

INTRODUCTION

PRINCE (**PR**ojects **IN** Controlled **E**nvironments) is a structured method for effective project management. The method was first established in 1989 by CCTA (the Central Computer and Telecommunications Agency). PRINCE was developed from PROMPTII, a project management method created by Simpact Systems Ltd in 1975. PROMPTII was adopted by CCTA in 1979 as the standard to be used for all government information system projects. PRINCE superseded PROMPTII in 1989 within government projects.

CCTA (now the Office of Government Commerce) continued to develop the method, and PRINCE2 was launched in 1996 in response to user requirements for improved guidance on project management on all projects, not just information systems. PRINCE2 is based on the experiences of scores of projects, project managers and project teams, who have contributed, some from their mistakes or omissions, others from their successes.

PRINCE2 is a *de facto* standard used extensively by the UK government and is widely recognised and used in the private sector, both in the UK and internationally.

1.1 Why use a project management method?

Project failures are all too common – some make the headlines, but the vast majority are quickly forgotten. The reasons for failure are many and varied. Some common causes are:

- Insufficient attention to checking that a valid Business Case exists for the project
- Insufficient attention to quality at the outset and during development
- Insufficient definition of the required outcomes, leading to confusion over what the project is expected to achieve
- Lack of communication with stakeholders and interested parties, leading to products being delivered that are not what the customer wanted
- Inadequate definition and lack of acceptance of project management roles and responsibilities, leading to lack of direction and poor decision making
- Poor estimation of duration and costs, leading to projects taking more time and costing more money than expected
- Inadequate planning and co-ordination of resources, leading to poor scheduling
- Insufficient measurables and lack of control over progress, so that projects do not reveal their exact status until too late
- Lack of quality control, resulting in the delivery of products that are unacceptable or unusable.

Without a project management method, those who commission a project, those who manage it and those who work on it will have different ideas about how things should be organised and when the different aspects of the project will be completed. Those involved will not be clear about how much responsibility, authority and accountability they have and, as a result, there will often be confusion surrounding the project. Without a project management method, projects are rarely completed on time and within acceptable cost – and this is especially true of large projects.

A good project management method will guide the project through a controlled, well-managed, visible set of activities to achieve the desired results. PRINCE2 adopts the principles of good project management to avoid the problems just identified and so helps to achieve successful projects. These principles are:

- A project is a finite process with a definite start and end
- Projects always need to be managed in order to be successful
- For genuine commitment to the project, all parties must be clear about why the project is needed, what it is intended to achieve, how the outcome is to be achieved and what their responsibilities are in that achievement.

1.2 Benefits of using PRINCE2

Organisations are becoming increasingly aware of the opportunities for adopting a project approach to the way that they address business change. They are aware of the benefits that a single, common, structured method for project management can bring:

- A method that is repeatable
- A method that is teachable
- Building on experience
- Ensuring that everyone knows what to expect, where, how and when
- Early warning of problems
- Being proactive, not reactive, but also able to accommodate sudden, unexpected events.

Projects may exist in their own right, may have relationships with other projects or may be part of a larger programme of work. PRINCE2 is applicable in all these situations. PRINCE2 provides the organisation with:

- Controlled management of change, in terms of investment and return on investment
- Active involvement of users and stakeholders throughout the project to ensure that the product(s) will meet the business, functional, environmental, service and management requirements
- An approach which distinguishes the management of the project from the development of the product(s), so that the management approach is the same whether the project is to build a ship or to implement new working practices.

PRINCE2 provides benefits to the managers and directors of a project and to an organisation through the controllable use of resources and the ability to manage risk more effectively.

PRINCE2 embodies established and proven best practice in project management. It is widely recognised and understood, providing a common language for all participants in a project.

PRINCE2 encourages formal recognition of responsibilities within a project and focuses on what a project is to deliver, why, when and for whom.

PRINCE2 provides projects with:

- A controlled and organised start, middle and end
- Regular reviews of progress against plan and against the Business Case
- Flexible decision points
- Automatic management control of any deviations from the plan
- The involvement of management and stakeholders at the right time during the project
- Good communication channels between the project management team and the rest of the organisation
- Agreement on the required quality at the outset and continuous monitoring against those requirements.

Project Managers using PRINCE2 are able to:

- Establish terms of reference as a prerequisite to the start of a project
- Use a defined structure for delegation, authority and communication
- Divide the project into manageable stages for more accurate planning
- Ensure that resource commitment from management is part of any approval to proceed
- Provide regular but brief management reports
- Keep meetings with management and stakeholders to a minimum but at the vital points in the project.

Those who will be directly involved with using the products or outcomes of a project are able to:

- Participate in all the decision making on a project
- If desired, be fully involved in day-to-day progress
- Participate in quality checks throughout the project
- Ensure that their requirements are being adequately satisfied.

For senior management of the project, PRINCE2 uses the 'management by exception' concept, i.e. management agree a plan, and then let the Project Manager get on with it unless

something is forecast to go wrong. Senior managers are kept fully informed of the project status without having to attend frequent, time-consuming meetings.

1.3 Support for PRINCE2

There are many service providers offering training, consultancy, tools and services for PRINCE2, thus ensuring a competitive supply of services to support organisations in their implementation and use of the method.

There is an international accreditation programme for trainers and consultants, ensuring a high quality and consistent level of service to organisations. There are professional qualifications in PRINCE2 that assess an individual's knowledge of the method and ability to apply it to project scenarios. In addition, there is an active user group dedicated to the support, promotion and strengthening of the method.

1.4 Structure of the manual

There are five major parts to this manual, as shown in Figure 1.1.

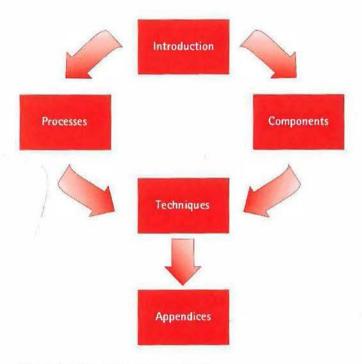


Figure 1.1 Structure of the manual

Introduction presents the basic principles governing project management and how PRINCE2 addresses them; it also shows how PRINCE2 fits with the related topic of programme management.

Processes describes the PRINCE2 process model, explaining what has to be done to manage a project by bringing together and applying the principles in a successful manner.

Components explains and describes the major elements of project management, such as organisation and control, and how PRINCE2 incorporates them. These components represent the 'raw materials' of good project management, including quality management and the management of risk.

Techniques explains some techniques of project management that are specific to PRINCE2.

Appendices offer Product Description outlines for PRINCE2 management products, role descriptions, a series of 'healthcheck' questions for organisations to ask themselves when using PRINCE2, risk categories and a suggested filing scheme for management documents.

In addition, there is a full glossary of terms.

1.5 Using the manual

This manual is aimed at people who will be playing a part in a PRINCE2 project or those who wish to understand how PRINCE2 contributes to the project management process; this would include senior managers responsible for the overall direction of a project, Project Managers, project auditors, quality assurance personnel and members of the project team. In addition, line managers of project personnel may find it useful to gain an appreciation of their staff's involvement in a project by reviewing *An introduction to PRINCE2*, Chapter 2.

This manual has been designed to provide a complete reference to the PRINCE2 method. As such, the entire manual provides essential reading for all Project Managers. However, the following is offered as a focus for specific groups:

- Project Managers coming to PRINCE2 for the first time should:
 - read and understand An introduction to PRINCE2, Chapter 2 to appreciate the overall approach that PRINCE2 takes to creating and managing a project
 - use the process descriptions in the *Processes* section as the basis for planning a project and deciding on resource requirements
 - read and understand the Components section to familiarise themselves with the interaction between the components and the processes
- Project Managers already familiar with PRINCE2 should read and understand the process model described in the *Processes* section to appreciate the changes of emphasis and process-driven approach
- Senior managers who will be involved in a project at Project Board level should gain an appreciation of PRINCE2 and their roles within a project by studying *Introduction*, Chapters 1 and 2; *Business Case*, Chapter 13; *Organisation*, Chapter 14 and the description of the process *Directing a Project*, Chapter 6
- Programme managers with PRINCE2 projects in their programme should gain a clear understanding of the approach that PRINCE2 takes to creating and managing a project.

1.6 PRINCE2 terminology

The following terms are the most important to understand with regard to PRINCE2 and are all included in the Glossary. Readers should familiarise themselves with them to prevent any possible confusion when using PRINCE2.

Business Case is used to define the information that justifies the setting up, continuation or termination of the project. It answers the question: 'Why should this project be done?' It is updated at key points throughout the project.

Customer is used to represent the person or group who has commissioned the work and will be benefiting from the end results.

Product is used to describe everything that the project has to create or change, however physical or otherwise this may be. Results of projects can vary enormously from physical items, such as buildings and machinery, to intangible things such as culture change and public perception.

Programme is a collection of projects that together achieve a beneficial change for an organisation.

Supplier is used to mean the group that is providing specialist resources and skills to the project or is providing goods and services to create the project outcome required by the customer and user(s).

User is defined as the person or group who will use or operate the final product. In some situations, the customer and user may be the same group of people.

2 AN INTRODUCTION TO PRINCE 2

2.1 What is a project?

PRINCE2 defines a project as:

A management environment that is created for the purpose of delivering one or more business products according to a specified Business Case.

Another definition of a project might be:

A temporary organisation that is needed to produce a unique and predefined outcome or result at a prespecified time using predetermined resources.

PRINCE2 additionally supposes that those responsible for the project may not have experience of working together to produce a similar set of outcomes or results for the same customer in the past; that co-ordination between those working on the project will need to be well organised; and that the responsibilities shared among those undertaking the work, those managing it and those sponsoring it will need to be clearly defined.

A PRINCE2 project, therefore, has the following characteristics:

- A finite and defined life cycle
- Defined and measurable business products
- A corresponding set of activities to achieve the business products
- A defined amount of resources
- An organisation structure, with defined responsibilities, to manage the project.

Each project falls within a specific business context. A project may be stand-alone, it may be one in a sequence of related projects or it may form part of a programme or corporate strategy.

A project, by its nature, is a temporary structure, created to achieve a specified business benefit or objective. When the work has been completed, the project is disbanded.

A project has a life cycle, which is the path and sequence through the various activities to produce the final product. The term 'life span' is used to describe the life of a product. The two should not be confused. Figure 2.1 shows how a *product life span* might start from the initial idea or conception, through to the operation of the product, finishing with the eventual scrapping of the product when it comes to the end of its usefulness. The *project life cycle* covers the tasks of specifying and designing the product, through to its testing and handover into operational use. PRINCE2 covers the project life cycle plus some pre-project preparation.

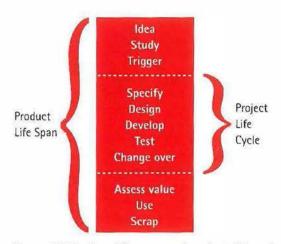


Figure 2.1 Product life span and project life cycle

2.2 The scope of PRINCE2

Figure 2.2 shows where PRINCE2 fits into a business and project environment. PRINCE2 is not intended to cover all subjects relevant to project management. The project management techniques and tools needed will vary according to the project type and the corporate environment. There are also certain aspects of project management that are well covered by existing and proven methods and are therefore excluded from PRINCE2. Examples of these aspects are:

- People management techniques such as motivation, delegation and team leadership
- Generic planning techniques such as Gantt charts and critical path analysis
- The creation and management of corporate quality management and quality assurance mechanisms
- Budgetary control and earned value analysis techniques.

PRINCE2 covers the management of the project and the management of the resources involved in carrying out the activities of the project. It does not cover the specialist techniques involved in the creation of the products. This is the job of other methods, although PRINCE2 must interface with them to enable information on such areas as estimating to be provided for project management.

Although PRINCE2 is centred on the project, it begins before the project does by preparing the ground so that the project starts in an organised and controlled manner.

Another often critical project area is purchasing. PRINCE2 assumes that the project is run within the context of a contract. The contracting process is not included within the method itself. Contracting and purchasing are themselves specialist activities (like software engineering) and can therefore be managed using the PRINCE2 method. If purchasing or contracting is to be undertaken during the early stages of the project, changes may be needed to the Project Board and other parts of the project management team once these stages have been completed. For example, it may be appropriate to have a senior representative of the purchasing department as a member of the Project Board (in the role of Senior Supplier) until suppliers are appointed.

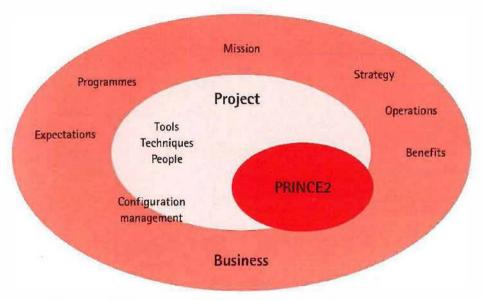


Figure 2.2 The PRINCE2 relationship with projects and business

Contract and purchasing issues will also increase the importance of a complete and accurate Project Initiation Document (PID), which will need to be kept in line with the text of the contract(s). Where PRINCE2 describes project roles, the conversion of these into formal job definitions for a particular project will also require careful attention, for example, Project Assurance, the approval of Product Descriptions and the allocation of risk 'ownership'.

2.3 PRINCE2 in context

PRINCE2 may be used on any type of project in any environment. It contains a complete set of concepts and project management processes that are the minimum requirements for a properly run and managed project. However, the way in which PRINCE2 is applied to each project will vary considerably, and tailoring the method to suit the circumstances of a particular project is critical to its successful use.

PRINCE2 projects are always focused on delivering specified products to meet a specified Business Case. PRINCE2 enables the project to capture and retain a definition of the business benefits that are the driving force behind the project itself. The benefits are stated in the project's Business Case. Benefits can take many different forms:

- Financial, in the form of additional profit or avoided costs
- Strategic, by providing a platform to move towards one of the organisation's strategic
- Legislative, by fulfilling some absolute requirement laid down by head office or a government body.

Throughout a PRINCE2 project, the Business Case is reviewed and progress is measured against any revised expectations of achieving defined benefits. During any project there are often opportunities to discover new benefits, which may enhance the project's product or

indeed impact on another project. However, any deviations from the original Business Case must be controlled through the Project Board.

Within any project there are stakeholders with an interest in the project and its product, including:

- Customers, who have commissioned the work and will be benefiting from the end results
- User(s), who will use or operate the final product. The customer and user may be the same group of people
- Suppliers, who are providing specialist resources and/or skills to the project or are providing goods and services
- Sub-contractors, who provide products or services to the supplier.

The customer/supplier environment assumes that there will be a customer who will specify the desired product, make use of the final products and (in most cases) pay for the project, and a (prime) supplier who will provide resources and skills to create that product. PRINCE2 is written from the standpoint that these two parties come from separately managed areas and typically from commercially separate organisations. Where, as may often be the case, both customer and supplier have a common management, this will influence the composition of the project management team.

Whatever the team composition, the customer should always participate (throughout the project) in the creation and verification of products.

A project, by its nature, is set up to introduce change and the future is always less predictable than with routine work. During the project, the specification of products will inevitably undergo change. These changes need to be controlled because they can easily destroy the project's chance of success. Controlling changes is linked to version control, a topic that is covered within PRINCE2 under configuration management. Configuration management is an essential part of project control as it is focused on controlling the products being delivered, knowing where they are at any point in time, what their status is, who is working on them and which is the latest version.

In addition, projects can be large and complex, dealing with novel or unusual factors. Risk is therefore a major factor to consider during project management and PRINCE2 incorporates the management of risk into its processes.

Whatever the nature or size of a project, PRINCE2 defines an initiation stage that covers the planning and definition of the project. The initiation stage enables a management review before making any commitment to later stages and their associated resources and costs.

There will be many higher-level details surrounding the project. These will need to be dealt with by other methods and approaches, such as programme management. PRINCE2 is aimed at the middle ground between these higher-level, more strategic details and the specialist techniques required to create the technical products.

Few projects can be completed entirely in isolation from other work. PRINCE2 projects may exist as part of a programme, contributing to the realisation of benefits of a larger organisational change. In a programme context, the outputs from one project may be used as

inputs by another project. There may be other dependencies between projects, such as shared resources. PRINCE2 places strong emphasis on the products that the project is required to deliver and so provides a firm basis for defining the boundaries.

Feasibility studies

In some situations, a feasibility study might be required to investigate the situation and determine options for the way ahead. Using PRINCE2, the optimum approach would be to handle the study as a separate and distinct project.

Figure 2.3 shows the (relatively) simple life cycle for a feasibility study project. It has one Project Plan, one Business Case, one set of risks and one final product — the recommendation. The possible options may each vary enormously in their costs and timescales. Each option would have a different Project Plan, Business Case and set of risks, but at the end of the feasibility study project there is one recommendation. A PRINCE2 project is based on getting a clear definition of the final product, a Project Plan and a budget by the end of initiation. If the feasibility study were part of the PRINCE2 project, coming before the development of the recommended solution, then it would not be possible to get a clear definition of the final product before the end of initiation since this definition would depend on the option chosen during the feasibility study. The appropriate option should be chosen in a separate feasibility study project, allowing the second project to proceed with a straightforward set of project information.

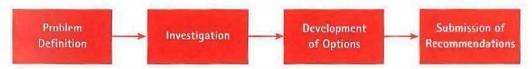


Figure 2.3 Life cycle of a feasibility study project

2.4 Overview of PRINCE2

PRINCE2 is a structured project management method based on the experience of scores of project managers, who have contributed, some from their mistakes or omissions, others from their success.

PRINCE2 has a process-based approach to project management. The processes define the management activities to be carried out during the project. In addition, PRINCE2 describes a number of components that are applied within the appropriate activities. Figure 2.4 shows the components positioned around the central process model.

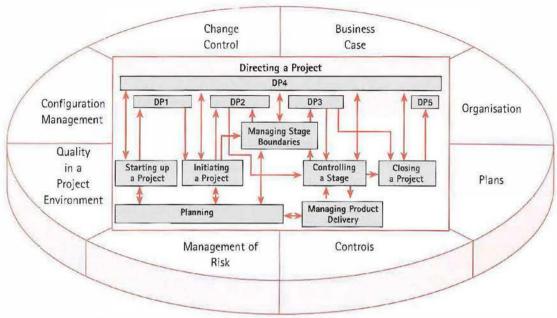


Figure 2.4 PRINCE2 processes and components

2.5 The processes

The PRINCE2 process model, shown in Figure 2.5, consists of eight distinctive management processes, covering the activities from setting the project off on the right track, through controlling and managing the project's progress, to the completion of the project. The common *Planning* (PL) process is used by four of the other processes.

Any project run under PRINCE2 will need to address each of these processes in some form. However, the key to successful use of the process model is in tailoring it to the needs of the individual project. Each process should be approached with the question: 'How extensively should this process be applied to this project?'

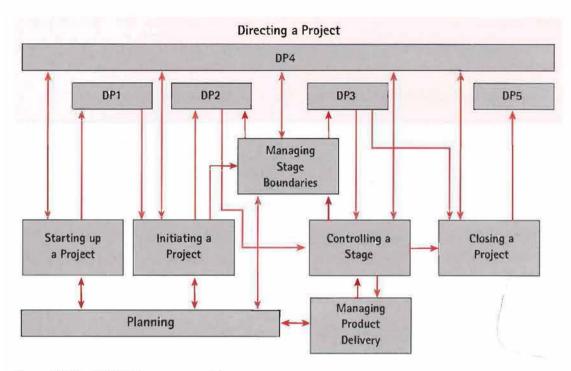


Figure 2.5 The PRINCE2 process model

2.5.1 Starting up a Project (SU)

This is the first process in PRINCE2. It is a pre-project process, designed to ensure that the prerequisites for initiating the project are in place. The process expects the existence of a Project Mandate that defines in high-level terms the reason for the project and what product is required. The process should be very short.

The work of the process is built around the establishment of six things:

- The design and, as far as possible, appointment of the project management team
- The Project Brief
- The Project Approach (in general terms how a solution will be provided)
- The customer's quality expectations
- A Risk Log
- The initiation Stage Plan.

The Daily Log is opened here for the Project Manager's use throughout the project.

2.5.2 Directing a Project (DP)

Directing a Project runs from Starting up a Project (SU) until the project's closure.

This process is aimed at the Project Board, a group of managerial decision makers representing business, users and suppliers. (The Project Board is fully explained in

Organisation, Chapter 14.) The Project Board manages by exception, monitors via reports and controls through a number of decision points.

The key processes for the Project Board break into five main areas:

- Authorising initiation (starting the project off on the right foot)
- Authorising a project (review of the Project Initiation Document to ensure it is sensible to commit major investment to the project)
- Stage boundaries (commitment of more resources after checking results so far)
- Ad hoc direction (monitoring progress, providing advice and guidance, reacting to major threats to plans or benefits)
- Project closure (confirming the project outcome and bringing the project to a controlled close).

2.5.3 Initiating a Project (IP)

The objectives of *Initiating a Project* are to:

- Define how the required product quality will be achieved
- Plan and cost the project
- Revise the Business Case and confirm that an acceptable Business Case exists for the project
- Ensure that the investment of time and effort required by the project is justified,
 taking account of the risks to the project
- Enable and encourage the Project Board to take ownership of the project and agree to the commitment of resources for the next stage
- Provide the baseline for the decision-making processes required during the project's life.

The key product of this process is the Project Initiation Document, which defines the what, why, who, when and how of the project.

Three other blank products are created in readiness for use during the project. These are:

- The Quality Log
- The Issue Log
- The Lessons Learned Log.

Another required product is the next Stage Plan. This, however, comes from the process Managing Stage Boundaries (SB), which will occur towards the end of the initiation stage.

2.5.4 Managing Stage Boundaries (SB)

This process produces the information on which the Project Board will take key decisions on whether to continue with the project or not.

The objectives of this process are to:

- Assure the Project Board that all products planned in the current Stage Plan have been completed as defined
- Provide the information needed for the Project Board to assess the continuing viability of the project
- Provide the Project Board with any other information needed to approve the current stage's completion and authorise the start of the next stage, together with its delegated tolerance level
- Record any measurements or lessons that can help later stages of this project and/or other projects.

The products of this process are:

- An End Stage Report, given by the Project Manager to the Project Board, containing information on the stage achievements
- Current Stage Plan actuals, showing performance against the original Stage Plan
- The next Stage Plan or Exception Plan, for which approval is sought
- A revised Project Plan
- The updated Risk Log, which, together with the Business Case and Project Plan, is used by the Project Board to review the continuing viability of the project
- An updated Business Case
- The Lessons Learned Log, updated with any lessons learned from the current stage
- Any changes to the structure or staffing of the project management team.

Team Plans may also be produced whilst planning the next stage as they will help to define the work required during the stage. Team Plans are optional.

2.5.5 Controlling a Stage (CS)

A project may have many stages. This process describes the monitoring and control activities of the Project Manager involved in allocating work, ensuring that a stage stays on course and reacting to unexpected events. The process forms the core of the Project Manager's effort on the project, being the process that handles day-to-day management of the project.

Throughout a stage there will be a cycle of:

- Authorising work to be done
- Gathering progress information about that work
- Watching for changes
- Reviewing the situation
- Reporting
- Taking any necessary corrective action.

This process covers these activities, together with the ongoing work of risk and Project Issue management. Products produced during the stage on a cyclic basis are:

- Work Packages
- Highlight Reports, regular progress reports from the Project Manager to the Project Board
- Project Issues (and updated Issue Log)
- An updated Risk Log
- A regularly updated Stage Plan.

There may also be the need for an Exception Report.

2.5.6 Managing Product Delivery (MP)

The objective of this process is to ensure that planned products are created and delivered by the project by:

- The Team Manager negotiating details of Work Packages with the Project Manager
- Making certain that work on products allocated to the team is effectively authorised and agreed
- Ensuring that work conforms to the requirements of interfaces identified in the Work Package
- Ensuring that the work is done
- Assessing work progress and forecasts regularly
- Ensuring that completed products meet quality criteria
- Obtaining approval for the completed products.

Products created or updated during this process are:

- Team Plans
- Quality Log updates, giving the Project Manager a view of quality work being done
- Project Issues
- Risk Log updates
- Checkpoint Reports, regular progress reports from the Team Manager to the Project Manager.

2.5.7 Closing a Project (CP)

The purpose of this process is to execute a controlled close to the project.

The process covers the Project Manager's work to wrap up the project either at its end or at a premature close. Most of the work is to prepare input to the Project Board to obtain its confirmation that the project may close.

The objectives of Closing a Project are, therefore, to:

- Check the extent to which the objectives or aims set out in the Project Initiation
 Document have been met
- Assess to what extent all expected products have been handed over and accepted by the customer
- Confirm that maintenance and operation arrangements are in place (where appropriate) including any relevant training
- Make any recommendations for future work (Follow-on Action Recommendations)
- Capture lessons resulting from the project and complete the Lessons Learned Report
- Prepare an End Project Report
- Archive the project files
- Produce a Post-Project Review Plan
- Prepare a recommendation to the Project Board to notify the host organisation of the intention to disband the project organisation and release the resources (end project recommendation).

2.5.8 Planning (PL)

Planning is a repeatable process and plays an important role in other processes, the main ones being:

- Planning an Initiation Stage (SU6)
- Planning a Project (IP2)
- Planning a Stage (SB1)
- Updating a Project Plan (SB2)
- Accepting a Work Package (MP1)
- Producing an Exception Plan (SB6).

Apart from a plan, the process produces:

- A Product Checklist, which is a table of the products to be produced by the work planned, with space for planned and actual dates for delivery of draft, quality-checked and approved products
- The Risk Log, updated with any risk situation changes made as a result of the planning activity.

2.6 The components

Each component is described in further detail in the *Components* section of this manual, showing how the particular subject affects project management and providing guidance on when and how to address the issues.

Business Case

The existence of a viable Business Case is the main control condition of a PRINCE2 project. The Business Case is verified by the Project Board before a project begins and at every major decision point throughout the project. The project should be stopped if the viability of the Business Case disappears for any reason.

Organisation

PRINCE2 provides a structure of a project management team and a definition of the responsibilities and relationships of all roles involved in the project. According to the size and complexity of a project, these roles can be combined or shared.

Plans

PRINCE2 offers a series of plan levels that can be tailored to the size and needs of a project and an approach to planning based on products rather than activities.

Controls

PRINCE2 provides a set of controls which facilitate the provision of key decisionmaking information, allowing an organisation to pre-empt problems and make decisions on problem resolution. For senior management PRINCE2 controls are based on the concept of management by exception, i.e. we agree a plan, then let the manager get on with it unless something is forecast to go wrong.

In order to promote sound management control, a project is split into stages as an approach to defining the review and commitment points of a project. (Using stages also helps to reduce the amount of work that the Project Manager needs to plan in detail at any one time.)

Management of risk

Risk is a major factor to be considered during the life of a project. PRINCE2 defines the key moments when risks should be reviewed, outlines an approach to the analysis and management of risk, and tracks these through all the processes.

Quality in a project environment

PRINCE2 recognises the importance of quality and incorporates a quality approach to the management and technical processes. It begins by establishing the customer's quality expectations and follows these up by laying down standards and quality inspection methods to be used and by checking that these are being used.

Configuration management

Tracking the components of a final product and their versions for release is called configuration management. There are many methods of configuration management available. PRINCE2 defines the essential facilities and information requirements for a configuration management method and how it should link with other PRINCE2 components and techniques.

Change control PRINCE2 emphasises the need for change control, and this is enforced with a change control technique plus identification of the processes that capture, analyse and progress the change control.

2.7 The techniques

PRINCE2 offers very few techniques, preferring to leave the choice of technique to the users of the method and according to the circumstances of the project. But in support of the method the manual does contain details of three techniques: product-based planning, change control and quality review.

PRINCE2 provides a product-based start to the planning activity. It also provides a planning framework that can be applied to any type of project. This involves:

- Establishing what products are needed
- Defining the form and content of each product
- Determining the sequence in which each product should be produced.

Part of the product-based planning technique enables the project to define the standard of quality to which each product must conform.

Every project needs a technique for the control of changes. For organisations that do not already have a suitable technique, PRINCE2 describes a change control technique.

PRINCE2 also describes a specific technique, quality review, which is particularly suitable for the quality testing of document-based products, although its principles can be applied to any form of quality testing and review.

2.8 Process and component links

It is often difficult for newcomers to PRINCE2 to understand the main relationships and links between the processes, components and techniques. In which processes are the components used? Where is this technique used? Figure 2.6 gives a picture of these links.

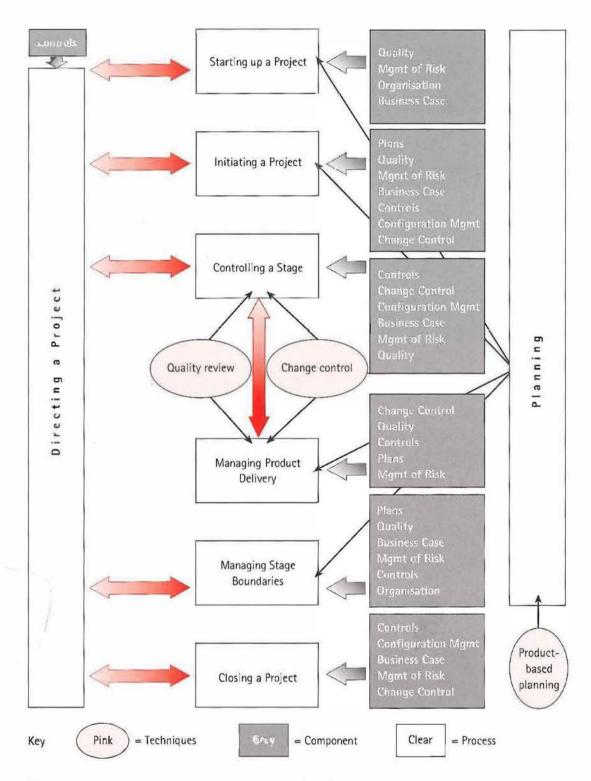


Figure 2.6 Use of PRINCE2 components and techniques in the processes

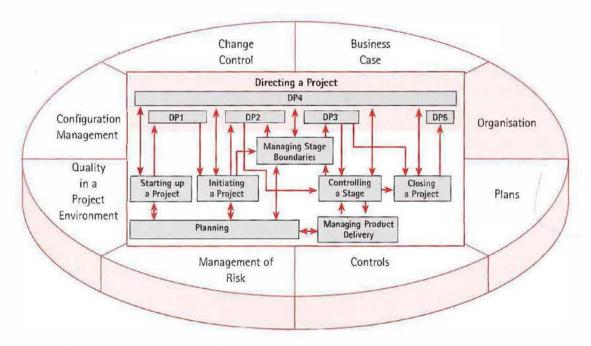


Figure 14.1 Organisation in the PRINCE2 template

14.1 Overview

The PRINCE2 project management structure is based on a customer/supplier environment. The structure assumes that there will be a customer who will specify the desired outcome, make use of the outcome and probably pay for the project and a (prime) supplier who will provide the resources and skills to create that outcome. This assumption has a bearing on how the project is organised.

The customer and supplier may be part of the same corporate body or may be independent of one another.

Establishing an effective organisational structure for the project is crucial to its success. Every project has need for direction, management, control and communication. PRINCE2 offers an approach that provides these elements and is sufficiently flexible to be mapped to any environment.

A project needs a different organisational structure from line management. It needs to be more flexible and is likely to require a broad base of skills for a comparatively short period of time. A project is normally cross functional, an involved partnership.

The project organisation may combine people who are working full time on the project with

others who have to divide their time between the project and other duties. The Project Manager may have direct management control over some of the project staff, but may also have to direct staff who report to another management structure.

The management structure of those with a problem to be solved will very often be different from that of those providing the solution. They will have different priorities and different interests to protect, but in some way they must be united in the common aims of the project. The management level that will make the decisions and the commitments on behalf of their interests may be too busy to be involved on a day-to-day basis with the project. But projects need day-to-day management if they are to be successful.

14.1.1 Four layers

PRINCE2 separates the management of the project from the work required to develop the products and concentrates on the former.

A fundamental principle is that the project management structure has four layers, illustrated in Figure 14.2, which undertake:

- Corporate or programme management
- Direction of the project (Project Board)
- Day-to-day management of the project (Project Manager)
- Team management and product delivery (Team Managers).

The first of these instigates a project and defines overall constraints. The project management team, which comprises the other three layers, manages and implements the project.



Figure 14.2 The four layers of management

14.1.2 Project management structure

PRINCE2 provides a structure for a project management team that supports:

- Roles for decision makers
- Management by exception for the decision makers
- Full- or part-time project management
- Controlled delegation of some day-to-day management responsibilities, where required, to Team Managers

- Roles for the independent inspection of all aspects of project performance
- Administrative support, as required, to the Project Manager and Team Managers
- Agreement by all concerned on what the various roles and responsibilities are
- Lines of communication between the project management team members.

The PRINCE2 project management structure (see Figure 14.3) consists of roles and responsibilities that bring together the various interests and skills involved in and required by the project. For the project to be successful, it is important to define these roles at the outset.

A project management structure is a temporary structure specifically designed to manage the project to its successful conclusion to meet the requirements defined in the Project Brief. The structure allows for channels of communication to decision-making forums and should be backed up by job descriptions that specify the responsibilities, goals, limits of authority, relationships, skills, knowledge and experience required for all roles in the project organisation.

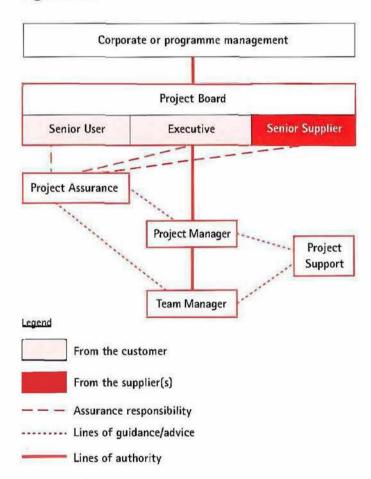


Figure 14.3 Project management structure

All the roles set out in Figure 14.3 have an accompanying role description.

In order to be flexible and meet the needs of different environments and different project sizes, PRINCE2 does not define management jobs to be allocated on a one-to-one basis to

people. PRINCE2 defines *roles*, which might be allocated, shared, divided or combined according to the project's needs. Associated with this is the concept that some responsibilities for a role can be moved to another role or delegated, but they should not be dropped. If a responsibility is dropped, the risks of doing so must be addressed.

Some of the PRINCE2 roles cannot be shared or delegated if they are to be undertaken effectively. The Project Manager role cannot be shared, neither can the Project Manager or Project Board decision-making roles be delegated. Where individuals have been appointed to Project Assurance roles (see section 14.2.4) by the Project Board, the Project Board still retains accountability for these assurance actions.

Corporate cultures differ; PRINCE2 can be used whatever the culture or corporate organisation structure.

Hints and tips

Contractual and commercial arrangements will often influence the ideal project management organisation.

The project organisation structure should include links with the more permanent, functional or line management structures within both the customer and supplier communities.

14.1.3 Three project interests

Figure 14.4 represents the structure and composition of the Project Board. Three interests must be represented on the Project Board at all times.

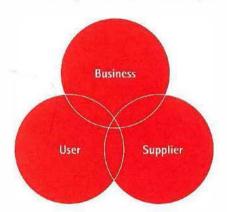


Figure 14.4 The three project interests

Business

The product(s) of the project should meet a business need. The project should give value for money. There should, therefore, be representation from the business viewpoint to ensure that these two prerequisites exist before commitment to the project is made and remain in existence throughout the project. PRINCE2 makes a distinction between the business interests and the requirements of those who will use the final product(s). The Executive role is defined to look after the business interests (representing the customer).

PRINCE2 ORGANISATION

User

There will be an individual, group or groups for whom some or all of the following will apply:

- They will use the final product
- The product will achieve an objective for them
- They will use the end result to deliver benefits
- They will be impacted by the project outcome.

The user presence is needed to specify the desired outcome and ensure that the project delivers it. User management should therefore be represented on the Project Board. They will typically form part of the customer representation.

Supplier

The creation of the end product will need resources with certain skills. Representation is needed from the supplier who will provide the necessary skills. The project may need to use both in-house and external supplier teams to construct the final outcome.

14.1.4 The customer/supplier environment

PRINCE2 is defined in terms of a customer/supplier environment. There are many combinations of customer and supplier that may affect the organisation and control of the project, including:

- A customer with an in-house 'supplier'. Even here they may have separate budgets and therefore need separate 'Business Cases'
- Projects sponsored by a single customer versus those supporting multiple customers
- Those projects that are supplied by a single source versus those with multiple suppliers
- Situations that involve a consortium of equal customers and/or suppliers versus those that involve a 'legal' hierarchy of either:
 - projects supplied by an in-house source (part of the parent organisation)
 - those with a mixture of in-house and external suppliers.

The project's direction set by the Project Board must reflect the agreements and decisions of the three interests as defined in section 14.1.3. It may be difficult in certain business environments to contemplate having the supplier represented on the Project Board, but there must be a common platform for decisions that affect all parties. The Senior Supplier role is needed if the Project Board is to enable full decision making.

At times there may be questions of confidentiality or conflicts of interest. The customer representatives on the Project Board may not wish to discuss everything in front of the supplier and vice versa. There is nothing to prevent either party having private meetings to make internal decisions and/or discuss their position before meeting with the other party. The main objectives are full communication and agreed decisions by all three parties, and the Project Board composition including the Senior Supplier is a powerful aid to achieving these.

If there are problems in identifying an external contractor who could take the role of Senior Supplier (for example, the project involves purchasing and the supplier has not yet been identified) the customer's purchasing manager or contracts manager could take on the role. Whoever is in the Senior Supplier role must have the appropriate authority to deploy supplier resources.

In customer/supplier situations there will always be two Business Cases: the customer's and the supplier's. Unless otherwise stated, in this manual any references to the Business Case mean the customer's Business Case.

14.2 The PRINCE2 project management team

The following is a summary of the project management team. A full description of each role is provided in *Project management team roles*, Appendix B.

14.2.1 Project Board

The Project Board represents at managerial level the business, user and supplier interests of the project. The Project Board members must have authority because they are the decision makers and responsible for the commitment of resources to the project, such as personnel, cash and equipment.

The level of manager required to fill the roles will depend on such factors as the budget, scope and importance of the project. This will often result in people in senior management positions sitting on Project Boards. Their Project Board responsibilities will be in addition to their normal work, which makes it important that PRINCE2 offers them 'management by exception', keeping them regularly informed but only asking for joint decision making at key points in the project.

The Project Board consists of three roles:

- Executive
- Senior User
- Senior Supplier.

These roles should ideally be assigned to individuals who can stay with the project throughout its life.

The Project Board is appointed by corporate or programme management to provide overall direction and management of the project. The Project Board is accountable for the success of the project and has responsibility and authority for the project within the instructions (initially contained in the Project Mandate) set by corporate or programme management.

The Project Board approves all major plans and authorises any major deviation from agreed Stage Plans. It is the authority that signs off the completion of each stage as well as authorising the start of the next stage. It ensures that required resources are committed and arbitrates on any conflicts within the project or negotiates a solution to any problems between the project and any parties beyond the scope of the project. In addition, it approves the appointment and responsibilities of the Project Manager.

PRINCE2 ORGANISATION

The Project Board is responsible for ensuring that the project remains on course to deliver products of the required quality to meet the Business Case defined in the Project Initiation Document. According to the size, complexity and risk of the project, the Project Board may decide to appoint specific additional resources to some or all of the Project Assurance roles. If no additional resources are appointed, assurance remains the responsibility of the Project Board members. Project Assurance is discussed in section 14.2.4.

The Project Board is the project's 'voice' to the outside world and is responsible for any publicity or other dissemination of information about the project.

The Project Board is not a democracy controlled by votes. The Executive is the key decision maker because he/she is ultimately responsible to the business. He/she is supported by the Senior User and Senior Supplier.

Executive

The Executive is ultimately accountable for the project, supported by the Senior User and Senior Supplier. The Executive is responsible for the following key aspects of the project:

Development and continuation of the project Business Case

Overseeing the development of a viable Business Case is part of ensuring that the aims of the planned change continue to be aligned with the business and establishing a firm basis for the project during its initiation and definition. The Executive should be responsible for securing the necessary investment for the business change.

The Executive has the responsibility throughout the project to ensure that the business benefits will be achieved.

Project organisation structure and plans

The Executive ensures that there is a coherent organisation structure and logical plan(s). This will involve being actively engaged with the work of project initiation.

Monitoring and control of progress

Monitoring and controlling the progress of the business change at a strategic level (at an operational level this is the responsibility of the Project Manager). The Project Manager is responsible for regular reports (Highlight Reports) to the Executive (and other Project Board members) on progress of the business change. There will be inevitable Project Issues that arise, requiring the Executive's advice, decision making and communication with senior stakeholders.

Problem referral

Referring serious problems upwards to top management as necessary, in a timely manner. Regular consultation will be required between those delivering the change and its stakeholders and sponsors. The Executive is responsible for ensuring the communication processes are effective and linkages are maintained between the project and the organisation's strategic direction.

PRINCE2 ORGANISATION

Formal closure

Formally closing the project and ensuring that the lessons learned are documented. Closure requires formal sign-off by the Executive that the aims and objectives have been met and that lessons learned are documented and disseminated. Some benefits may already be delivered. However, the activities at closure include the planning of the post-project review when the entire benefits realisation process will be assessed.

Post-project review

Ensuring that the post-project review takes place, which has the purpose of finding out if the benefits, as stated in the Business Case, have been realised. The Executive is responsible for commissioning and chairing these reviews and ensuring that the relevant personnel are consulted and involved in the review process. The output is forwarded to the appropriate stakeholders.

Senior User

The Senior User is accountable for any products supplied by the user(s), such as making sure that requirements have been clearly and completely defined and that what is produced is fit for its purpose, as well as for monitoring that the solution will meet user needs.

The role represents the interests of all those who will use the final product(s) of the project, those for whom the product will achieve an objective, those who will use the product to deliver benefits or those who will be affected by the project. The Senior User role is responsible for:

- Providing user resources
- Ensuring that the project produces products that meet user requirements
- Ensuring that the products provide the expected user benefits.

The Senior User role may require more than one person to cover all the user interests. For the sake of effectiveness, the role should not be split between too many people. The *Hints and tips* section gives guidance on solutions to the problem of too many contenders for the Senior User role.

Senior Supplier

The Senior Supplier needs to achieve the results required by the Senior User. The Senior Supplier is accountable for the quality of all products delivered by the supplier(s). Part of this role is to ensure that proposals for designing and developing the products are realistic. The Senior Supplier aims to achieve the results required by the Senior User within the cost and time parameters for which the Executive is accountable. The role represents the interests of those designing, developing, facilitating, procuring and implementing. The Senior Supplier role must have the authority to commit or acquire the required supplier resources. The Senior Supplier has responsibility for the supplier's Business Case. In some environments the customer might share design authority for specialist solutions, or have a major say in it, along with the suppliers.

The Senior Supplier role may require more than one person to cover all the supplier interests.

For the sake of effectiveness, the role should not be split between too many people. The *Hints* and tips section gives guidance on solutions to the problem of too many contenders for the Senior Supplier role.

Hints and tips

Project Board members are normally very busy outside the project. There is a danger in larger projects that if they don't appoint people to the Project Assurance roles, the Project Assurance responsibilities will not get done. If the Project Assurance roles are not assigned, Project Board members must seriously consider how the work associated with these responsibilities will get done, when they will find the time and how well those responsibilities will be carried out.

Roles may be combined but never eliminated.

It is advisable to avoid combining the roles of Senior User and Senior Supplier if there would be a potential conflict of interest.

Project Boards are the major decision makers. It is important that the business, user and supplier are represented, because they all need to make commitments to the project.

Note: Customer specialists may also be involved in setting the approach and direction of the project, especially in cases where the project is part of a programme.

Both the customer and the supplier may wish to appoint their own Project Assurance roles. In particular, the customer may feel the need for assurance about the specialist aspects of the project, independent of the supplier.

The Senior Supplier may wish to appoint a business assurance role to monitor the supplier's Business Case.

A large Project Board can become unwieldy and inhibit the decision-making process. If there are too many candidates for a Project Board role, they should be encouraged to appoint a spokesperson to carry out that role. In particular, if there are too many wanting to share the Senior User role, a user committee can be formed with a chairperson. The chairperson represents them as Senior User, reports back to the committee and takes direction from it before Project Board meetings.

The involvement of multiple suppliers may necessitate more than a single Senior Supplier representative on the Project Board. Alternatively, if there are many suppliers wishing to share this role, consideration should be given to forming a supplier forum with a nominated chairperson to represent them on the Project Board.

Suppliers should not be in a position to overwhelm the business/user representatives by sheer weight of numbers.

Other interests can be invited to attend Project Board meetings to provide advice, etc. but not to take part in the decision making.

All Project Board members need training in Project Board procedures and responsibilities.

Where the project is one of a string, a decision is needed on who the user is. Is it an end user or is it the next project in the string?

Don't confuse the need for an organisation to manage the project with the need for a communication vehicle.

Project Board members should sign up to their agreed roles and responsibilities before taking the job on.

The authority levels required of Project Board members should match the needs of a project.

Where the project is part of a programme, the programme appoints the Project Board Executive and has the option of appointing the other Project Board members. Alternatively the Project Board Executive may be asked to select the other Project Board members. Where the latter is the case, the advice and approval of the programme should be sought.

There may sometimes be a lack of confidence between a programme and its projects. In order to ensure that a project that forms part of a programme maintains the focus required to fulfil the programme objectives, it will often be appropriate to have programme representation on the Project Board. This may be done either by appointing a programme representative into a Project Board role or by having a representative of programme management attend the Project Board meetings without taking a formal project role. In such cases project decisions that have a programme impact can be made more quickly. The programme representative is more likely to be able to make a decision on the spot, rather than the project having to wait until the programme's managers are consulted. This should lead to a reduction in delays or rework caused by having to wait for crucial decisions.

14.2.2 Project Manager

PRINCE2 provides for a single focus for day-to-day management of the project, namely the Project Manager, who has well-defined responsibilities and accountability. Figure 14.5 gives an idea of the many facets to the role of Project Manager. The Project Manager needs a project organisation structure that will take responsibility for or provide support in addressing these facets and provide support in performing some of the other facets.

The Project Manager is given the authority to run the project on a day-to-day basis on behalf of the Project Board within the constraints laid down by the board.

The Project Manager's prime responsibility is to ensure that the project produces the required products, to the required standard of quality and within the specified constraints of time and cost. The Project Manager is also responsible for the project delivering an outcome that is capable of achieving the benefits defined in the Project Initiation Document.

The Project Manager is responsible for the work of all the PRINCE2 processes except Directing a Project (DP) and the pre-project process Appointing an Executive and a Project Manager (SU1). The Project Manager would delegate responsibility for the process Managing Product Delivery (MP) to the Team Manager(s) in projects using this role. The Project Manager manages the Team Managers and Project Support and is responsible for liaison with Project Assurance and the Project Board.

In a customer/supplier environment the Project Manager will normally come from the customer organisation, but there will be projects where the Project Manager comes from the supplier. In this case, the customer may appoint a 'project director' or 'controller' to be its day-to-day liaison with the Project Manager.



Figure 14.5 The many facets of the Project Manager role

Hints and tips

It may be beneficial to employ high-quality people part time rather than lesser quality people full time.

It is important to remember that this manual assumes that the Project Manager will be from the customer organisation. It is possible that the Project Manager may be from the supplier – in such cases the customer/supplier interface moves from Project Manager/Team Manager to Project Board/Project Manager.

Where the Project Manager does not have direct authority over personnel required to work on the project, it is essential that the agreement of the appropriate managers is obtained (and maintained throughout the project) for the commitment of their personnel.

Remember that the Project Manager's role is to manage the work, not to do it.

The Project Manager must avoid becoming involved in low-level detail to the extent that sight is lost of the 'big picture', that is, what is going on in every part of the project.

Different Project Manager attributes are needed for different types of project.

In tailoring the Project Manager and Team Manager roles in a customer/supplier environment, consideration must be given to whether it is acceptable for customer resources to be managed by a supplier or supplier resources to be managed by the customer representative. If such a situation is permitted, the division of management responsibilities for human resource management should be made clear – for example, appraisals, promotion and training.

14.2.3 Team Manager

The use of a separate person in this role is optional. The Project Manager may find that it is beneficial to delegate the authority and responsibility for planning the creation of certain products and managing a team of specialists to produce those products. There are many

reasons why the Project Manager may decide to employ a different person in this role. Among these are the size of the project, the particular specialist skills or knowledge needed for certain products, geographical location of some team members and the preferences of the Project Board.

The Team Manager's prime responsibility is to ensure production of those products defined by the Project Manager to an appropriate quality in a timescale and at a cost acceptable to the Project Board. The Team Manager reports to and takes direction from the Project Manager. In addition, the Team Manager is likely to have a reporting line to the Senior Supplier. It is vital that any such links are understood and documented to avoid conflicts of interest and any undermining of the Project Manager's authority.

The use of this role should be discussed by the Project Manager with the Project Board and, if the role is required, planned as part of *Designing a Project Management Team* (SU2) or for each stage as part of *Planning a Stage* (SB1).

14.2.4 Project Assurance

The use of one or more separate persons in this role is optional. The Project Board may find that it is beneficial to delegate the authority and responsibility for Project Assurance to others as the Project Board members do not work full time on the project and therefore place a great deal of reliance on the Project Manager. Although they receive regular reports from the Project Manager, there may always be questions at the back of their minds: 'Are things really going as well as we are being told?', 'Are any problems being hidden from us?', 'Is the solution going to be what we want?', 'Are we suddenly going to find that the project is over budget or late?', 'Is the Business Case intact?', 'Will the intended benefits be realised?' The supplier and/or customer may have a quality assurance function charged with the responsibility to check that all projects are adhering to their quality management system.

All of these points mean that there is a need in the project organisation for monitoring all aspects of the project's performance and products independently of the Project Manager. This is the role of Project Assurance.

Each member of the Project Board is responsible for appointing one or more persons into the Project Assurance role aligned with their area of concern – business, user or supplier. The Project Board may also appoint other members of the organisation to take a specific role within Project Assurance, such as an organisation's quality manager to monitor the quality aspects of the project. Other stakeholders with a special interest in the project may be appointed to take part or all of a Project Assurance role by the Project Board.

It is not enough to believe that standards will be adhered to. It is not enough to ensure that the project is well set up and justified at the outset. All these possibilities need to be checked throughout the project as part of ensuring that it remains consistent with and continues to meet a business need and that no change to the external environment affects the validity of the project.

PRINCE2 identifies these Project Assurance functions by aligning them to each Project Board member's role. All appointments to the Project Assurance function must be independent of the Project Manager. Any appointed Project Assurance roles assure the project on behalf of one or more members of the Project Board.

The members of the Project Board are responsible for the Project Assurance appointments and may choose to take some of the responsibilities themselves. Where responsibilities are shared it must be clear who is to do what. The person or people filling a Project Assurance role may be changed during the project at the request of the Project Board. Use of other personnel to take on Project Assurance responsibilities should be designed during *Designing a Project Management Team* (SU2); otherwise resource usage and costs for Project Assurance could easily get out of control. Anyone appointed to a Project Assurance role reports to the Project Board member(s) responsible for the appointment.

Since Project Assurance has to be independent of the Project Manager the Project Board cannot assign any Project Assurance roles to the Project Manager.

Project Assurance involvement in the processes

Project Assurance has a role to play in most of the sub-processes. The list below gives examples of Project Assurance work in a project:

- Preparing a Project Brief (SU4) Review the outline Business Case (Executive's Project Assurance) and the first entries in the Risk Log
- Defining Project Approach (SU5) Checking that the Project Approach is technically correct (Senior Supplier's Project Assurance) and in line with corporate or programme strategy (Executive's Project Assurance)
- Planning an Initiation Stage (SU6) Identifying in the initiation Stage Plan how the Business Case and risk assessments will be checked
- Planning Quality (IP1) Confirming that the Project Quality Plan includes the required standards
- Planning a Project (IP2) Confirming that the interests of the Project Board members that they represent are satisfied by the Project Plan
- Refining the Business Case and Risks (IP3) Confirming the Business Case (Executive's Project Assurance) and ensuring all risks are identified with suitable actions and monitoring
- Setting up Project Controls (IP4) Ensuring that proposed controls contain adequate safeguards for their interests
- Setting up Project Files (IP5) Confirming the coverage and adequacy of the proposed filing system
- Assembling a Project Initiation Document (IP6) Consulting with the Project Manager on the Project Initiation Document development and assembly
- Directing a Project (DP) Advising Project Board members
- Authorising Work Package (CS1) Confirmation of the quality checking requirements in the Work Package
- Assessing Progress (CS2) Reviewing the updated Quality Log and watching for delayed/missed quality checks
- Examining Project Issues (CS4) Involvement in the impact analysis
- Reviewing Stage Status (CS5) Involvement in stage status reviews

- Reporting Highlights (CS6) Reviewing the Highlight Report before it is sent out
- Escalating Project Issues (CS8) Monitoring any possible deviations and bringing any concerns to the Project Manager
- Accepting a Work Package (MP1) Confirmation of sufficient quality checking in the Team Plan
- Executing a Work Package (MP2) Checking that the Quality Log is updated and that
 quality standards are applied correctly. Possibly involved as reviewers in quality
 reviews
- Planning a Stage (SB1) Checking that quality reviews are planned, plus proposing reviewers
- Updating a Project Plan (SB2) Checking the impact of any Project Plan changes
- Updating a Project Business Case (SB3) Checking the impact of any changes to the Business Case (Executive's Project Assurance)
- Updating the Risk Log (SB4) Monitoring any Risk Log changes
- Reporting Stage End (SB5) Agreement of End Stage Report content before its finalisation
- Producing an Exception Plan (SB6) Checking that the Exception Plan matches the Exception Report proposal and Project Board direction
- Decommissioning a Project (CP1) Consultation on the completeness of work
- Identifying Follow-on Actions (CP2) Consultation on benefits realisation and agreement of Post-Project Review Plan content before its finalisation
- Designing a Plan (PL1) Checking that the plan design will generate realistic plans
- Defining and Analysing Products (PL2) Involvement in the writing and/or checking of Product Descriptions (or identification of who should be involved), particularly the quality criteria, quality checking method and quality checking personnel
- Analysing Risks (PL6) Assisting with the risk analysis and identification of countermeasures
- Completing a Plan (PL7) Confirming that the plan is complete and accurate before presentation for approval.

Hints and tips

The Project Board may carry out its own Project Assurance roles if it so wishes and if there is time. It greatly assists Project Board commitment if the members can be persuaded to undertake their own Project Assurance. The question is whether the members have the time and skill required.

The Project Assurance required may vary according to the type of project. One possible example is the need to assure the continued business integrity of the project. This role would monitor the continuing validity of the Business Case against external events, changes to the project risks, the evolution of actuals against the Project Plan and any impact on the Business Case of changes to the specification.

Another example is the regular Project Assurance on behalf of the customer that the project is staying on track to produce an effective and usable solution. A third example is that of assuring on behalf of the Senior Supplier that the correct standards are available, are being used and are being used correctly in the development of the products. This might include Project Assurance that there is an audit trail of all the quality control work being done. Other examples would include security assurance and assurance that the project is staying within programme strategy and guidelines.

If a role is changed during the project, care must be taken to ensure continuity of the work being done by that role.

It is not advisable to combine any Project Assurance roles where there would be potential conflicts of interest.

Anyone appointed to a Project Assurance role should be independent of the Project Manager.

In customer/supplier projects, there may be a need for separate Project Assurance roles to monitor the respective interests of the customer and the supplier.

14.3 Project Support

The Project Manager may need administrative help. This may stem from the sheer volume of work to be done or the mandated use of certain tools where the Project Manager has insufficient expertise, such as in supporting the use of specific planning and control software or configuration management.

The appointment of one or more individuals to Project Support on a formal basis is optional. It is driven by the needs of the individual project and Project Manager. Project Support could be in the form of administrative services or providing advice and guidance to one or more related projects. Project Support can act as a repository for lessons learned and estimating metrics and be a central source of expertise in such things as specialist support tools and project management standards. In smaller projects the Project Support work may be shared between the Project Manager and team members.

One specific Project Support role that must be considered is Configuration Librarian. Depending on the project size and environment, there may be a need to appoint someone to carry out this role. If not, it defaults to the Project Manager together with any other unassigned Project Support functions. See Configuration management, Chapter 19 and Project management team roles, Appendix B for details of the work.

It is necessary to keep Project Support and Assurance responsibilities separate in order to maintain the independence of Project Assurance.

Hints and tips

The physical location of project staff can present problems if they are geographically remote from each other. If at all possible, choose people at a common location. Alternatively, ensure that suitable communications technology and training in its use is available.

Where the size of projects and number of staff warrant it, the common areas of support may be concentrated into a Project Support Office (PSO). This allows staff to be permanently allocated to this type of work and therefore to become highly skilled at the activities. A PSO can support all projects and set standards, such as the use of planning and control tools, risk management, reporting, change control and configuration management.

GLOSSARY

Acceptance Criteria

A prioritised list of criteria that the final product(s) must meet before the customer will accept them; a measurable definition of what must be done for the final product to be acceptable to the customer. They should be defined as part of the Project Brief and agreed between customer and supplier no later than the project initiation stage. They should be documented in the Project Initiation Document.

Activity network

A flow diagram showing the activities of a plan and their interdependencies. The network shows each activity's duration, earliest start and finish times, latest start and finish times and float. Also known as 'planning network'. See also Critical path.

Baseline

A snapshot; a position or situation that is recorded. Although the position may be updated later, the baseline remains unchanged and available as a reminder of the original state and as a comparison against the current position. Products that have passed their quality checks and are approved are baselined products. Anything 'baselined' should be under version control in configuration management and 'frozen', i.e. no changes to that version are allowed.

Benefits

The positive outcomes, quantified or unquantified, that a project is being undertaken to deliver and that justify the investment.

Benefits realisation

The practice of ensuring that the outcome of a project produces the projected benefits claimed in the Business Case.

Business Case

Information that describes the justification for setting up and continuing a PRINCE2 project. It provides the reasons (and answers the question: 'Why?') for the project. An outline Business Case should be in the Project Mandate. Its existence is checked as part of the Project Brief, and a revised, fuller version appears in the Project Initiation Document. It is updated at key points, such as end stage assessments, throughout the project.

Change authority

A group to which the Project Board may delegate responsibility for the consideration of Requests for Change. The change authority is given a budget and can approve changes within that budget.

Change budget

The money allocated to the change authority to be spent on authorised Requests for Change.

Change control

The procedure to ensure that the processing of all Project Issues is controlled, including submission, analysis and decision making.

Checkpoint

A team-level, time-driven review of progress, usually involving a meeting.

Checkpoint Report

A progress report of the information gathered at a checkpoint meeting which is given by a team to the Project Manager and provides reporting data as defined in the Work Package.

Communication Plan

Part of the Project Initiation Document describing how the project's stakeholders and interested parties will be kept informed during the project.

Concession

An Off-Specification that is accepted by the Project Board without corrective action.

Configuration audit

A comparison of the latest version number and status of all products shown in the configuration library records against the information held by the product authors.

Configuration control

Configuration control is concerned with physically controlling receipt and issue of products, keeping track of product status, protecting finished products and controlling any changes to them.

Configuration management

A discipline, normally supported by software tools, that gives management precise control over its assets (for example, the products of a project), covering planning, identification, control, status accounting and verification of the products.

Contingency budget

The amount of money required to implement a contingency plan. If the Project Board approves a contingency plan, it would normally set aside a contingency budget, which would only be called upon if the contingency plan had to be implemented when the associated risk occurs. See also Contingency plan.

Contingency plan

A plan that provides details of the measures to be taken if a defined risk should occur. The plan is only implemented if the risk occurs. A contingency plan is prepared where other actions (risk prevention, reduction or transfer) are not possible, too expensive or the current

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view is that the cost of the risk occurring does not sufficiently outweigh the cost of taking avoiding action – but the risk cannot be simply accepted. The Project Board can see that, should the risk occur, there is a plan of action to counter it. If the Project Board agrees that this is the best form of action, it would put aside a contingency budget, the cost of the contingency plan, only to be used if the risk occurs.

Critical path

This is the line connecting the start of an activity network with the final activity in that network through those activities with zero float, i.e. those activities where any delay will delay the time of the entire end date of the plan. There may be more than one such path. The sum of the activity durations on the critical path will determine the end date of the plan.

Customer

The person or group who commissioned the work and will benefit from the end results.

Customer's quality expectations

A statement from the customer about the quality expected from the final product. This should be obtained during the start-up of a project in *Preparing a Project Brief* (SU4) as an important feed into *Planning Quality* (IP1), where it is matched against the Project Approach and the standards that will need to be applied in order to achieve that quality.

Daily Log

A record of jobs to do or to check that others have done, commitments from the author or others, important events, decisions or discussions. A Daily Log should be kept by the Project Manager and any Team Managers.

Deliverable

An item that the project has to create as part of the requirements. It may be part of the final outcome or an intermediate element on which one or more subsequent deliverables are dependent. According to the type of project, another name for a deliverable is 'product'.

Earned value analysis

Earned value analysis is a method for measuring project performance. It indicates how much of the budget should have been spent in view of the amount of work done so far and the task, assignment or resources.

End Project Report

A report given by the Project Manager to the Project Board that confirms the handover of all products and provides an updated Business Case and an assessment of how well the project has done against its Project Initiation Document.

End stage assessment

The review by the Project Board and Project Manager of the End Stage Report to decide whether to approve the next Stage Plan (unless the last stage has now been completed). According to the size and criticality of the project, the review may be formal or informal. The approval to proceed should be documented as an important management product.

End Stage Report

A report given by the Project Manager to the Project Board at the end of each management stage of the project. This provides information about the project performance during the stage and the project status at stage end.

Exception

A situation where it can be forecast that there will be a deviation beyond the tolerance levels agreed between the Project Manager and the Project Board (or between the Project Board and corporate or programme management, or between a Team Manager and the Project Manager).

Exception assessment

This is a meeting of the Project Board to approve (or reject) an Exception Plan.

Exception Plan

This is a plan that often follows an Exception Report. For a Team Plan exception, it covers the period from the present to the end of the Work Package; for a Stage Plan exception, it covers the period from the present to the end of the current stage. If the exception were at a project level, the Project Plan would be replaced.

Exception Report

Description of the exception situation, its impact, options, recommendation and impact of the recommendation to the Project Board. This report is prepared by the relevant manager to inform the next higher level of management of the situation.

Executive

The single individual with overall responsibility for ensuring that a project meets its objectives and delivers the projected benefits. This individual should ensure that the project or programme maintains its business focus, that it has clear authority and that the work, including risks, is actively managed. The Executive is the chairperson of the Project Board, representing the customer, and is the owner of the Business Case.

Feasibility study

A feasibility study is an early study of a problem to assess if a solution is feasible. The study will normally scope the problem, identify and explore a number of solutions, and make a recommendation on what action to take. Part of the work in developing options is to calculate an outline Business Case for each as one aspect of comparison.

Follow-on Action Recommendations

A report that can be used as input to the process of creating a Business Case/Project Mandate for any follow-on PRINCE2 project and for recording any follow-on instructions covering incomplete products or outstanding Project Issues.

Gantt chart

This is a diagram of a plan's activities against a time background, showing start and end times and resources required.

Gate review

A generic term, rather than a PRINCE2 term, meaning a point at the end of a stage or phase where a decision is made whether to continue with the project. In PRINCE2 this would equate to an end stage assessment.

Highlight Report

Time-driven report from the Project Manager to the Project Board on stage progress.

Issue Log

Contains all Project Issues including Requests for Change raised during the project. Project Issues are each allocated a unique number and are filed in the Issue Log under the appropriate status. See also Project Issue.

Lessons Learned Log

An informal collection of good and bad lessons learned about the management and specialist processes and products as the project progresses. At the end of the project, it is formalised and structured into a Lessons Learned Report. See also Lessons Learned Report.

Lessons Learned Report

A report that describes the lessons learned in undertaking the project and includes statistics from the quality control of the project's management products. It is approved by the Project Board and then held centrally for the benefit of future projects.

Off-Specification

Something that should be provided by the project, but currently is not (or is forecast not to be) provided. This might be a missing product or a product not meeting its specifications. It is one type of Project Issue.

Operational and maintenance acceptance

Acceptance by the person/group who will support the product during its useful life that it is accepted into the operational environment. The format of the acceptance will depend on the product itself — it could be in the form of an acceptance letter signed by the appropriate authority, or a more complex report detailing the operational and maintenance arrangements that have been put in place.

Outcome

The term used to describe the totality of what the project is set up to deliver, consisting of all the specialist products. For example, this could be an installed computer system with trained staff to use it, backed up by new working practices and documentation, a refurbished and equipped building with all the staff moved in and working, or it could be a new product launched with a recruited and trained sales and support team in place.

Peer review

Specific reviews of a project or any of its products where personnel from within the organisation and/or from other organisations carry out an independent assessment of the

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project. Peer reviews can be done at any point within a project but are often used at stage-end points.

Phase

A part, section or segment of a project, similar in meaning to a PRINCE2 stage. The key meaning of stage in PRINCE2 terms is the use of management stages, i.e. sections of the project to which the Project Board commits one at a time. A phase might be more connected to a time slice, change of skills required or change of emphasis.

Post-implementation review

See Post-project review.

Post-project review

One or more reviews held after project closure to determine if the expected benefits have been obtained. Also known as post-implementation review.

PRINCE2

A method that supports some selected aspects of project management. The acronym stands for **PR**ojects **IN** Controlled **E**nvironments.

PRINCE2 project

A project whose product(s) can be defined at its start sufficiently precisely so as to be measurable against predefined metrics and that is managed according to the PRINCE2 method.

Process

That which must be done to bring about a particular result in terms of information to be gathered, decisions to be made and results to be achieved.

Producer

This role represents the creator(s) of a product that is the subject of a quality review. Typically, it will be filled by the person who has produced the product or who has led the team responsible.

Product

Any input to or output from a project. PRINCE2 distinguishes between management products (which are produced as part of the management or quality processes of the project) and specialist products (which are those products that make up the final deliverable). A product may itself be a collection of other products.

Product-based planning

A four-step technique leading to a comprehensive plan based on creation and delivery of required outputs. The technique considers prerequisite products, quality requirements and the dependencies between products.

Product Breakdown Structure

A hierarchy of all the products to be produced during a plan.

Product Checklist

A list of the major products of a plan, plus key dates in their delivery.

Product Description

A description of a product's purpose, composition, derivation and quality criteria. It is produced at planning time, as soon as possible after the need for the product is identified.

Product Flow Diagram

A diagram showing the sequence of production and interdependencies of the products listed in a Product Breakdown Structure.

Product life span

This term is used in this manual to define the total life of a product from the time of the initial idea for the product until it is removed from service. It is likely that there will be many projects affecting the product during its life, such as a feasibility study and development, enhancement or correction projects.

Product Status Account

A report on the status of products. The required products can be specified by identifier or the part of the project in which they were developed.

Programme

A portfolio of projects selected, planned and managed in a co-ordinated way.

Project

A temporary organisation that is created for the purpose of delivering one or more business products according to a specified Business Case.

Project Approach

A description of the way in which the work of the project is to be approached. For example: Are we building a product from scratch or buying in a product that already exists? Are the technology and products that we can use constrained by decisions taken at programme level?

Project Assurance

The Project Board's responsibilities to assure itself that the project is being conducted correctly.

Project Brief

A description of what the project is to do; a refined and extended version of the Project Mandate, which the Project Board approves and which is input to project initiation.

Project closure notification

Advice from the Project Board to inform all stakeholders and the host location that the project resources can be disbanded and support services, such as space, equipment and access, demobilised. It should indicate a closure date for costs to be charged to the project.

Project closure recommendation

A recommendation prepared by the Project Manager for the Project Board to send as a project closure notification when the board is satisfied that the project can be closed.

Project Initiation Document (PID)

A logical document that brings together the key information needed to start the project on a sound basis and to convey that information to all concerned with the project.

Project Issue

A term used to cover any concern, query, Request for Change, suggestion or Off-Specification raised during the project. They can be about anything to do with the project.

Project life cycle

This term is used in this manual to define the period from the start-up of a project to the handover of the finished product to those who will operate and maintain it.

Project management

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

Project management team

Covers the entire management structure of Project Board, Project Manager, plus any Team Manager, Project Assurance and Project Support roles.

Project Manager

The person given the authority and responsibility to manage the project on a day-to-day basis to deliver the required products within the constraints agreed with the Project Board.

Project Mandate

Information created externally to the project that forms the terms of reference and is used to start up the PRINCE2 project.

Project Plan

A high-level plan showing the major products of the project, when they will be delivered and at what cost. An initial Project Plan is presented as part of the Project Initiation Document. This is revised as information on actual progress appears. It is a major control document for the Project Board to measure actual progress against expectations.

Project Quality Plan

A plan defining the key quality criteria, quality control and audit processes to be applied to project management and specialist work in the PRINCE2 project. It will be part of the text in the Project Initiation Document.

Project records

A collection of all approved management and specialist products and other material, which is necessary to provide an auditable record of the project.

Note: This does not include working files.

Project start-up notification

Advice to the host location that the project is about to start and requesting any required Project Support services.

Project Support

An administrative role in the project management team. Project Support can be in the form of advice and help with project management tools, guidance, administrative services such as filing, and the collection of actual data. The provision of any Project Support on a formal basis is optional. Tasks either need to be done by the Project Manager or delegated to a separate body and this will be driven by the needs of the individual project and Project Manager. A full description of the role can be found in *Project management team roles*, Appendix B.

One support function that must be considered is that of configuration management. Depending on the project size and environment, there may be a need to formalise this and it quickly becomes a task with which the Project Manager cannot cope without support. Details of the Configuration Librarian role can be found in *Project management team roles*, Appendix B.

Project Support Office

A group set up to provide certain administrative services to the Project Manager. Often the group provides its services to many projects in parallel.

Proximity (of risk)

Reflects the timing of the risk, i.e. is the threat (or opportunity) stronger at a particular time, does it disappear some time in the future, or does the probability or impact change over time?

Quality

The totality of features and characteristics of a product or service that bear on its ability to satisfy stated needs. Also defined as 'fitness for purpose' or 'conforms to requirements'.

Quality Log

Contains all planned and completed quality activities. The Quality Log is used by the Project Manager and Project Assurance as part of reviewing progress.

Quality management system

The complete set of quality standards, procedures and responsibilities for a site or organisation.

Quality review

A quality review is a quality checking technique with a specific structure, defined roles and procedure designed to ensure a product's completeness and adherence to standards. The participants are drawn from those with an interest in the product and those with the necessary skills to review its correctness. An example of the checks made by a quality review is: 'Does the document match the quality criteria in the Product Description?'

Quality system

See Quality management system.

Request for Change

A means of proposing a modification to the current specification of a product. It is one type of Project Issue.

Requirements

A description of the user's needs. See also Specification.

Reviewer

A person asked to review a product that is the subject of a quality review.

Risk

Risk can be defined as uncertainty of outcome, whether positive opportunity or negative threat. Every project has risks associated with it. Project management has the task of identifying risks that apply and taking appropriate steps to take advantage of opportunities that may arise and avoid, reduce or react to threats.

Risk Log

Contains all information about the risks, their analysis, countermeasures and status. Also known as Risk Register.

Risk profile

A graphical representation of information normally found in the Risk Log.

Risk register

See Risk Log.

Risk tolerance line

The risk tolerance line is one drawn between risks that can be accepted or for which suitable actions have been planned, and risks that that are considered sufficiently serious to require referral to the next higher level of project authority.

Senior responsible owner

This is not a PRINCE2 term, but is used in many organisations. Its equivalent in PRINCE2 terms would be the 'Executive' role. See also Executive.

Senior Supplier

The Project Board role that provides knowledge and experience of the main discipline(s) involved in the production of the project's deliverable(s). Represents the supplier interests within the project and provides supplier resources.

Senior User

The Project Board role accountable for ensuring that user needs are specified correctly and that the solution meets those needs.

Specification

A detailed statement of what the user wants in terms of products, what these should look like, what they should do and with what they should interface.

Sponsor

Not a specific PRINCE2 role but often used to mean the major driving force of a project. May be the equivalent of Executive or corporate/programme management.

Stage

A stage is the section of the project that the Project Manager is managing on behalf of the Project Board at any one time, at the end of which the Project Board wishes to review progress to date, the state of the Project Plan, Business Case and risks, and the next Stage Plan in order to decide whether to continue with the project.

Stakeholders

Parties with an interest in the execution and outcome of a project. They would include business streams affected by or dependent on the outcome.

Supplier

The group or groups responsible for the supply of the project's specialist products.

Team Manager

A role that may be employed by the Project Manager or Senior Supplier to manage the work of project team members.

Tolerance

The permissible deviation above and below a plan's estimate of time and cost without escalating the deviation to the next level of management. Separate tolerance figures should be given for time and cost. There may also be tolerance levels for quality, scope, benefit and risk. Tolerance is applied at project, stage and team levels.

User(s)

The person or group who will use the final deliverable(s) of the project.

Work Package

The set of information relevant to the creation of one or more products. It will contain a description of the work, the Product Description(s), details of any constraints on production such as time and cost, interfaces, and confirmation of the agreement between the Project Manager and the person or Team Manager who is to implement the Work Package that the work can be done within the constraints.

APPENDIX B: PROJECT MANAGEMENT TEAM ROLES

The following roles explain the normal responsibilities and tasks of each member of the project management team. They can be tailored to suit the needs of the roles for any project. Tailoring may include combining roles or dividing a role between two or more people. The important thing to remember is that all the responsibilities must be held by someone, whatever the size of the project. Responsibilities may be moved from one role to another, but should never be dropped. *Organisation*, Chapter 14 gives clear indication of which roles may or may not hold certain responsibilities, for example, the Project Manager should not hold Project Assurance responsibilities.

B.1 Project Board

The Project Board is responsible to corporate or programme management for the overall direction and management of the project and has responsibility and authority for the project within the remit (the Project Mandate) set by corporate or programme management.

The Project Board is the project's 'voice' to the outside world and is responsible for any publicity or other dissemination of information about the project.

B.1.1 Specific responsibilities

The Project Board approves all major plans and authorises any major deviation from agreed Stage Plans. It is the authority that signs off the completion of each stage and authorises the start of the next stage. It ensures that required resources are committed and arbitrates on any conflicts within the project or negotiates a solution to any problems between the project and external bodies. In addition, it approves the appointment and responsibilities of the Project Manager and any delegation of its Project Assurance responsibilities.

The Project Board has the following responsibilities. It is a general list and will need tailoring for a specific project.

At the beginning of the project:

- Approve the start of the project via acceptance of the Project Brief
- Agree with the Project Manager on that person's responsibilities and objectives
- Confirm project tolerances with corporate or programme management
- Specify external constraints on the project, such as quality assurance

- Approve an accurate and satisfactory Project Initiation Document, ensuring it complies with relevant customer standards and policies, plus any associated contract with the supplier
- Delegate any Project Assurance roles
- Commit project resources required for the next Stage Plan.

As the project progresses:

- Provide overall guidance and direction to the project, ensuring it remains within any specified constraints
- Review each completed stage and approve progress to the next
- Review and approve Stage Plans and any Exception Plans
- 'Ownership' of one or more of the identified risks, as allocated at plan approval time that is, be responsible for monitoring the risk and advising the Project Manager of any change in its status and taking action, if appropriate, to ameliorate the risk
- Approve changes
- Ensure compliance with corporate or programme management directives.

At the end of the project:

- Provide assurance that all products have been delivered satisfactorily
- Provide assurance that all Acceptance Criteria have been met
- Approve the End Project Report
- Approve the Lessons Learned Report and the passage of this to the appropriate standards group to ensure action
- Decide on the recommendations for follow-on actions and ensure passage of these to the appropriate authorities
- Approve, where appropriate, a Post-Project Review Plan
- Send project closure notification to corporate or programme management.

The Project Board owns the process, Directing a Project (DP).

The Project Board is ultimately responsible for assurance that the project remains on course to deliver the desired outcome of the required quality to meet the Business Case defined in the Project Initiation Document. According to the size, complexity and risk of the project, the Project Board may decide to delegate some Project Assurance responsibility. See sections 14.2.4 and B.7 for more detail.

One Project Board responsibility that should receive careful consideration is approving and funding changes. See *Change control*, Chapter 20.

Responsibilities of specific members of the Project Board are described in the respective sections that follow.

B.2 Executive

The Executive is ultimately responsible for the project, supported by the Senior User and Senior Supplier. The Executive's role is to ensure that the project is focused throughout its life cycle on achieving its objectives and delivering a product that will achieve the forecast benefits. The Executive has to ensure that the project gives value for money, ensuring a cost-conscious approach to the project, balancing the demands of business, user and supplier.

Throughout the project, the Executive 'owns' the Business Case.

B.2.1 Specific responsibilities

- Oversee the development of the Project Brief and Business Case
- Ensure that there is a coherent project organisation structure and logical set of plans
- Authorise customer expenditure and set stage tolerances
- Monitor and control the progress of the project at a strategic level, in particular reviewing the Business Case continually (for example, at each end stage assessment)
- Ensure that any proposed changes of scope, cost or timescale are checked against their possible effects on the Business Case
- Ensure that risks are being tracked and mitigated as effectively as possible
- Brief corporate or programme management about project progress
- Organise and chair Project Board meetings
- Recommend future action on the project to corporate or programme management if the project tolerance is exceeded
- Approve the End Project Report and Lessons Learned Report and ensure that any outstanding Project Issues are documented and passed on to the appropriate body
- Approve the sending of the project closure notification to corporate or programme management
- Ensure that the benefits have been realised by holding a post-project review and forward the results of the review to the appropriate stakeholders.

The Executive is responsible for overall business assurance of the project – that is, that it remains on target to deliver products that will achieve the expected business benefits, and that the project will be completed within its agreed tolerances for budget and schedule. Business assurance covers:

- Validation and monitoring of the Business Case against external events and against project progress
- Keeping the project in line with customer strategies
- Monitoring project finance on behalf of the customer
- Monitoring the business risks
- Monitoring any supplier and contractor payments

- Monitoring changes to the Project Plan to see whether there is any impact on the needs of the business or the project Business Case
- Assessing the impact of potential changes on the Business Case and Project Plan
- Constraining user and supplier excesses
- Informing the project team of any changes caused by a programme of which the project is part (this responsibility may be transferred if there is other programme representation on the project management team)
- Monitoring stage and project progress against the agreed tolerances.

If the project warrants it, the Executive may delegate some responsibility for the business assurance functions.

The Project Board is not a democracy controlled by votes. The Executive is the key decision maker because he/she is ultimately responsible to the business. He/she is supported by the Senior User and Senior Supplier.

B.3 Senior User

The Senior User is responsible for specifying the needs of those who will use the final product(s), for user liaison with the project team and for monitoring that the solution will meet those needs within the constraints of the Business Case in terms of quality, functionality and ease of use.

The role represents the interests of all those who will use the final product(s) of the project, those for whom the product will achieve an objective or those who will use the product to deliver benefits. The Senior User role commits user resources and monitors products against requirements. This role may require more than one person to cover all the user interests. For the sake of effectiveness the role should not be split between too many people.

B.3.1 Specific responsibilities

- Ensure the desired outcome of the project is specified
- Make sure that progress towards the outcome required by the users remains consistent from the user perspective
- Promote and maintain focus on the desired project outcome
- Ensure that any user resources required for the project are made available
- Approve Product Descriptions for those products that act as inputs or outputs (interim or final) from the supplier function or will affect them directly
- Ensure that the products are signed off once completed
- Prioritise and contribute user opinions on Project Board decisions on whether to implement recommendations on proposed changes
- Resolve user requirements and priority conflicts
- Provide the user view on Follow-on Action Recommendations
- Brief and advise user management on all matters concerning the project.

The assurance responsibilities of the Senior User are to check that:

- Specification of the user's needs is accurate, complete and unambiguous
- Development of the solution at all stages is monitored to ensure that it will meet the user's needs and is progressing towards that target
- Impact of potential changes is evaluated from the user point of view
- Risks to the users are frequently monitored
- Quality checking of the product at all stages has the appropriate user representation
- Quality control procedures are used correctly to ensure products meet user requirements
- User liaison is functioning effectively.

Where the project's size, complexity or importance warrants it, the Senior User may delegate the responsibility and authority for some of the assurance responsibilities.

B.4 Senior Supplier

The Senior Supplier represents the interests of those designing, developing, facilitating, procuring, implementing, and possibly operating and maintaining the project products. This role is accountable for the quality of products delivered by the supplier(s). The Senior Supplier role must have the authority to commit or acquire supplier resources required.

It should be noted that in some environments the customer might share design authority or have a major say in it.

If necessary, more than one person may be required to represent the suppliers.

B.4.1 Specific responsibilities

- Agree objectives for supplier activities
- Make sure that progress towards the outcome remains consistent from the supplier perspective
- Promote and maintain focus on the desired project outcome from the point of view of supplier management
- Ensure that the supplier resources required for the project are made available
- Approve Product Descriptions for supplier products
- Contribute supplier opinions on Project Board decisions on whether to implement recommendations on proposed changes
- Resolve supplier requirements and priority conflicts
- Arbitrate on, and ensure resolution of, any supplier priority or resource conflicts
- Brief non-technical management on supplier aspects of the project.

The Senior Supplier is responsible for the specialist integrity of the project. The supplier assurance role responsibilities are to:

- Advise on the selection of development strategy, design and methods
- Ensure that any supplier and operating standards defined for the project are met and used to good effect
- Monitor potential changes and their impact on the correctness, completeness and integrity of products against their Product Description from a supplier perspective
- Monitor any risks in the production aspects of the project
- Ensure quality control procedures are used correctly, so that products adhere to requirements.

If warranted, some of this assurance responsibility may be delegated to separate supplier assurance personnel. Depending on the particular customer/supplier environment of a project, the customer may also wish to appoint people to carry out assurance on supplier products.

B.5 Project Manager

The Project Manager has the authority to run the project on a day-to-day basis on behalf of the Project Board within the constraints laid down by the board.

The Project Manager's prime responsibility is to ensure that the project produces the required products to the required standard of quality and within the specified constraints of time and cost. The Project Manager is also responsible for the project producing a result capable of achieving the benefits defined in the Business Case.

B.5.1 Specific responsibilities

- Manage the production of the required products
- Direct and motivate the project team
- Plan and monitor the project
- Agree any delegation and use of Project Assurance roles required by the Project Board
- Produce the Project Initiation Document
- Prepare Project, Stage and, if necessary, Exception Plans in conjunction with Team Managers and appointed Project Assurance roles, and agree them with the Project Board
- Manage the risks, including the development of contingency plans
- Liaise with programme management if the project is part of a programme
- Liaise with programme management or related projects to ensure that work is neither overlooked nor duplicated
- Take responsibility for overall progress and use of resources and initiate corrective action where necessary
- Be responsible for change control and any required configuration management
- Prepare and report to the Project Board through Highlight Reports and End Stage Reports
- Liaise with the Project Board or its appointed Project Assurance roles to assure the overall direction and integrity of the project
- Agree technical and quality strategy with appropriate members of the Project Board
- Prepare the Lessons Learned Report
- Prepare any Follow-on Action Recommendations required
- Prepare the End Project Report
- Identify and obtain any support and advice required for the management, planning and control of the project
- Be responsible for project administration
- Liaise with any suppliers or account managers
- May also perform Team Manager and Project Support roles.

B.6 Team Manager

The Team Manager's prime responsibility is to ensure production of those products defined by the Project Manager to an appropriate quality, in a timescale and at a cost acceptable to the Project Board. The Team Manager reports to and takes direction from the Project Manager.

B.6.1 Specific responsibilities

- Prepare plans for the team's work and agree these with the Project Manager
- Receive authorisation from the Project Manager to create products (via a Work Package)
- Manage the team
- Direct, plan and monitor the team's work
- Take responsibility for the progress of the team's work and use of team resources, and initiate corrective action where necessary within the constraints laid down by the Project Manager
- Advise the Project Manager of any deviations from plan, recommend corrective action and help prepare any appropriate Exception Plans
- Pass back to the Project Manager products that have been completed and approved in line with the agreed Work Package requirements
- Ensure all Project Issues are properly reported to the person maintaining the Issue Log
- Ensure the evaluation of Project Issues that arise within the team's work and recommend action to the Project Manager
- Liaise with any Project Assurance roles
- Attend any end stage assessments as directed by the Project Manager
- Arrange and lead team checkpoint meetings and produce Checkpoint Reports as agreed with the Project Manager
- Ensure that quality controls of the team's work are planned and performed correctly
- Ensure that the appropriate entries are made in the Quality Log
- Maintain, or ensure the maintenance of, team files
- Identify and advise the Project Manager of any risks associated with a Work Package
- Ensure that all identified risks are entered in the Risk Log
- Manage specific risks as directed by the Project Manager.

B.7 Project Assurance

Assurance covers all interests of a project, including business, user and supplier.

Project Assurance has to be independent of the Project Manager, therefore the Project Board cannot delegate any of its assurance responsibilities to the Project Manager.

B.7.1 Specific responsibilities

The implementation of the assurance responsibilities needs to answer the question: 'What is to be assured?' A list of possibilities would include ensuring that:

- Thorough liaison between the supplier and the customer is maintained throughout the project
- User needs and expectations are being met or managed
- Risks are being controlled
- The Business Case is being adhered to
- The value-for-money solution is constantly reassessed
- The project fits with overall programme or company strategy
- The right people are involved in writing Product Descriptions
- The right people are planned to be involved in quality checking at the correct points in the product's development.
- Staff are properly trained in the quality checking procedures
- The right people are being involved in quality checking
- The quality review/quality checking procedures are being correctly followed
- Quality checking follow-up actions are dealt with correctly
- An acceptable solution is being developed
- The project remains viable
- The scope of the project is not 'creeping upwards' unnoticed
- Focus on the business need is maintained
- Internal and external communications are working
- Applicable standards are being used
- Any legislative constraints are being observed
- The needs of specialist interests (for example, security) are being observed
- Quality assurance standards are being adhered to.

It is not enough to believe that standards will be obeyed. It is not enough to ensure that a project is well set up and justified at the outset. All the aspects listed above need to be checked throughout the project as part of ensuring that it remains consistent with, and continues to meet, a business need and that no change to the external environment affects the validity of

the project. Project Assurance must therefore monitor Stage and Team Planning, Work Package preparation and quality review preparation.

See each of the Project Board role descriptions – B.2 Executive, B.3 Senior User and B.4 Senior Supplier – for details of Project Assurance tasks.

B.8 Project Support

The provision of any Project Support on a formal basis is optional. Tasks need to be done by the Project Manager or delegated to a separate body and this will be driven by the needs of the individual project and Project Manager. Project Support could be in the form of advice on project management tools, guidance, administrative services such as filing, and the collection of actuals, to one or more related projects. Where set up as an official body, Project Support can act as a repository for lessons learned and a central source of expertise in specialist support tools.

One support function that must be considered is that of configuration management. Depending on the project size and environment, there may be a need to formalise this and it quickly becomes a task with which the Project Manager cannot cope without support. See B.9 for details of the Configuration Librarian role.

B.8.1 Specific responsibilities

The following is a suggested list of tasks:

- Administer change control
- Set up and maintain project files
- Establish document control procedures
- Compile, copy and distribute all project management products
- Collect actuals data and forecasts
- Update plans
- Administer the quality review process
- Administer Project Board meetings
- Assist with the compilation of reports
- Specialist knowledge (for example, estimating, risk management)
- Specialist tool expertise (for example, planning and control tools, risk analysis)
- Specialist techniques
- Standards.

B.9 Configuration Librarian

The Configuration Librarian is the custodian and guardian of all master copies of the project's products. The role also maintains the Issue Log.

Major tasks are to:

- Control the receipt, identification, storage and issue of all project products
- Provide information on the status of all products
- Number, record, store and distribute Project Issues.

B.9.1 Specific responsibilities

- Assist the Project Manager to prepare the Configuration Management Plan (during initiation)
- Create an identification scheme for all products
- Create libraries or other storage areas to hold products
- Assist in the identification of products
- Maintain current status information on all products
- Accept and record the receipt of new or revised products into the appropriate library
- Prevent changes to a product version once it has been declared ready for inspection
- Control the allocation of new version numbers to changed products
- Archive superseded product copies
- Ensure the security and preservation of the master copies of all project products
- When authorised to do so, issue copies of products for review or information
- When authorised to do so, issue a new version of a product for change or correction
- Maintain a record of all copies issued
- Notify holders of any changes to their copies
- Maintain the Issue Log
- Monitor all Project Issues and ensure they are resubmitted to the configuration library after any authorised change
- Collect and retain information that will assist in the assessment of what products are impacted by a change to a product
- Produce Product Status Accounts
- Assist in conducting configuration audits
- Liaise with other Configuration Librarians where products required by the project are common to other systems.

B.10 Project Support Office (PSO)

The concept of a Project Support Office is a central pool of skilled resources to provide the roles of Project Support, such as clerical support, Configuration Librarians and possibly PRINCE2 consultants to individual projects. A Project Support Office may be established to support either a specific project or a range of projects within the organisation. The overall objectives of a Project Support Office are to supply resources that have the skills defined in roles B.8 (Project Support) and B.9 (Configuration Librarian) to one or more projects. These resources can:

- Support Project Managers in administration work
- Provide support skills in such areas as expertise in planning and control tools and risk management
- Ensure correct and efficient use of PRINCE2 standards across all projects.

A Project Support Office can be useful where:

- Resource shortages, either in numbers or skills, make it difficult to supply people to perform project administration for each current project
- There are a number of small projects of a diverse nature that individually require only limited support from Project Support
- There is a large programme, requiring co-ordination of individual projects
- A large project requires several resources to handle Project Support roles.

The Project Support Office role can provide all the services defined in the roles described in B.8 and B.9, but may also include some or all of the following, when acting for a number of projects.

B. 10.1 Special responsibilities

- Operate a central filing system for several projects
- Operate a complex configuration management system
- Be a centre of expertise for estimating techniques
- Provide expertise in the planning and control software used
- Advise on the preparation of plans
- Produce multi-project reports
- Keep a historical database of how long specific activities take
- Analyse productivity
- Provide PRINCE2 expertise and advice
- Advise on cost/benefit analysis
- Co-ordinate standards
- Act as quality review scribe (and even chairperson).

APPENDIX C: RISK CATEGORIES

The following categories can be used as a starting point for identifying an organisation's main areas of risk in relation to projects or programmes.

Strategic/commercial

- Under-performance to specification
- Management will under-perform against expectations
- Collapse of contractors
- Insolvency of promoter
- Failure of suppliers to meet contractual commitments; this could be in terms of quality, quantity, timescales or their own exposure to risk
- Insufficient capital revenues
- Market fluctuations
- Fraud/theft
- Partnerships failing to deliver the desired outcome
- The situation being non-insurable (or cost of insurance outweighing the benefit)
- Lack of availability of capital investment.

Economic/financial/market

- Exchange rate fluctuation
- Interest rate instability
- Inflation
- Shortage of working capital
- Failure to meet projected revenue targets
- Market developments will adversely affect plans.

Legal and regulatory

- New or changed legislation may invalidate assumptions upon which the activity is based
- Failure to obtain appropriate approval, for example, planning, consent
- Unforeseen inclusion of contingent liabilities
- Loss of intellectual property rights
- Failure to achieve satisfactory contractual arrangements
- Unexpected regulatory controls or licensing requirements
- Changes in tax or tariff structure.

Organisational/management/human factors

- Management incompetence
- Inadequate corporate policies
- Inadequate adoption of management practices
- Poor leadership
- Key personnel have inadequate authority to fulfil their roles
- Poor staff selection procedures
- Lack of clarity over roles and responsibilities
- Vested interests creating conflict and compromising the overall aims
- Individual or group interests given unwarranted priority
- Personality clashes
- Indecision or inappropriate decision making
- Lack of operational support
- Inadequate or inaccurate information
- Health and safety constraints.

Political

- Change of government policy (national or international), for example, approach to nationalisation
- Change of government
- War and disorder
- Adverse public opinion/media intervention.

Environmental

- Natural disasters
- Storms, flooding, tempests
- Pollution incidents
- Transport problems, including aircraft/vehicle collisions.

Technical/operational/infrastructure

- Inadequate design
- Professional negligence
- Human error/incompetence
- Infrastructure failure
- Operation lifetime lower than expected
- Residual value of assets lower than expected
- Increased dismantling/decommissioning costs
- Safety being compromised
- Performance failure
- Residual maintenance problems
- Scope 'creep'
- Unclear expectations
- Breaches in security/information security
- Lack or inadequacy of business continuity.

- Were all obvious risks covered?
- Were the risks and countermeasures discussed with the Project Board?
- Were appropriate countermeasures taken?
- Were risks reassessed when plans were changed?

Project Plan

- Is there a Project Plan?
- Does the Project Plan comply with PRINCE2 requirements?
- Are planning assumptions stated?
- Does the Project Plan show the stage divisions?
- Has each risk to the plan been added to the Risk Log?
- If an end date was imposed, is it realistic?
- Was the Project Plan quality reviewed?
- Were the assurance roles involved in the review?
- Was the product-based planning technique used?
- Is there a checklist of key products?
- Are there Product Descriptions for each major product?
- Are the Product Descriptions to the standard PRINCE2 format?
- Are Product Descriptions being reviewed before the start of building those products?

Stage Plan

- Is there a Stage Plan for each management stage?
- Do Stage Plans comply with PRINCE2 requirements?
- Is stage tolerance defined?
- Are stage controls identified and suitable?
- Are planning assumptions stated?
- Are Stage Plan risks identified and included in the Risk Log?
- Are Stage Plans consistent with the Project Plan?
- Is next stage planning carried out correctly in each stage?
- Were Stage Plans quality reviewed?
- Was the current Stage Plan approved?
- Is product-based planning used in stage planning?

- Is there a Product Checklist for each stage?
- Are there Product Descriptions for each product on the checklist?
- Are the Product Descriptions to the standard PRINCE2 format?
- Are Product Descriptions reviewed prior to the start of the build process?
- Were Team Managers/team members involved in planning?
- Did the assurance roles review the draft Stage Plan?
- Did Project Assurance add quality checks to the draft Stage Plan?
- Did Project Assurance add names to these quality checks?
- Is time and effort allowed for project management activities?
- Is time allowed for the analysis of Project Issues?
- Has a reasonable rate of staff effectiveness been chosen?
- Is the method of quality checking identified for each product?

Control

- Are checkpoints held at the frequency stated in the Stage Plan?
- What actual progress information is captured?
- Are actuals used to update the Stage Plan regularly?
- Is the update frequency commensurate with the plan size?
- Is there a record of Work Package authorisation and return?
- Are estimates collected to complete any further information?
- Are Product Checklists kept up to date?
- Are Checkpoint Reports produced?
- Are Highlight Reports produced when stated in the plan?
- Are Highlight Reports produced to the agreed standard?
- Is the Stage Plan regularly checked against tolerances?
- Are Exception Reports used when tolerances are threatened?
- Were any required Exception Plans produced?
- Were exception assessments held to approve any Exception Plans?
- Can stages be completed within the agreed tolerance levels?
- Are end stage assessments carried out at the end of each stage?
- Is there an End Stage Report for each stage?
- Is the End Stage Report to standard?
- Is end stage assessment documentation circulated prior to the meeting?

APPENDIX D: PRINCE2 HEALTHCHECK

It can be very useful for an organisation to check on the correct use of PRINCE2 in its projects. The following set of questions forms a good basis for any such healthcheck. The questions can be the basis of a table or spreadsheet, with entries in extra columns to indicate whether and how well each element of the method is being used.

Start-up

- Was there a Project Mandate?
- Was the Project Board designed/appointed before initiation was authorised?
- Was a Project Brief produced?
- Is the Project Brief to PRINCE2 standards?
- Are customer's expectations set?
- Are Acceptance Criteria and customer's quality expectations set?
- Has the Project Approach been defined?
- Was an initiation Stage Plan produced?
- Was the initiation Stage Plan approved?
- Was the Risk Log created?

Initiation

- Was the initiation stage formally authorised?
- Were the Authorising Initiation (DP1) agenda items covered?
- Is there a Project Initiation Document (PID)?
- Is the PID produced to PRINCE2 standards?
- Are the project objectives stated?
- Have project constraints been identified?
- Are project tolerances defined?
- Are any project interdependencies stated?
- Is the project scope stated?
- Are reporting procedures, contents and frequency defined?

- Is there a Communication Plan covering both inward and outward communication needs?
- Does the PID contain the Project Plan?
- Is there a Business Case in the PID?
- Are the reasons for the project given?
- Is there an investment appraisal or cost/benefit analysis?
- Was the PID quality reviewed?
- Did the Project Board formally approve the PID?
- Was the Project Board committed to the process?
- Was initiation done before work on products began?
- Was there an initiation end stage assessment (Authorising a Project (DP2))?
- Was the next Stage Plan presented at the initiation end stage assessment?
- Were Project Issues affecting the PID managed effectively?
- Was formal approval to proceed to the next stage given?

Organisation

- Is there a Project Board?
- Are any limits to the authority of the Project Board documented?
- Is it clear to whom the Project Board reports?
- Which member of the Project Board reports to senior management?
- Does the Senior User adequately represent all user areas?
- Are Project Board members contributing fully to all exception assessments and end stage assessments?
- Are Project Board members carrying out their other project duties?
- Is there a Project Manager?
- Have Project Assurance roles been agreed?
- Has any role for Project Support been clarified?
- Does each person have a job description?
- Has each person agreed/signed their job description?
- Was the organisation agreed by the end of Starting up a Project (SU)?
- Is the documented version of the organisation correct?
- Is the role of the supplier(s) clearly defined?
- Have any changes to the management team been recorded?
- Has the Project Board received training for its roles?

- Is the Team Manager role used effectively?
- Are job descriptions agreed with any late appointments?

Business Case

- Is there a Business Case?
- Are the reasons for the project clearly defined and valid?
- Is there an investment appraisal?
- Are figures based on defined items that can be measured?
- Is the Business Case passed down from pre-project work?
- If so, have the figures been checked out?
- Are costs based on the Project Plan or some other figures?
- Are benefits stated in terms that can be measured in the post-project review?
- Have 'before' measurements been taken in order to assist comparisons in the postproject review?
- Is the Business Case updated and reviewed for each end stage assessment?
- Who measures the impact of changes on the Business Case?
- Is the impact of changes on the Business Case assessed?
- If the project is part of a programme, is the programme's Business Case fully reflected in the project?

Risk

- Is there a Risk Log?
- Is it being kept up to date?
- Are risks to each plan identified, analysed and acted upon?
- Is a formal procedure for the management of risk in use?
- Is risk assessment part of each end stage assessment?
- Were the major risks entered in the Business Case?
- Have risk 'owners' been identified?
- Are risks monitored on a sufficiently regular basis?
- Is risk assessment part of each major change request assessment?
- Were risk probability and impact assessed?
- Have proactive risk actions been taken where necessary?
- Were any needed contingency plans prepared?

- Were all obvious risks covered?
- Were the risks and countermeasures discussed with the Project Board?
- Were appropriate countermeasures taken?
- Were risks reassessed when plans were changed?

Project Plan

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- Were any required Exception Plans produced?
- Were exception assessments held to approve any Exception Plans?
- Can stages be completed within the agreed tolerance levels?
- Are end stage assessments carried out at the end of each stage?
- Is there an End Stage Report for each stage?
- Is the End Stage Report to standard?
- Is end stage assessment documentation circulated prior to the meeting?

- Is the End Stage Report accepted at the end stage assessment?
- Are unfinished products included in the next Stage Plan?
- Does the Project Board sign off stages and give approval to proceed?
- Do relevant project members attend end stage assessments?
- Are end stage assessment actions recorded?

Quality

- Has the customer specified quality expectations?
- Is there a Project Quality Plan?
- Will the Project Quality Plan achieve the customer's quality expectations?
- Does the Project Quality Plan point at specific quality procedures?
- Are quality responsibilities defined in the Project Quality Plan?
- Are there stage quality plans?
- Are individuals and quality methods identified in the stage quality plans?
- Is there a Quality Log?
- Is the Quality Log up to date?
- Do the teams maintain one central Quality Log?
- Does the Project Manager get sufficient feedback to ensure quality is acceptable?
- Are Project Assurance roles sufficiently involved in quality checking?
- Do the quality file and Quality Log match?
- Is any external quality assurance function happy with its involvement?

Quality reviews

- Has training in quality reviews been given to attendees?
- Have the chairperson and reviewers been identified at stage or team planning time?
- Are products sent out before quality review meetings?
- Are Product Descriptions and blank question lists sent with the products?
- Are products reviewed against their Product Descriptions?
- Are products reviewed by the means stated in the Product Description?
- Is enough time planned for preparation, review and follow-up?
- Are question lists completed prior to quality reviews?
- Is there an agenda for each quality review meeting?

- Do reviewers unable to attend quality reviews send question lists?
- Do quality reviews generate follow-up action lists?
- Do the reviewers sign off corrections?
- Are product creators (producers) always present?
- Are second reviews carried out if needed?
- Is there a review result for each review?

Change control

- Is there a documented procedure for change control?
- Is that procedure the same as stated in the Project Plan?
- Are Project Issues recorded?
- Is there an Issue Log?
- Are Project Issues assessed regularly?
- Is the impact of Project Issues on the Business Case assessed?
- Is the impact of Project Issues on the Risk Log assessed?
- Are all Project Issues actioned?
- Is the status of Project Issues monitored?
- If the impact of a Project Issue exceeds tolerance, is it escalated to the Project Board?
- Are plans updated to incorporate agreed changes?
- Is a distinction made between Off-Specifications and Requests for Change?

Configuration management

- Is there a formal configuration management method in use?
- Are products controlled once submitted to configuration management?
- Are products uniquely identified?
- Are relationships between products identified?
- Are products identified as complete?
- Do products have version identifiers?
- Are product records up to date?
- Is the accuracy of the product records checked regularly?
- Are all old versions preserved?
- Is it easy to retrieve old versions?

- Are the configuration management records in line with the support requirements?
- Is the Configuration Librarian role well defined, allocated and agreed?
- Are new records created during product-based planning?

Project filing

- Is there a recognisable filing system?
- Is its structure documented and available?
- Does it cover management and specialist products?
- Does it cater for multiple versions for example, of plans?
- Does the filing system provide an audit trail?
- Is it easy to find things in the filing system?
- Is the filing kept up to date?
- Is filing responsibility clearly defined in a job description?