). Its main output is the [project brief](#). This is used by the [project board](#) to assess whether approval should be given for the [Initiating a Project \(IP\)](#) stage.

The equivalent in Praxis is the [identification process](#).

Although the approach in the PMBoK® guide and ISO21500 is different, they both contain an integration process that is very similar in scope to Starting Up a Project. In the PMBoK® guide this is [Develop Project Charter](#) and in ISO21500 it is also [Develop project charter](#).

**Statement of work (SoW)** The PMBoK® guide and ISO21500 term for a document that defines the [products](#) or services that will be created by the project. It also explains the business need and how the project fits with organisational strategy.

There is no direct equivalent in Praxis and PRINCE2 but there are commonalities with the [mandate](#), [brief](#) and [outline business case](#).

The [APM PSMC](#) also uses the term but in this case it is equivalent to a high level specification.

**Steps** Steps are components of an [activity](#) that are used to measure the progress of the activity in an objective way.

In a large [network diagram](#) the use of steps enables the number of activities to be reduced.

**Storming** The second stage of team building in the [Tuckman](#) model.

**Story points** User stories in an [agile](#) project are not of equal difficulty. Therefore, [scrum](#) teams often use an arbitrary measure called story points. These are a qualitative measure of the effort required to complete a [user story](#). The resulting estimated story points can then be used to measure [velocity](#).

**Strategic management** A function in the APM BoK that describes the strategic management that gives rise to projects, programmes and portfolios. This is considered to be out of scope by the other guides.



### Strategic schedule

The [APM PSMC](#) refers to this as a high level [schedule](#) produced early in the project [life cycle](#) to help determine the relationship with other projects. This would therefore constitute a programme or portfolio level schedule.

---

### Strong matrix

More:

- [Encyclopaedia](#)

The best [matrix organisation](#) for a company that manages many projects, is the strong matrix. This takes the project managers out of the departmental structure and places them in a project management group reporting to a projects director or [PMO](#) head.

In this organisation, each project manager is able to concentrate on the needs of the project without being distracted by departmental loyalties. The creation of a role that heads P3 management provides someone at a level equal to the departmental managers who can address functional conflicts between projects in an impartial way.

---

### Structured portfolio

See [portfolio](#).

---

### Subject groups (ISO21500)

An ISO21500 subject group is a set of processes related to a particular area of project management, such as risk, cost or communication. The full list of subject groups is:

- [Integration](#).
- [Stakeholder](#).
- [Scope](#).
- [Resource](#).
- [Time](#).
- [Cost](#).
- [Risk](#).
- [Quality](#).
- [Procurement](#).
- [Communication](#).

The same set of processes are used to manage the overall project and subdivisions within it, such as a [phase](#), [stage](#) or [sub-project](#).

The equivalents in Praxis are the knowledge [functions](#) with each Praxis [procedure](#) performing the same function as the set of ISO21500 [processes](#).

The PMBoK® guide and ISO21500 share a very similar structure with the PMBoK's knowledge areas being equivalent to the ISO21500 subject groups.

In PRINCE2 the closest equivalents are the [PRINCE2 themes](#).

---

<b>Subjective estimating</b>	<a href="#">Estimating</a> that is based purely on the expert judgement of the estimator.
More:	
–	<a href="#">Encyclopaedia</a>

---

<b>Sub-network</b>	The subset of a project <a href="#">network diagram</a> relating to a <a href="#">sub-project</a> .
--------------------	---

---

<b>Sub-project</b>	<p>Where project <a href="#">networks</a> become very large, it is useful to adopt a layered approach. The top level network comprises large sections of work as single <a href="#">activities</a> which are then broken down into more detailed networks. <a href="#">Critical path analysis</a> must then work down through the levels and back up again to perform the overall calculation.</p> <p>See also <a href="#">hierarchy of networks</a>.</p>
--------------------	---

---

<b>Succeeding activity</b>	See <a href="#">successor</a> .
----------------------------	---------------------------------

---

<b>Success criteria</b>	The measurable criteria that must be met by a project or programme. Most criteria relate to the time, cost and <a href="#">scope</a> (including <a href="#">benefits</a> ) aspects, but levels of risk and customer satisfaction with the project or programme management could also be success criteria.
-------------------------	---

---

<b>Success factors and maturity</b>	<p>An APM BoK function that deals with <a href="#">capability maturity</a>.</p> <p>The equivalent function in Praxis is called capability maturity which views the attributes of the capability maturity model as being the success factors.</p>
-------------------------------------	--

---

<b>Successor</b>	An <a href="#">activity</a> which logically succeeds another in a <a href="#">network diagram</a> .
------------------	---

---

<b>Summary activity</b>	See <a href="#">hammock</a> .
-------------------------	-------------------------------

---

<b>Sunk costs</b>	<p>Costs that could not be avoided even if the project or programme were to be terminated i.e. these are the <a href="#">actual costs</a> to date plus the <a href="#">committed costs</a> at the point where termination is proposed.</p> <p>If the sunk costs are a high proportion of the total cost of completing the project or programme it may be better to continue rather than terminate even if the full <a href="#">business case</a> cannot be achieved.</p>
-------------------	--

---

<b>Supercritical</b>	If an <a href="#">imposed finish</a> has been set, the <a href="#">critical path</a> leading to that point may be too long to finish by that date. The critical path then becomes supercritical and possesses <a href="#">negative float</a> . Also referred to as hypercritical.
----------------------	---

## Supplier

The term used by Praxis, PRINCE2 and ISO21500 to represent a person or company that supplies goods or services to a project.

In the PMBoK® guide the supplier is referred to as a seller and in the APM BoK as a provider.

## Support

More:

- [Knowledge](#)
- [Capability maturity](#)
- [Resources](#)

Support is a set of specialist and administrative services carried out on behalf of project, programme or portfolio managers. A support infrastructure can be constituted in many different ways with many different roles within the realm of P3 management. A definitive set of goals for support is impractical but they are generally drawn from the broad list shown below:

- provide administrative support to P3 managers;
- support the [governance](#) of P3 management;
- provide specialist technical support;
- conduct [assurance](#).

In the APM BoK, the support role is covered by the infrastructure function. PRINCE2 has a short section on support in the [organisation theme](#). Neither the PMBoK® guide nor ISO21500 address support.

## Synergistic contingency evaluation and response technique (SCERT)

A method for analysing networks based on probability distributions of [duration](#) and progress. This is a complex method which has developed from [PERT](#) and [GERT](#) and is used more for retrospective analysis of projects to improve future planning.

## Take corrective action

An activity from the PRINCE2 [Controlling a Stage](#) (CS) process.

This PRINCE2 activity deals with actions taken by the project manager within the agreed [tolerances](#) of a [stage](#) or project. There may be input by the [project board](#) to any decisions made but this process does not cover the situation where [issues](#) have to be formally escalated to the project board.

The equivalent activity in Praxis is the *corrective action* activity in the [delivery process](#).

The PMBoK® guide process [Direct and Manage Project Work](#) makes specific reference to the need to take corrective action but the corresponding ISO21500 process, [Direct project work](#), does not.

ISO21500 prefers to refer to corrective action as an output of individual control processes such as [Control resources](#) and [Control risks](#).

**Tannenbaum and Schmidt**

More:

- [Encyclopaedia](#)

Robert Tannenbaum and Warren Schmidt first published their views on leadership styles in 1958<sup>21</sup> and updated their model in 1973<sup>22</sup>.

The model focuses on the delegation of authority from a manager to the team. In the original 1958 model the language of ‘subordinates’ and ‘superiors’ reflects its age, but the principles hold true.

**Target finish date**

See [imposed finish](#).

**Target schedule**

An alternative name for the [baseline schedule](#).

**Target start date**

See [imposed start](#).

**Task**

Usually synonymous with [activity](#). Some sources regard a task is a sub-division of an activity, others maintain that the opposite is true.

**Team manager**

In PRINCE2 the team manager is the person given responsibility for a [work package](#).

**Team plan**

The lowest level of PRINCE2 plan. Its scope typically covers a [work package](#) allocated to a team.

**Teamwork**

More:

- [Knowledge](#)
- [Competence](#)
- [Resources](#)

Teamwork is how a group of people come together to collaborate and co-operate in achieving common objectives. The goals of teamwork are to:

- create a team from a collection of individuals;
- develop and maintain the performance of the team.

Teams exist in all walks of life from working teams to sporting teams. The difference between a team and a group of individuals is the team’s collective commitment to agreed objectives. All teams are made up of individuals and regardless of the context of the team, human nature means that they go through similar stages of development and suffer from the same problems.

Teamwork is also a function in the APM BoK. Neither PRINCE2 nor ISO21500 address the subject. The PMBoK® guide has a brief explanation in the tools and techniques part of the [Develop Project Team](#) process.

<sup>21</sup> Tannenbaum, R. & Schmidt, W., How to Choose a Leadership Pattern, Harvard Business Review March-April (1958).

<sup>22</sup> Tannenbaum, R. & Schmidt, W, How to Choose a Leadership Pattern, Harvard Business Review May-June (1973).

<p><b>Technical stage</b></p>	<p>PRINCE2 differentiates between technical <a href="#">stages</a> and management stages. Technical stages are defined by the technical content of the work (e.g. design, build etc.) rather than for the purpose of management <a href="#">control</a>.</p>
<p><b>Tender</b></p>	<p>A document in which a supplier offers a price for completion of a given <a href="#">specification</a> of work.</p>
<p><b>Termination</b></p>	<p>The conclusion of the <a href="#">product life cycle</a> where a product is decommissioned at the end of its useful life.</p>
<p><b>Thamhain and Wilemon</b> More: – <a href="#">Encyclopaedia</a></p>	<p>Thamhain and Wilemon<sup>23</sup> conducted a study to investigate the sources of conflict in the project management <a href="#">life cycle</a>.  First of all, Thamhain and Wilemon identified the seven main sources of conflict on a project. These were: <a href="#">schedule</a>, priorities, manpower, technical options, procedures, cost and personality. They then assessed the relative intensity of conflict from these sources at different <a href="#">phases</a> in a four phase life cycle.</p>
<p><b>Theme (PRINCE2)</b></p>	<p>See <a href="#">PRINCE2 themes</a>.</p>
<p><b>Thomas-Kilmann</b> More: – <a href="#">Encyclopaedia</a></p>	<p>Kenneth Thomas and Ralph Kilmann based their conflict style inventory on the managerial grid developed by <a href="#">Blake and Mouton</a>. They arranged five <a href="#">conflict resolution</a> approaches on scales of two individual characteristics: assertiveness and cooperativeness.  They also developed the Thomas-Kilmann Conflict Mode Instrument that is used to identify an individual's natural tendencies when dealing with conflict.</p>
<p><b>Threat</b></p>	<p>A risk that could have a negative impact on the <a href="#">objectives</a> of a project or programme.  When most people refer to risk they are actually thinking of a <a href="#">threat</a> but risks can also be <a href="#">opportunities</a>.</p>

<sup>23</sup> Thamhain, H.J. and Wilemon D. L., (1975). Conflict management in project life cycles. Sloan Management Review.

### Threat response

There are four ways of responding to a negative risk or **threat**. These are:

**Avoid:** Find a way of performing the work that avoids the risk.

**Transfer:** Contractually transfer the risk to someone else, e.g. insurance or a **fixed price contract**.

**Reduce:** Find a way of performing the work that reduces the impact it will have should it occur.

**Accept:** Simply accept that there is no cost effective action that can reasonably be taken.

### Three duration technique

A method for reducing **estimating** uncertainty. Three **activity durations** are estimated: **optimistic**, **likely** and **pessimistic**. Analysis methods such as **PERT** and **Monte Carlo** simulation are performed to make statistical estimates of the completion date of the project.

### Three-point estimate

See **three duration technique**.

### Tied activity

An **activity** that must be performed immediately, or within a pre-determined time, after its **predecessor**.

### Time & materials contract

A **payment method** that is a combination of **cost plus** and **fixed price** contracts. Fixed prices can be agreed for component **products** but because the full **scope** of the project is not defined, the total cost is not known at the outset. The contractor is paid for their time at an agreed rate and the materials at cost plus a fee.

### Time (ISO21500 subject group)

An ISO21500 **subject group** that provides a set of **processes** for managing time. The processes comprise:

- **Sequence activities.**
- **Estimate activity durations.**
- **Develop schedule.**
- **Control schedule.**

The equivalent in Praxis are the **schedule management** functions and their component **procedures**.

PRINCE2 covers this in the **plans theme**.

The PMBoK® guide and ISO21500 share a very similar structure and the nearest equivalent **knowledge area** in the PMBoK® guide is **project time management**.

---

<b>Time / Cost / Quality triangle</b>	See <a href="#">triple constraint</a> .
<b>Time analysis</b>	See <a href="#">critical path analysis</a> .
<b>Time chainage chart</b> More	A form of chart that combines <a href="#">line of balance</a> with a physical layout of the work being done.
– <a href="#">Encyclopaedia</a>	
<b>Time contingency</b>	Time added to the <a href="#">duration</a> of an <a href="#">activity</a> that takes <a href="#">estimating</a> uncertainty into account.  See also <a href="#">buffer</a> .
<b>Time limited resource scheduling</b>	An alternative name for <a href="#">resource smoothing</a> .
<b>Time now date</b>	See <a href="#">progress date</a> .
<b>Time phased network</b>	See <a href="#">time scaled network</a> .
<b>Time risk allowance</b>	A collective term for techniques that allow for <a href="#">estimating</a> uncertainty such as <a href="#">buffers</a> and the <a href="#">three duration technique</a> .
<b>Time scaled network</b>	A <a href="#">network diagram</a> drawn so that the length of the <a href="#">arrows</a> or <a href="#">boxes</a> is proportional to their <a href="#">duration</a> .  If <a href="#">precedence diagrams</a> are drawn against a time scale they effectively become <a href="#">linked bar charts</a> .
<b>Time scheduling</b> More:	Time scheduling techniques are used to develop and present schedules that show when work will be performed and products delivered. The goals of time scheduling are to: <ul style="list-style-type: none"> <li>• construct a model for use in numerical analysis;</li> <li>• calculate dates for components of work;</li> <li>• determine where there is flexibility in the schedule.</li> </ul> <p>Time scheduling is also a function in the APM BoK. The relevant tools and techniques are covered in the PRINCE2 <a href="#">progress theme</a> and the PMBoK® guide <a href="#">project time management</a> knowledge area.</p> <p>ISO21500 has the processes in the <a href="#">time</a> subject group but doesn't explain the tools and techniques.</p>

**Time sheet** A means of recording the [actual effort](#) expended against project and non-project activities by individuals working on the project.

**Time tolerance** The permissible deviation in [schedule](#) that is allowed before the deviation needs to be escalated to the next level of management.

**Timebox** Timeboxes are used in [agile](#) approaches to project management. They represent a period of typically two to five weeks, sometimes referred to as [sprints](#) or iterations.  
 More  
 – [Encyclopaedia](#)  
 Each timebox starts with a [backlog](#) of prioritised [products](#) or features.

**Time-driven control** A term used in PRINCE2 for a periodic [control](#) point, e.g. a monthly progress review.

**Tolerance** Effective project or programme control requires management by exception between levels of the [management team](#). The [sponsor](#) will [delegate](#) authority to the project or programme manager and the manager will, in turn, delegate authority to managers of [sub-projects](#) or teams.  
 When a project, sub-project or [work package](#) is delegated, performance criteria for scope, time and cost will be stated. Tolerances define how much the person managing delegated work can deviate from these performance targets before having to report an [issue](#) to the level of management above. See also [triggers](#).

**Tolerance threat** A term used by PRINCE2. If the status of a [stage](#) is such that the project manager is unable to keep the [stage plan](#) within agreed [tolerances](#), then the situation must be escalated to the [project board](#). This is known as a tolerance threat.

**Top down estimating** Initial estimating is usually performed top down. Before the full [work breakdown structure](#) has been developed, [estimates](#) are likely to be based on [parametric estimating](#) or [comparative estimating](#) and be less accurate than estimates that can be produced once all the detailed [activities](#) have been defined and [bottom up estimating](#) can be performed.

**Tornado chart** A diagram that illustrates the upper and lower bounds of a range of variables resulting from a [sensitivity analysis](#). When the variables are ordered with the most volatile at the top and the most stable at the bottom, the result is similar to a cross section through a tornado.  
 More:  
 – [Encyclopaedia](#)



**Total float**

The amount of time an **activity** may be delayed without extending the **critical path**.

The short formulae often used for calculating total float are:

**Latest start** – **earliest start**, or

**Latest finish** – **earliest finish**

However, these formulae are only true for activities with **finish to start** links. The full formula that works for all types of dependency link is:

Total float = latest finish – earliest start – duration

**Tracking**

The process of collecting actual time, cost and **resource** progress information and feeding this back into the project **schedule**.

**Tranche**

A group of projects within a programme that produce a distinct component of the **blueprint**.

Tranches provide a means of breaking a programme up into manageable pieces. It is advisable to construct tranches that deliver a definable set of **benefits**. The implication of this is that a tranche will have its own **business case**. At the end of each tranche a **benefits review** will be performed and the **sponsor** will consider the business case for the next tranche.

**Tranche budget**

The **budget** for a **tranche** of a programme.

**Tranche business case**

The justification for investment in a **tranche** of work within a programme.

**Transfer**

One of the four possible **threat responses**.

**Transition plan**

In the context of an organisational change programme, the **outputs** of projects must be delivered and then used in some beneficial way. Work must be done to change the existing operational model to the new operational model. The schedule of technical change and **change management** activities needed are contained in a transition plan.

**Treat risks (4.3.30)**

This ISO21500 process evaluates the identified **risk events** (both **threats** and **opportunities**) and decides how best to respond to them. The **project management plan** will be updated accordingly.

The equivalent in Praxis is the *plan risk responses* step in the **risk management** procedure; In PRINCE2 it is the *plan* step in the **risk** theme procedure; in PMBoK® guide it is **Plan Risk Responses**.

**Trend analysis**

The use of mathematical models to forecast future performance based on historical data. The use of performance indices in [earned value](#) to predict eventual cost and completion dates are an example of trend analysis.

**Triangular distribution**

A statistical distribution that is commonly used in [PERT](#) analysis and [Monte Carlo analysis](#).

**Trigger**

A threshold that is set to determine when an [issue](#) should be escalated.

One example of the type of indicators that could be used as triggers are [schedule performance index](#) (SPI) and [cost performance index](#) (CPI) from [earned value analysis](#). E.g. if a project's CPI drops below 0.95 the [control management plan](#) may specify that this must be escalated to the project sponsor.

**Triple constraint**

More:

- [Encyclopaedia](#)

The triple constraint is one of the fundamental truths of P3 Management. Also known as the 'iron triangle', it has spawned many variations but these often dilute the impact of the original.

In its simplest form the triangle shows the relationship between the [objectives](#) of the work (scope), the time it will take to produce them and how much it will cost to complete the work.

The significance of the triangle is that it is the most stable geometric shape and emphasises that any attempt to make changes to one corner of the triangle will have an immediate impact on the other two.

**Tuckman**

More:

- [Encyclopaedia](#)

Bruce Tuckman first published his model of group dynamics in 1965. It originally comprised the four stages: forming, storming, norming and performing. In 1977 he added the fifth stage: adjourning, and other sources have added a sixth: mourning.

**Uniform distribution**

A distribution used in [Monte Carlo analysis](#) to indicate that all [durations](#) or costs between the [optimistic](#) and [pessimistic](#) duration estimates have an equal chance of occurring.

**Unlimited schedule**

A [schedule](#) calculated based upon unlimited availability of [resources](#), i.e. the opposite of a [resource limited schedule](#). [Critical path analysis](#) is a form of unlimited schedule because it does not take resource limits into account when scheduling [activities](#).

**Update the business case**

An [activity](#) from the PRINCE2 [Managing a Stage Boundary](#) (SB) process.

At a [stage boundary](#) in PRINCE2, the forthcoming [stage plan](#) is produced and this results in the [project plan](#) being updated. The revised plans are then used to update the project's [business case](#) so that a decision can be made whether or not to proceed with the next stage.

In Praxis this is incorporated in the plan next [tranche](#)/stage activity in the [boundaries process](#). Since neither PMBoK® guide nor ISO21500 define stages, keeping the business case up to date is an ongoing process.

---

**Update the project plan**

An [activity](#) from the PRINCE2 [Managing a Stage Boundary](#) (SB) [process](#). At each [stage boundary](#) the [project plan](#) is updated to reflect the final version of the [stage plan](#) being concluded and the latest plan for the next stage. This activity will also be triggered by the preparation of an [exception plan](#).

In Praxis, this is covered by the *assemble documentation* activity in the [boundaries process](#).

Neither ISO21500 nor the PMBoK® guide have a formal approach to stages built into their processes. Such updates should be considered implicit in processes such as [Monitor and Control Project Work](#) (PMBoK® guide) and [Control project work](#) (ISO21500).

---

**User acceptance**

Acceptance by the person or group who will use a [deliverable](#) once it has been [handed over](#).

---

**User story**

A user story is a type of [functional specification](#) used in [agile](#) development. It describes a software feature from the perspective of the [user](#) experience. It includes a description of the user, what they want and why.

---

**Users**

The group of people who are intended to benefit from, or operate the [products](#) of, the project. The users are key [stakeholders](#) in the project.

PRINCE2 nominates a [senior user](#) who sits on the [project board](#) to provide [sponsorship](#).

---

**V life cycle**

A [life cycle](#) model, drawn in the form of a 'V', which demonstrates the relationship between earlier and later phases of the life cycle.

---

**Validate Scope (5.5)** The PMBoK® guide process that formalises the [acceptance](#) of [deliverables](#).  
 In Praxis this is covered by the *accept completed work* activity in the [delivery process](#) and in PRINCE2, by the [receive completed work packages](#) activity in [Controlling a Stage \(CS\)](#).  
 There is no explicit reference to the [validation](#) or acceptance of deliverables in ISO21500.

**Validation** A technique that checks that a [product](#) satisfies [user](#) requirements.  
 Validation ensures that the correct product is being developed as opposed to [verification](#) which ensures that the solution is being developed correctly.

**Validation and verification requirements matrix** A term used by the [APM PSMC](#) that encompasses elements of the [V life cycle](#) and a [requirements traceability matrix](#).

**Value** In [value management](#), value is the ratio of ‘satisfaction of requirements’ over ‘use of resources’.

**Value engineering** A technique for generating alternative actions to improve the [value](#) of a product by balancing time and cost without affecting the [product’s](#) ability to meet [user](#) requirements.

**Value for money ratio** The ratio of monetary and non-monetary [benefits](#) to the investment made to achieve them.

**Value management** Value management is concerned with maximising the [value](#) of [benefits](#) delivered by a project or programme. Since ‘value’ is a subjective term it is important that a balance is maintained between different [stakeholder](#) perceptions of what value actually means.  
 There are many different approaches to the value management procedure but they all follow the same general principles. The technique initially spans the [requirements management](#) and [solutions development](#) functions but some aspects should be continued through the delivery phase of the [life cycle](#).

**Value tree** A diagram that shows the hierarchy of factors that drive [value](#), and the relationships between them.

**Variance at completion (VAC)**

More:

- [Encyclopaedia](#)

In [earned value management](#) this is the [budget at completion](#) less the [estimate at completion](#). A negative result indicates that the project is over budget.

---

**Variant**

A term used in PRINCE2 [product-based planning](#). This is a variation of a baselined [product](#). For example, if this glossary was a product then an Italian translation would be a variant of that product rather than an entirely different product.

---

**Variation of price contract**

More:

- [Encyclopaedia](#)

A form of [fixed price contract](#) where the price is adjusted to take external factors such as increased prices, inflation or deflation into account.

Sometimes referred to as a fixed price with economic price adjustment contract.

---

**Variation order**

The term used mainly in the construction and engineering industries for an approved technical change to a project.

---

**Velocity**

Velocity is a measure of performance in an [agile](#) project. The velocity is the number of units of work completed in a certain interval. Typically this may be the number of [story points](#) completed in each [sprint](#).

---

**Verification**

A technique that checks that a [product](#) meets its [acceptance criteria](#).

Verification ensures that the solution is being developed correctly as opposed to [validation](#) which ensures that the correct product is being developed.

---

**Vertical integration**

A term used by the [APM PSMC](#) to refer to one aspect of the [assurance](#) of a project [schedule](#).

This form of schedule assurance confirms that the data at different levels of detail (e.g. within a [hierarchy of networks](#)) is consistent and that each network covers the relevant scope.

See also [horizontal integration](#).

---

**Vision statement**

More:

- [Description](#)
- [Sample](#)

A vision statement is a brief description of the end goal of a [complex](#) project or programme. The need for a succinct and memorable description is necessary where there are many [stakeholders](#) who need to gain an insight into the end result of a complex piece of work.

## Waterfall

A term used to represent predominantly linear development approaches where (for example) design is completed before development starts and development finishes before testing starts.

Often drawn in a way that graphically resembles a waterfall and usually used to contrast the linear approach to more iterative approaches such as [agile](#).

---

## WBS dictionary

See [work breakdown structure dictionary](#).

---

## Weak matrix

More:

- [Encyclopaedia](#)

A form of [matrix organisation](#) where projects are co-ordinated by people within the functional departments because departmental boundaries do not allow central co-ordination of the project.

Often there is no real project manager with overall responsibility for the management of the project and the co-ordination is likely to be a joint effort between representatives of different departments. This structure is sometimes known as a co-ordination matrix.

---

## Weighted milestone method

More:

- [Encyclopaedia](#)

An [earned value management](#) method that divides a [work package](#) into segments so that each segment ends with a [milestone](#). The milestones are then assigned a weighted proportion of the work package costs.

See also [earning rules](#).

---

## What-if analysis

In the days before the widespread use of computers, [critical path analysis](#) had to be done by hand. This could take some time and it was unlikely that a planner would repeat the calculation many times in order to test all the questions that start with "What if we tried a different approach?" or "What if that change were to be accepted?"

Computer based scheduling enables many alternatives to be tried with ease in order to test alternative ways of working, the impact of change requests and solutions to problems.

---

## What-if simulation

The performance of a number of analyses (typically those based on a [network diagram](#)) according to pre-set parameters, in order to simulate the behaviour of the project under specific varying conditions.

Could be part of a [sensitivity analysis](#).

---

## Whole life cost

The total cost of ownership over the life of an asset. In some cases this is used in a [business case](#) rather than just the cost of creating the asset.

---

## Window analysis

The comparison of the [baseline schedule](#) and the [as-built schedule](#) for a particular period.

---

**Work breakdown code**

See [breakdown code](#).

**Work breakdown structure (WBS)**

More:

- [Encyclopaedia](#)

A tree diagram that breaks down the project in increasing levels of detail.

Each element of the structure is a [product](#) for which [acceptance criteria](#) will be defined. The WBS is the basis of the definition of what a project is intended to produce to meet its [objectives](#).

With the use of project planning software the practical application of the WBS has increasingly been to define [activities](#) rather than products as the elements within the structure.

This prompted some sources to specify a distinct [product breakdown structure](#) or product-based work breakdown structure.

**Work breakdown structure dictionary**

A term used by the PMBoK® guide, ISO21500 and the APM PSMC for a document that provides detailed [deliverable](#), [activity](#) and [scheduling](#) information about each component on the [work breakdown structure](#) (WBS).

WBS components are similar to [work packages](#) in Praxis and PRINCE2 and so the dictionary is the equivalent of a compendium of work package descriptions.

**Work calendar**

See [calendar](#).

**Work package**

A package of [deliverable](#) work that is sufficiently well defined to allow it to be [delegated](#) to a person or team.

Precise definitions vary slightly. For example, the PMBoK® guide defines a work package as being at the lowest level of each branch of a [work breakdown structure](#).

Praxis and PRINCE2 have a broader definition where a work package is a combination of [product](#) information together with all the time, cost and other information required to delegate the work.

PRINCE2 goes further and has a formal definition where the work package is 'the set of information that provides all the information that an individual or team need in order to successfully deliver the component products'. It also confirms agreement between the project manager and individual or [team manager](#) that the work can be done within the defined constraints.

**Workaround**

A response to an [issue](#) that is not a planned response, i.e. as distinct from a pre-determined [contingency plan](#).

A workaround of sufficient size to warrant replanning would result in an [exception plan](#).

---

**Working time**

Time measured according to the working week, i.e. in a normal five day week the working time of five days equates to seven days of elapsed time.

---

**Zero float**

A term used when referring to the fact that an [activity](#) on the [critical path](#) has no [float](#).

---



The printed version of the Praxis framework is published by the Association for Project Management.

[Click here](#) to go to the APM book store.



Published by Praxis Framework Ltd.

[www.praxisframework.org](http://www.praxisframework.org)

info@praxisframework.org