PRINCE2® 2009 Foundation

User Guide

Version 1.6

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Contents

Foreword

ILX Group plc is a leading developer and distributor of multimedia training products specialising in the area of project and programme management.

PRINCE2 Foundation uses the very latest multimedia educational techniques to provide a learning environment which is stimulating, easy-to-use and stress-free.

The aim of this course is to take students with little or no knowledge of PRINCE2 to the level where they could take the Foundation (Part 1) examinations with a high degree of confidence in achieving a pass. The examination within the course package uses previous examination questions that are accessed at random to provide an accurate simulation of the real thing.

We hope you enjoy the course and that you find it a useful starting point in your PRINCE2 training programme.

Section 1: Hardware/Software Pre-requisites

For the best experience using this multimedia course on a computer, we recommend the following specification:

Operating System: Windows XP, Windows Vista, Windows 7, Mac OSX
CPU: Intel Pentium II 450MHz or faster processor/PowerPC G3 500MHz or faster processor
RAM: 128MB
Screen resolution: 1024 x 768 or higher
Peripherals: Sound Card & Speakers, Keyboard & Mouse
Software: Flash Player 8 or higher

Course Introduction

S1P1 – Objectives

Welcome to session 1 of this complete e-learning training course in the PRINCE2 method.

This introductory session is intended to help you get the most out of the training programme and to give you a basic appreciation of what PRINCE2 is and why it is relevant.

Once you have completed this session you will be able to state the objectives of the course and match these against your own learning requirements.

You will know what a project is and be able to define a project using PRINCE2 terminology.

You will be able to explain the problems that PRINCE2 sets out to solve and why such a method needed to be devised.

Finally, you will be able to list the principal organizations that are involved in PRINCE2's development, support and promotion.

S1P2 – Course Objectives

One of the major advantages of PRINCE2 is that there is a universally recognised set of examination standards – which are independent of the training providers.

The UK's Office of Government Commerce, who is the author of PRINCE2, defines two levels of student examination – namely Foundation level and the more advanced Practitioner level.

A "pass" at the Foundation level is a pre-condition of sitting the Practitioner examination.

This Foundation course has been specially configured to give you all the information and training that you will require to confidently take the PRINCE2 Foundation examination.

Should you wish to go on and take the Practitioner examination at a later stage, then ILX can provide all the necessary additional training materials.

However, examinations are not really what PRINCE2 is all about, and many people just want to use PRINCE2 to improve the quality of their project management.

So – perhaps a more important, business-oriented objective of this course is that once you have completed your studies you should be able to operate as an informed member of a project team, operating in a PRINCE2 environment.

S1P3 – Supporting Material

In addition to the e-learning course, there are some paper-based materials that will help you in your studies.

The first and most important is a copy of the PRINCE2 Manual itself. If you have purchased this course as part of one of our bundled packages then you will have a copy of this book.

Otherwise, if you haven't already obtained one from elsewhere we strongly recommend that you buy a copy either from ourselves, from the APM Group Limited or from the Stationery Office.

You are not allowed to take the manual, or any other materials into the Foundation examination with you, but if you are serious about PRINCE2 then you really should have your own copy of the manual.

You may also have been provided with a document called the Course User Guide, either in paper-based or electronic form. This useful document contains a more or less full transcript of this course content, slightly modified to make it suitable to the different medium.

Although by no means essential, you may find this document useful, both during and after your studies.

S1P4 – Character Introduction

During this course you will come across a number of characters that are involved with PRINCE2. Let's introduce you to some of these characters before we get started.

Here we have the Project Board, which is responsible for the overall direction and

management of the project. The Project Board consists of the Executive, seen here sitting in the middle, who is ultimately responsible for the project and is supported by the Senior User and Senior Supplier.

The Project Manager runs the project on a day-to-day basis and is responsible for producing the required products to the required standard and quality.

S1P5 – What is Project Management?

Most people have some experience of project management, even if it is only in their personal lives.

You wouldn't be taking this course however unless you had some professional interest in managing projects and unless you already had some familiarity with the basics of project planning and control.

So you should be able to recognise a definition of what a project is.
Here is a list of several common and perfectly valid definitions of the word "Project".

One of these is actually given in the PRINCE2 manual – can you identify which it is?

Click in the white boxes to make your selection and then click on the "Submit" button to confirm your answer.

Answer feedback:

Take a look at this page of the PRINCE2 Manual and you will see the definition we were looking for.

You will notice that two words crop up very often in defining the word project – "cost" and "time". Projects are all about achieving a given objective within a pre-defined cost, or budget, and by a specific time.

Much of what goes on in PRINCE2 is aimed at achieving and satisfying the cost and time constraints that are inherent in any project. But PRINCE2 also places great emphasis on a third parameter – that being Quality.

If, as a Project Manager, you are consistent in getting all of those three factors – cost, time and quality - right then you won't go far wrong. PRINCE2 exists to help you do just that.

S1P6 – Variables of a Project

In addition to Costs, Timescales and Quality, PRINCE2 goes on to identify three further variables which affect any project and which need to be managed to achieve a successful project outcome.

These are:

Scope – what exactly the project will or will not deliver.

Risks – regardless of the nature of the project, all projects involve risk. The management of risk is an important theme in PRINCE2.

And Benefits – in other words "Why are we doing this project?" Or "Will the completed project deliver the expected benefits?"

S1P7 – Why do projects exist?

Every organization however large or small faces two distinct imperatives, these are:

• To maintain 'business as usual' – in other words continue day-to-day operations

• And to change in order to compete in an ever-changing environment.

Organizational management is increasingly focussed on balancing between business as usual and change.

Projects are a way to bring about change and although many skills required to manage an organization can be considered generic there are some important skills which those involved in projects should possess.

PRINCE2 defines project management as, 'the planning, delegating, monitoring and control of all aspects of the project, and the motivation of those involved, to achieve the project objectives within the expected performance targets of time, cost, quality, scope, benefits and risks.

S1P8 – Activity

Shown below are four of the six project variables which PRINCE2 identifies. Can you recall the other two?

Answer feedback:

The six project variables defined by PRINCE2 are Costs, Timescales, Quality, Risk, Scope and Benefits.

S1P9 – What makes a project different?

But what specifically makes projects different from Business As Usual activities? Well this can be defined by a number of specific characteristics.

Firstly Change, which by their very nature, projects bring about. Projects are also Temporary in nature, once the required change objectives have been achieved, then Business As Usual resumes. So projects have a defined start and just as importantly, a clearly defined end.

Projects are often complex and involve many skills from different areas internal and external to the organization. They can be considered to have Cross-functional characteristics. PRINCE2's customer supplier approach means that the project as a whole benefits from differing perspectives, each contributing to the intended change.

Although organizations may undertake similar projects, using a proven pattern of project activity, each project is still in effect Unique. After all, even similar projects are likely to involve different resources, locations or customers.

Finally all projects contain a degree of uncertainty. The five characteristics we've already discussed here, will by their nature introduce threats and opportunities to the project. These can be considered over and above those which are encountered in business as usual activities.

S1P10 – What is PRINCE2?

A good starting point to answering the question "What is PRINCE2?" is to understand exactly what PRINCE2 is not.

PRINCE2 is not a piece of computer software.

PRINCE2 is not a planning tool, in the way that Microsoft Project is, for example.

PRINCE2 is not carved in tablets of stone - it is designed to be flexible to meet particular circumstances.

PRINCE2 is not, like some of its predecessors, unnecessarily bureaucratic or cumbersome.

PRINCE2 is not restricted to large projects - it can be applied across the board to projects of all kinds and sizes.

PRINCE2 is not a guarantee of successful project outcomes - but it certainly can help prevent embarrassing and costly project disasters.

So, if PRINCE2 is none of these things, what exactly is it?

At its most basic level, PRINCE2 is a book, which is produced by the UK government's Office of Government Commerce – or OGC - and which entirely describes a structured method for approaching, managing and closing down a project of any type or size.

S1P11 – What is PRINCE2? - continued

One of the great strengths of PRINCE2 is that it is truly generic. It is applicable to any project regardless of;

• The scale of the project
• The type of project
• The nature of the organization
• Culture
• or geographical location

PRINCE2 achieves this by isolating management and specialist aspects of project work. In effect the day-to-day work on the project is handled separately from the production of the project's deliverables, known as products in PRINCE2.
PRINCE2's generic nature can provide significant benefits in all facets of business activity, whilst strengthening organizational capability and maturity.

The PRINCE2 manual lists many important benefits. We have summarized these here for your convenience.

S1P12 – PRINCE2 Players

To help promote PRINCE2, the OGC has collaborated with a number of organizations.

The Stationery Office, for example are charged with printing and distributing the manuals.

The APM Group Limited, in High Wycombe, have been appointed by the OGC to co-ordinate the examination procedures and to accredit the various training organizations, such as ourselves.

Companies that have been approved by the APM Group to deliver training in PRINCE2 are referred to as Accredited Training organizations or ATOs and are thereby entitled to use the PRINCE2 logo on their training and promotional material.

A higher level of accreditation is provided by UKAS – the United Kingdom Accreditation Service. They audit the procedures of the APM Group to verify that they meet the standards expected of a professional accrediting body.

There is a well-established user group for companies and individuals that use PRINCE2 – or any of the other OGC-inspired Best Practice approaches such as Managing Successful Programmes and Management of Risk.

Contact details of all of these organizations can be found by clicking on their respective names.

S1P13 – Review Questions

Now try your hand at a few questions about PRINCE2.

Would you say this statement is true or false?

Answer feedback:

Whilst most projects of any size these days will almost always involve the use of a computerised planning tool, PRINCE2 does not mandate their use.

All that PRINCE2 says is that planning must be done - it doesn't dictate how it should be done.

In fact, it is generally true of PRINCE2 that it tells you what should be done and why it should be done - but it stops short of telling you how to do it.

S1P14 – Review Questions

Try answering this question.

Answer feedback:

PRINCE2 is not prescriptive - it is descriptive. It is designed to be interpreted and applied according to the needs of the project under consideration.

S1P15 – Summary

This brings us to the end of session 1.

In this brief introductory session we have seen what a project is, as defined by PRINCE2 and we have seen six variables of a project as recognised by PRINCE2, namely costs, timescales, quality, scope, risks and benefits.

We went on to look at why projects exist, and what differentiates a project from Business As Usual activities.

We described what PRINCE2 is, and how its generic nature makes it applicable to projects of any type or type.

Finally we outlined some of the key organizations which collaborate in order to support PRINCE2.

Session 2 – Overview and Principles

S2P1 – Objectives

Welcome to session 2 entitled 'overview and principles'.

This session sets out to explain the fundamental concepts on which the PRINCE2 project management method is based.

Once you have completed the session you will understand the method and the relationship between its Principles, Themes and Processes and some of the specific tools needed when tackling a project of any size.

You will, therefore, learn about the key elements that make up the PRINCE2 project management method and the structure of the PRINCE2 Manual.

Finally, you will be able to recognise the essential characteristics and structure of a PRINCE2 project.

S2P2 – Basic Concepts

In order to successfully complete any significant job of work there are five main aspects that need to be considered, namely:

• The method to be used, in other words how will you approach the job?
• How will the work be organized?
• What are the main factors that need to be taken into account?
• Who will have responsibility for what?
• And how will progress be monitored and communicated?

PRINCE2 provides best practice guidance on all of these aspects by defining:

• Seven self-validating Principles
• Seven Themes
• And Seven Processes

The seven Principles provide a best-practice framework for the project. Ultimately they define a PRINCE2 project.

The seven Themes provide guidance on aspects of project work which should be addressed at various points during the undertaking. They relate to each other and are integrated into the Processes.

Finally the seven Processes offer a 'journey' through the project so that critical aspects of project work are neither forgotten nor treated in a trivial manner. The Processes, which form a process model, take the project team through the project timeline from initial instruction to the delivery of the product or products needed by the organization.

S2P3 – Basic Concepts

Imagine that the project is the construction of a large prefabricated building.

This project would require a significant investment and involve many people with different skills. Therefore, a more formalised approach would be required for this project. To handle the complexity of the work and aspects of the technical work such as planning permission and building control you may decide to use PRINCE2 as the method for the project.

PRINCE2 will encourage you to produce a sound business justification for the building and assist you in setting up the management structure and defining roles and responsibilities. It will also provide you with a set of management procedures or processes to guide you all the way through the project from beginning to end.

Notice that PRINCE2 does not, and cannot, provide a set of detailed job-instructions specific to the project because the method is generic and not created around specific technical work. Nonetheless it does guide you in the management of the production of the products.

Many different techniques would be required for such a project - some of the management techniques would be fairly generic but there would also be a whole host of techniques specific to the construction industry.

S2P4 – Basic Concepts

PRINCE2 does not set out to define all the techniques of project management - but it does recommend some key ones -

particularly the use of Product Based Planning - as a means of maintaining objectivity throughout the project. The Product Based Planning technique is provided as part of the Plans Theme.

Other project management techniques such as Networking, Critical Path Analysis and Gantt Charts would probably be used on a project like this - but PRINCE2 does not define or mandate them - it just says that such techniques must be chosen and used as appropriate.

In addition to the project-specific tools for specialist work such as cranes, diggers and cement mixers, there may also be a need for management tools such as computers and associated software.

Again PRINCE2 does not include or mandate the use of any these types of tools - other than to say they should be selected and used as required.

S2P5 – Activity

Do you think Microsoft's MS-Project software package would be classed as a method, procedure, technique or a tool?

Answer feedback:

MS-Project, together with the many other commercially available computer-based planning packages, would be classed as a tool - used in support of the project.

The PRINCE2 manual also gives guidance on tailoring PRINCE2 to the project environment. This includes information on how to apply the PRINCE2 method taking into account, for instance, the scale of the project, the customer/supplier environment and whether the project is in the private or public sector.

S2P6 – Key elements of PRINCE2

So let's now take a more detailed look at the make-up of PRINCE2 and see how it relates to the aspects of work which we have just been discussing.

The first thing to understand about PRINCE2 is that it does not exist or operate in isolation from the rest of the organization.

Each organization usually has its own sets of standards and practices. There may be an ISO9000 certified quality management system in operation, as well as established best-practice, experience and commonsense procedures.

All of these act as a foundation on which PRINCE2 must be installed when it is adopted by an organization.

Given these factors, the next base on which PRINCE2 is founded is that every project will have a Business Case. This must be carefully prepared to assess whether the expected business benefits that could accrue from the project justify committing to the anticipated project costs given the risks.

This focus on the Business Case means that PRINCE2 is used by the project team before work on the project's specialist products begins. This high-level preliminary work is essential if a main cause of project failure is to be avoided namely - a project which was never worth doing in the first place.

S2P7 – Key elements of PRINCE2 - Principles

There are then three main elements which make up the PRINCE2 method in its entirety. Firstly, there are the Principles.

Projects vary greatly in size, complexity, business criticality, location and cultural setting. Regardless of these factors there are some principles which should be acknowledged and held to be true before, during and after the life of the project. PRINCE2 defines seven Principles which hold true from the conception of the project through to completion and close-down. They are:

• Continued Business Justification
• Learn from experience
• Defined Roles and responsibilities
• Manage by stages
• Manage by exception
• Focus on products
• Tailor to suit the project environment

Let's spend a few moments to look at each in turn.

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The first PRINCE2 principle is that of 'Continued Business Justification.'

Buying a house or a car is a major expense for most people. It is unlikely that the purchase would be made without some serious thought and evaluation. The equivalent in project terms is the creation of a Business Case to investigate the project's viability. The Business Case is the documentary evidence that the Continued Business Justification Principle is being followed. We will look at the creation and maintenance of the Business Case in the Business Case Theme, exploring this Principle in more detail.

S2P8 – Key elements of PRINCE2 - Principles

The second PRINCE2 principle is to Learn from Experience'. Everything we do in life contributes to who we are and what we are able to do. We often label that as 'experience'. In a project environment where the same group of people may not work together again on later projects the 'collective memory' or Lessons Learned should be captured more formally so that no project should waste resource on 're-inventing the wheel'.

The Learn from Experience principle becomes embedded in PRINCE2 in the Processes chapter. It's here previous lessons are reviewed and current lessons are captured and passed on to later projects.

Creating Defined Roles and Responsibilities' is another key PRINCE2 principle.

Knowing what is expected of you and knowing what you can expect of others is important in any form of work. Project work is no different. The Defined Roles and Responsibilities principle becomes apparent in the Organization Theme where the Project Management Team is set up.

Undertaking a technically complex, expensive and business-critical project 'in one go' invites unacceptable risk. PRINCE2 uses another of its principles here, namely Manage by Stages. The project is divided into 'manageable chunks' called stages. This brings several advantages to the project. One advantage is that the Stage Boundaries encourage the Project Board to re-evaluate the viability of the project periodically. Another advantage is that the Project Manager is not required to plan in detail for lengthy periods of time – especially when next week is difficult to predict in some environments. The principle of Manage by Stages will be revisited in the Progress Theme.

S2P9 – Key elements of PRINCE2 - Principles

In any project people need to know their limit of authority so they neither inadvertently exceed it nor seek guidance from a higher level of management too early. Appropriate delegation of authority through the levels of management in the Project Management Team is important to proper management of the project. The Manage by Exception principle seeks to have each level of management given clear responsibilities and accountabilities for parts of the project. We'll visit this principle again in the Progress Theme, where we will look at Tolerance which is the mechanism which enables Management by Exception.

Focus on Products

You may be used to creating and working with 'to do' lists. They focus our attention on activities. PRINCE2 takes a different view of things for project work. It draws our attention to 'products' rather than 'activities' as a starting point. The principle here is to Focus on Products. So, the first question we should ask is, "What have I got to make?" rather than, "What have I got to do?" This is appropriate to project work in particular where we are required to 'produce', or 'create', or 'modify' something. The Plans Theme and the planning work will embody the Focus on Products Principle.

The seventh and final PRINCE2 principle is Tailor to suit the Project Environment'.

Projects are distinguished by a number of characteristics. One of them is that they are unique. Every project is different. Some of the differences relate to the products being made, to the environment being changed and the people whose

work is being modified. Consequently PRINCE2 needs to be tailored in the way it is used otherwise it will become bureaucratic rather than pragmatic.

S2P10 – Key elements of PRINCE2 - Themes

PRINCE2 identifies seven Themes as being the essential ingredients for any successful project. They are:

Business Case. As we have seen the Business Case for a project forms part of its very foundation. It is the most important set of information for a project and drives the decision-making process. It is used continually to ensure that the project's progress is aligned with the business objectives.

Organization. Defining all the roles, responsibilities and relationships for the people involved in managing and executing the project.

Quality. The emphasis which PRINCE2 places on products, or deliverables, means that it is easy to see the relevance of traditional quality management principles to the management of projects.

Plans. These are the backbone of the management information system that is required for any project. PRINCE2 is very concerned with the different levels of plan which need to be produced and the approvals which are required before plans are put into action.

Risk. Since risk is such a fundamental consideration within the Business Case, PRINCE2 identifies Risk as a Theme in its own right to assess and take relevant action in respect of such uncertainties.

Change. Change in projects is inevitable so PRINCE2 defines procedures for managing changes as they occur or become necessary. This can be a particularly crucial element in a project since the rest of the project or other projects or perhaps a programme can be affected by changes made within a project. This Theme also provides for Configuration Management which may be thought of as asset control.

Progress. As important as it is to plan the project it is equally important to know how the project is progressing. When the 'actual state' is known and compared to the planned state, then control is possible. Each of these seven Themes is considered in more detail in sessions 3 and 4.

S2P11 – Activity

From the list shown, can you identify the PRINCE2 Principles?

Answer Feedback:

The seven PRINCE2 principles are:

• Continued Business Justification
• Learn from Experience
• Defined Roles and Responsibilities
• Manage by Stages
• Manage by Exception
• Focus on Products
• Tailor to suit the Project Environment

S2P12 – Key elements of PRINCE2 - Processes

PRINCE2 identifies seven Processes - the first of these being Starting Up a Project. This is a set of pre-project activities which set out to answer the question "Do we have a worthwhile and viable project?", before seeking commitment of resources.

The process Directing a Project is provided for the Project Board for the purpose of decision making. Their first formal decision uses Directing a Project at the end of the Starting Up a Project process.

Initiating a Project helps ensure that a firm baseline exists for the project and that everyone involved understands what the project is seeking to achieve before any major commitment of resource.

Controlling a Stage is for the Project Manager's day-to-day activities, which includes authorising work, monitoring progress, reporting to the Project Board and reacting to unplanned events.

Managing Product Delivery is the main workshop of the project and consumes the majority of the resources. Here the

products of the project are created by the teams of specialist people under the management of Team Managers.

Managing a Stage Boundary enables the Project Manager to provide information to the Project Board at key points so they can decide whether to allow the project to proceed or to close it prematurely.

Finally, Closing a Project enables the Project Manager to execute a controlled and orderly close to the project, either at its natural end or at premature close. One of the outputs from this process will be a Lessons Report, which can provide valuable information for future projects.

Planning is an important aspect of any project as it provides everybody involved in the project with information on what is required, how it will be achieved, what resources will be used and when things will happen.

Planning is a repeatable process and plays an important role in many of the other processes. PRINCE2 gives guidance on planning in the Plans Theme.

Principles, processes and themes need to be integrated with the project environment. This is known as 'tailoring PRINCE2 to the project environment,' as PRINCE2 is not a 'one size fits all' solution, it is a flexible framework. Adopting PRINCE2 across an organization is known as embedding, whilst using the processes and themes in a flexible manner to suit the project is called 'tailoring'.

S2P13 – The PRINCE2 Manual

The PRINCE2 Manual was subjected to its first major revision in 1998. The revised manual included greater coverage of how PRINCE2 applies within a multi-project or programme environment.

A more major re-structuring took place in 2002, with the format of the book being changed and the order of presentation also being amended.

A further revision took place in 2005 with more changes to the sections and the technical details. A further version of the manual was released in 2009.

Despite these changes the essential content and approach remains unchanged.

There are about 300 pages in the manual altogether, the first 13 or so of which deal with the contents listing and an introduction to the book and to the PRINCE2 method.
This is followed by the three main sections dealing in detail with the Principles, the Themes and the Processes.

The last 20 or so pages of the manual are taken up with Tailoring PRINCE2 to the project environment, Appendices, Checklists and Further information on where to go for additional help in understanding and implementing PRINCE2.

S2P14 – The structure of a PRINCE2 project

We have seen on the previous pages that PRINCE2 has a very clearly defined structure, so any project managed using PRINCE2 must also have a definite structure, with all PRINCE2 projects sharing certain characteristics.

For example, every PRINCE2 project relates to:

Change – every project introduces change to the business.

Temporary – the project has a life-span which ends when the final product is delivered and accepted or the project has nothing else to contribute.

Cross-functional – projects use people with a variety of management and technical skills and often cross boundaries of business functions and even cross company boundaries.

Unique – the change may introduce completely new ways of working or introduce the new technology to a new group of people. Either way there is a dimension to it which is unique.

Uncertainty – with change comes uncertainty and that brings risk to the undertaking.

In many projects the supplier comes from within the customer organization and as such will understand the way in which PRINCE2 is embedded and the requirements for tailoring.

PRINCE2 is written from a customer's perspective, as such when a commercial customer supplier environment exists, careful consideration needs to be given to the way in which PRINCE2 is applied.

It should be recognized that there are likely to be at least two sets of:

- reasons for undertaking the project
- management systems
- governance structures
- and corporate cultures to be considered

In particular both the customer and the supplier are likely to have a Business Case, both of which demonstrate continued business justification. However, it is the customer's business case that drives the project. Similar considerations need to be made for each PRINCE2 theme. The processes may also require tailoring especially Starting up a Project and Initiating a Project, where the Supplier may not have been selected.

S2P15 – The structure of a PRINCE2 project

A PRINCE2 project is divided into a number of Management Stages, each forming a distinct unit for management purposes.

These Management Stages run in sequence and do not overlap. They are separated by decision points or Stage Boundaries, enabling management to authorise or prevent progress on to the next stage.

The project stages correspond to the natural steps in the project life-cycle. Thus the stage boundaries are normally defined to correspond with the completion of major products and key decisions concerning commitment of resources.

PRINCE2 recognises that few projects are ever undertaken entirely in isolation. The output of one project may be used as the input to another. A number of projects may be sharing common resources.

In such a multi-project, or programme environment, PRINCE2 provides a mechanism for defining the boundary of the project and its relationship to other projects.

S2P16 – Activity

Now see how you get on with a few questions.

Answer feedback:

The items listed are all PRINCE2 processes.

S2P17 – Activity

Within a PRINCE2 project, is it allowable for Management Stages to overlap and run in parallel?

Answer feedback:

Management Stages are divisions of the project into sequential periods of time, separated by key decision points, or Stage Boundaries. They run in sequence and by definition cannot overlap.

S2P18 – Summary

This brings us to the end of session 2 on the 'overview and principles' of PRINCE2'. In this session we have reviewed the basic concepts behind PRINCE2, the structure of the method, the manual and PRINCE2 projects themselves.

We started off by rationalising "work" into several main aspects, methods, procedures, techniques and tools and we looked at the meaning and examples of each.
We then saw how the PRINCE2 method is made up of three key elements, Principles, Themes and Processes and we have begun to examine the relationships which exist between each of these three elements.

In the following lessons we will be examining each of these three elements in some greater detail.

Session 3 – PRINCE2 Themes Part 1

S3P1 – Objectives

Hello. The subject of session 3 is PRINCE2 Themes.

The PRINCE2 manual contains 7 themes. Here, in the first of two sessions on the subject we will look at the Business Case, organization, Quality and Plans Themes in turn.

Once you have completed this session you will;

- Understand the significance of the Business Case in a PRINCE2 project.
- Be familiar with the Organization Theme and the levels of organization suggested by PRINCE2.
- Be aware of the four inter-related elements of Quality, namely a Quality System, Quality Assurance, Quality Planning and Quality Control
- Understand the importance of planning in a PRINCE2 project.

S3P2 – Business Case

The first of the seven themes that the PRINCE2 manual describes is the Business Case.

It is a key philosophy of PRINCE2 that any project should be driven and underpinned by a viable Business Case. Unless a satisfactory Business Case exists then a project should not be started.

And if, during the course of a project, things happen that render the Business Case for the project invalid, then the project should be aborted. In any event, the Business Case for a project should be routinely updated at each stage end.

The Business Case is a description of the reasons for the project and the justification for its undertaking. It should provide a clear statement of the benefits that are expected from the project and the costs, risks and timescale that are entailed in achieving those benefits.

In PRINCE2 the Business Case is developed at the start of a project and reviewed throughout the life of the project

(being reviewed by the Project Board at each key decision point, such as end-stage assessments and exception assessments). The benefits are confirmed as they start to accrue, normally from the end of the project, but in some cases they may accrue as the products are released to the user community, for example as part of a phased rollout of a product.

The Business Case presents the optimum mix of information, which in turn enables the Project Board to judge whether the project is:

- Desirable - that the cost/benefit/risk analysis is valid,
- Viable - that the project can deliver its products, and
- Achievable - that the product can provide the benefits.

S3P3 – Business Case

The main sections that PRINCE2 suggests should be included in a Business Case are:
Executive Summary - this highlights the key points in the Business Case, including the important benefits and the return on investment (or ROI).

Reasons - describes the reason for the project, for example, the problem to be resolved or opportunity to be seized. It should also explain how the project will enable the achievement of corporate strategies and achievements.

Business Options - this includes analysis and reasoned recommendation for the base business options of 'do nothing', 'do the minimum' or 'do something'. Other options may be included as required.

Expected Benefits - where the benefits that are expected to accrue from the project are identified and described. These can be quantitative and measurable and qualitative and therefore harder to measure. Tolerances should be set for each benefit and for the aggregated benefit. The requirements for benefits realization should also be stated.
Expected Dis-benefits - are those outcomes perceived as being negative by one or more of the stakeholders. For example, a benefit could be a reduced overhead, but fewer staff and lower morale

could be considered a dis-benefit. These should be valued and included in the investment appraisal.

Timescale - this refers to the actual project duration, from the creation of the Project Plan to the period of the benefits realization. This information feeds into the preparation of the Project, Stage and Benefits Review Plan.

S3P4 – Business Case

The Business Case should also include sections on:

Costs - a summary of the project costs from the Project Plan. Costs also include the ongoing costs of operations, maintenance and their funding arrangements.

Investment Appraisal - compares the aggregated benefits and dis-benefits with the costs of the project and the ongoing operational and maintenance costs. There are many techniques which could be used to develop the investment appraisal, such as return on investment, net present value, sensitivity analysis and so on. These are not specified by PRINCE2.

And finally, Major Risks - a summary of the major risks associated with the project should also be included. It should include a view of the aggregated risk and if appropriate, a summary risk profile.

S3P5 – Types of project

There are many reasons for undertaking a project and their objectives and benefits will be viewed differently. Some typical examples include:

• A compulsory project - which is brought about by legislative changes.

• A not-for-profit project - which is driven by a need to change procedures, improve morale, increase efficiency and so on. Benefits on such projects are often less tangible.

• A research and development project where the outcomes are not known and the benefits are speculative can be considered as an Evolving Project.

• A customer/supplier project - which typically focuses on product development involving the customer and the supplier, where the benefits are expected to be tangible.

• And finally a multi-organization project - the Business Case here may be very complex and cover a wide range of factors associated with the partners in the project. In any event the project's Business Case is owned by the Executive. The Senior User is responsible for ensuring the outcome and benefits are realised after the product has been released.

S3P6 – Business Case Development

It is the Executive's responsibility to ensure that the project's objectives, costs, and benefits are aligned with the business strategy or programme objectives.

The Project Mandate should contain some basic elements of the Business Case, but at this stage things may be quite sketchy and incomplete.

During the Starting Up a Project process the information from the Project Mandate is used to develop the information required for the outline Business Case. At this stage the aim is to bring the Business Case up to basic level, sufficient to allow the Project Board to give approval to initiate the project during the Directing a Project process.

The Initiating a Project process is where the detailed Business Case is fully developed. It will form part of the Project Initiation Documentation and is derived from the outline Business Case, Project Plan (including costs, timescales and products) and the Risk Register.

The Project Board in Directing a Project will use the detailed Business Case as part of their considerations when authorising the project.

S3P7 – Business Case Development

In PRINCE2 we differentiate between outputs, outcomes and benefits. An output is any of the project's specialist products which when implemented and used will result in outcomes and in turn these result

in measurable improvements, known as benefits. For example, the product may be a new accounting system, the outcome is that invoices are processed more accurately and the benefit is a cost reduction of 10%.

The Business Case will evolve over time as more becomes known about the project, its products and the estimates of cost, time and benefits. Consequently the Business Case must be reviewed by the Project Board.

• At the end of Starting Up a Project in order to authorize the initiation of the project

• At the end of the Initiating a Project process in order to authorize the project

• At the end of each stage to authorize the next stage and the continuation of the project

• In tandem with the Exception Plan in order to authorize the revised stage and the continuation of the project in the event of an exception at Stage or Project level. The Business Case is also reviewed by the Project Manager.

• As part of the impact assessment of any new issues or risks.

• At the end of each stage to determine if any of the costs, timescales, risks and benefits need to be updated.

• During the final stage to assess the project's performance against its requirements and the likelihood that the outcome will realise the benefits.

The Business Case will also be reviewed as part of the benefits review. This is to determine whether the project outcomes have successfully realized the expected benefits.

Finally, it may be necessary to tailor the Business Case if the project is part of a programme. For example the project Business Case may be aggregated into the overall programme Business Case and may be reduced in content. On other occasions the programme may provide the Business Case for the project.

S3P8 – Organization

Of all the factors that determine whether a project succeeds or fails, Organization and Staffing are undoubtedly amongst the most important.

If all the project staff are technically competent, well informed, and have the right level of leadership and motivation then the chances of success will be high.

Here we will take a closer look at the Organization Theme. PRINCE2 assumes that projects take place in a Customer-Supplier environment. The customer defines the requirement, pays for the project and uses the eventual products. The supplier provides the required skills and know-how to create the end-products for the customer.

This Customer-Supplier approach is then combined with PRINCE2's other primary focus - the need for a sound Business Case for the project.

It is these three interests that form the basis for the management structure that PRINCE2 proposes.

S3P9 – Levels of Organization

Within any project there will be a number of stakeholders, some of whom will not be part of the project management team but their views still need to be considered by the project's decision makers. The PRINCE2 organization theme provides a structure that enables all stakeholder views to be represented.

There are four basic levels of organization. At the highest level we have Corporate or Programme Management which sits outside the project management team and is responsible for commissioning the project, identifying the Executive and defining the project level tolerances within which the Project Board will work.

The next level is Directing - and relates to the activities of the Project Board. This is where the major decisions about the future of the project are made.

The Managing level includes the day-to-day activities of the Project Manager. The Project Manager's main responsibility is to

produce the right products at the right time, on budget and to the required standard.

Finally, the Delivering level is where the work is undertaken to build or develop the products of the project.

S3P10 – The Project Board

The focal point of the PRINCE2 project management organizational structure is the Project Board.

The Project Board is the overall authority for the project and is responsible for its initiation, direction, review and eventual closure. We will see in the Processes session how the Project Board carry out most of their work via Directing a Project.

Within the confines of the project, the Project Board is the highest authority, responding only to a corporate strategy body, such as a Board of Directors.

PRINCE2 identifies this top-level body as Corporate or Programme Management and it is from here that the Project Mandate is handed down in order to Start-Up a Project.

The Project Board should represent the three interests discussed - namely the User, the Supplier and the Business interests.

In order to achieve this, three roles are specified - the Senior User, representing the user interest; the Senior Supplier representing the supplier interest and the Executive, representing the overall business interest.

The important point here is that these are roles - not job titles or individuals. The roles can be combined or shared and the names can be changed as appropriate to make them more understandable to people within your particular organization.

The main concern of PRINCE2 here is that a Project Board exists and that the three interests are properly represented by that Board.

In small projects it may be desirable to combine roles, for example, the Business interest and User interest may be represented by one person fulfilling two roles - Executive and Senior User.

At the other end of the scale, in very large projects, each role may require a team of people to adequately represent it.

S3P11 – The Project Board

Given that it is permissible to combine roles, what do you think is the minimum number of people which should ever make up the Project Board?

Answer feedback:

One of the main responsibilities of the Executive is to represent the customer's interests and so it is quite acceptable to combine the Executive and Senior User roles under one person.

The Executive and Senior Supplier may also be combined, though this is far less common.

However, it is not at all advisable to combine the Senior User and Senior Supplier roles, as there may be questions of confidentiality or conflicts of interest.

So under any normal circumstances, the minimum number of people on the Project Board would be two.

S3P12 - The Project Board

Each of the three Project Board roles has very clearly defined responsibilities. The Executive is the key role and is ultimately responsible for the entire project, supported by the other two roles.

The Executive 'owns' the Business Case for the project and has to ensure that the project is delivering value for the time and resources being invested.

It is normally the Executive who chairs the Project Board meetings and resolution of conflicts is very much a part of this role.

Where the project is part of a programme, the Programme Director appoints the Executive and has the option of appointing the other Project Board members or delegating their appointment to the Executive.

The Senior User role represents the interests of all those who will use or be affected by the project and its products.

The responsibility of the Senior User starts with the specification of user needs and commitment of user resources. A very important responsibility of the Senior User is the identification and realisation of benefits. This means the Senior User's responsibility is likely to continue into the operational environment and beyond the lifetime of the project.

As work progresses, it is the Senior User's responsibility to monitor what is being produced and ensure that it will meet user needs and that the expected benefits are materialised.

In very many cases the Senior User role will require several individuals to adequately represent all the user interests.

The Senior Supplier role is there to represent the interests of those designing, developing, facilitating, procuring and implementing the project's products.

It is quite common for the Senior Supplier role to be filled by a person or people external to the organization, although it could be a representative from an internal supplier department or someone responsible for contracts with external suppliers.

S3P13 – The Project Board

Ensuring that the project is delivering the right products, to the correct specification is the responsibility of which Project Board role?

Answer feedback:

This is the responsibility of the Senior User.

S3P14 – The Project Board

Who would normally chair the Project Board meetings?

Answer feedback:

The Executive is ultimately responsible for the project and would normally act as chair for Project Board meetings.

S3P15 – The Project Board

Would you say this statement is true or false?

Answer feedback:

All three Project Board roles are mandatory.

S3P16 – The Project Manager

We have seen that in the majority of cases, Project Board members will work part-time on the project, and they will often have many other commitments to attend to.

Because of this, PRINCE2 defines a fourth mandatory role, that of the Project Manager.
It is the responsibility of the Project Manager to plan and oversee all of the day-to-day work and to ensure that the project is producing the right products, at the right time, to the right standards of quality and within the allotted budget.

Unlike the Project Board roles, the Project Manager role always relates to a single person.

On large projects, the volume of work and demands for specialist knowledge may justify the appointment of Team Managers to support the Project Manager in the management and control of specific technical stages.

The main tasks of the Project Manager include overall planning for the whole project, motivation and leadership of project staff, liaison with Programme Management over related projects, definition of responsibilities for specialist Team Managers and reporting progress to the Project Board.

In summary, the Project Manager is there to ensure that a result is achieved which makes it possible to realise the benefits described in the Project Initiation Documentation.

S3P17 – Team Manager/s

The appointment of separate people in the role of Team Manager is optional,

depending on the nature and demands of the project.

Where they do exist, it is the responsibility of the Team Manager to manage the creation and delivery of the specialist work packages and products under their control, as defined by the Project Manager.

The Team Manager will work with the Project Manager to define responsibilities for the team members and provide planning and leadership.

Any suggested changes to the products for which a Team Manager is responsible will be raised as issues and sent to the Project Manager for a decision on further action.

One of the tasks of a Team Manager is to attend, and usually run, checkpoint meetings to raise Checkpoint Reports for the Project Manager. It is on the basis of these that the Project Manager then provides regular Highlight Reports to the Project Board.

S3P18 – Team Manager/s

Would you say this statement is true or false?

Answer feedback:

The job of the Project Manager and the Team Manager is to manage the work, not to actually do it. In most cases the team members will have very specialised knowledge and skills and it would not be possible or desirable for either the Project Manager or Team Manager to carry out such specialised work.

It can happen that the Project Manager or Team Manager does have some particular specialist skill and also fulfils a technical role, but that is an additional role and not part of the management role which is their primary function.

S3P19 – Project Support

All projects have a requirement for administration and this is known in PRINCE2 as Project Support. It is not an optional role as these support activities must be undertaken, however, in larger

projects a separate person or group of people are often appointed to the Project Support role. This enables the Project Manager to concentrate on the management of the project instead of getting bogged down in the administration activities.

Many large organizations may already have a Project Support Office, in which case there will be little need for change as they will already be providing Project Support facilities.

Some of the main tasks that are normally carried out by the Project Support function will include:

- Setting up and maintaining project documentation and the project filing system.
- Updating plans and assessing the impact of changes.
- Defining and maintaining project management standards.
- Configuration Management and Change Control.
- Taking minutes at meetings and compiling reports.

S3P20 – Project Assurance

The Project Board members do not work full-time on the project, therefore they 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 Quality System being adhered to?'

All of these questions mean that there is a need in the project organization for a means of assessing all aspects of the project's performance and products which is independent of the Project Manager. This is the Project Assurance function.

Project Assurance is mandatory and PRINCE2 separates the Project Assurance function from Project Support. Each Board Member has their own set of responsibilities for Project Assurance so it

is split into Business, User and Supplier Assurance. Each Board Member may, if they wish, delegate some or all of their responsibilities for Assurance to a third party, however assurance responsibilities cannot be assigned to the Project Manager.

In cases where a Project Support Office is providing both Project Support and Project Assurance, great care must be taken to draw a clear distinction between the work being carried out for the Project Manager, and the assurance functions which are carried out on behalf of the Project Board.

A final role to consider here is that of the Change Authority. This is the person or group of people responsible for agreeing to changes to the requirements or scope of the project. By default this responsibility lies with the Project Board but they may, if they wish, delegate it to another body. Typically, the Project Manager would have limited responsibility to agree certain changes so that the project could progress smoothly. The limits of authority and the escalation process for changes outside these boundaries needs careful consideration during project initiation.

S3P21 – Organization

So what we now have is a picture of a project management organization, as defined by PRINCE2, with the roles that can optionally have separate people appointed to them highlighted as shown. Remember that all roles must be filled – none of the roles are optional.

It is important to realise that this structure is only temporary and will exist only for the duration of the project.

In very many cases the project will exist alongside many other projects, making up a Corporate Programme.

In such circumstances there may be a need to vary some of the relationships, particularly with respect to Project Support and Project Resources, where the programme may provide some assistance.

S3P22 – Quality in a Project Environment

PRINCE2 defines quality in terms of the attributes that make a product or service 'fit for the purpose of satisfying STATED needs'. Here we will look at Quality which is the third PRINCE2 Theme.

Within a project environment the main aim of Quality Management is to ensure that the products that are produced are fit for their intended purpose and satisfy the needs and expectations of the Customer.

Such quality expectations must be reflected throughout the PRINCE2 project environment. Ideally they will be stated right at the start in the Project mandate, included in the Project Brief and then expanded in the Project Initiation Documentation. From there on, quality is a theme that is prominent throughout the lifecycle of the whole project.

There are four inter-related elements which make up quality management: a quality system, quality assurance, quality planning and quality control. These elements support the PRINCE2 principle of 'learn from experience' by helping to identify and eliminate causes of unsatisfactory performance. For example, the Lessons Log may identify that a manufacturing process contains a flaw which can be corrected in future production runs.

S3P23 – Quality in a Project Environment

PRINCE2 will typically form part of a corporate or programme quality system, where it has been adopted as a corporate or programme standard.

Such systems lay down standards for the documentation of processes and procedures, to ensure the delivery of a consistent level of quality.

The main tangible evidence of a company's Quality Management System will be the Quality Manual, which should start with a clear statement of the company's Quality Policy, as defined by senior management.

The Quality Manual should then go on to document the organization structure and all of the processes and procedures which go on within the organization and which have a baring on the ability to deliver quality.

S3P24 – Quality in a Project Environment

Do you think this statement is true or false?

Answer feedback:

Quality is a theme that is prominent throughout the life of the whole project.

S3P25 – Quality in a Project Environment

The Quality Assurance function is responsible for setting up and maintaining the Quality Management System.

Quality Assurance ensures everything which goes on within an organization is in line with laid down procedures and that the end products satisfy the relevant quality standards.

Do you think the Quality Assurance function should be external or internal to the project management function?

Answer feedback:

In many large organizations there will be a corporate quality assurance function that audits all the other departments to ensure that they are adhering to the Quality Management System.

This gives quality assurance a degree of independence that is essential to objectivity.

One of the roles of the corporate quality assurance function is to ensure that projects are being run in accordance with the method and procedures laid down in the Quality System.

If a corporate quality assurance function does not exist then quality assurance for projects will normally be included in the role of Project Assurance.

S3P26 – Quality in a Project Environment

On the other hand, Quality Planning and Quality Control for projects are very much the responsibility of project management.

Quality Planning establishes the objectives and requirements for quality and lays out the overall approach to quality in the Quality Management Strategy during the Initiation Stage. Quality planning also includes establishing the activities that are needed within a Stage to ensure that quality is achieved.

It is important that the customer's quality expectations are fully understood and documented prior to the project commencing. This is documented in the Project Brief. The quality approach for the whole project is defined in the Quality Management Strategy which forms part of the Project Initiation Documentation.

Quality Control is the means of ensuring that products meet the quality criteria specified for them. Quality control is about examining products to determine that they meet requirements and so normally takes place after some work has been done. There are basically two types of quality method, which are as follows:

• 'In-process', where specialist methods are used in the creation of the products and ongoing quality inspections, and

• 'Appraisal' methods where the finished products are assessed for completeness. Testing is carried out where the quality criteria are objective and measurable and quality inspection methods are used where some subjective judgement is required. Within PRINCE2 the quality review technique is suggested which complements the use of product descriptions.

S3P27 – Quality in a Project Environment

What is the difference between Quality Assurance and Quality Control?

Answer feedback:

Quality Assurance is all about setting standards and processes and ensuring

that they are followed; whereas Quality Control is more to do with inspection of finished goods to ensure they meet specification.

S3P28 – Quality Audit Trail

Quality planning begins by establishing the Customer's Quality Expectations. These are a key input in identifying the quality requirements for the project's products. Any standards that need to me applied and any measures that may be used to assess whether the products meet the requirements will also need to be identified.

Customer Quality Expectations are usually expressed in broad terms and will need to be discussed and evaluated in order to define measurable acceptance criteria.

Acceptance criteria form a measurable definition of the attributes that will be tested in order to define whether a product is 'fit for purpose'.

Based on discussion with the customer about the quality expectations and acceptance criteria, the project's Product Description is defined. This is part of the initial scoping activity and includes:

• Overall purpose of the product
• The products it consists of
• The customer's quality expectations
• The acceptance criteria
• Project level quality tolerance

S3P29 – Quality Review Technique

During the Initiating a Project process the Quality Management Strategy is defined. This describes how any Quality Management Systems in the customer/supplier environment will be applied, along with any applicable standards. Also included are any responsibilities for quality including a summary of the approach to Project Assurance, along with a description of any tailoring which may be required.

Product Descriptions are mandatory, but the level of detail to be included is a matter of judgement. The aim is to provide enough detail so that the team members are able to build the products to the right standards. Product Descriptions contain the quality specifications for the product and the methods by which this will be judged.

Finally the last part of the quality planning activity is to create the Quality Register, which provides an audit trail of the quality events planned and undertaken.
As the products are built they are tested using an appropriate control technique, such as the Quality Review Technique, described in PRINCE2.

S3P30 – Quality Review Technique

A Quality Review is where a team of qualified people get together with the express purpose of checking a completed product for errors.

A Quality Review can be invoked at any point within a project, since any product can be the subject of a review.

Quality Reviews will most typically be carried out in the Managing Product Delivery process as the product is completed. The quality criteria, as documented in the Product Description, will be used by the reviewers to ensure that the right quality standards have been met.

Among the main benefits which Quality Reviews offer are a structured and organized approach to the examination of subjective quality criteria and the early identification of defects.

The objectives of a Quality Review are:

• To assess the conformity of a product. This will typically take the form of a document (or similar item) against set criteria
• To involve key interested parties in checking the product's quality and providing wider acceptance of the product
• To provide confirmation that the product is complete and ready for approval, and finally
• To baseline the product for change control

S3P31 – Quality Review Technique

There are three basic steps in the Quality Review procedure, these are Review Preparation, Review Meeting Agenda and Review Follow-up.

Review Preparation involves confirming where and when the meeting will take place and who will attend. A copy of the product for review should be distributed to attendees (if this is possible), and the product should be assessed against the quality criteria and a question list should be produced to send to the producer.

Review Meeting Agenda, involves the discussion and clarification of any major errors, agreement on appropriate actions, agreement on the outcome of Quality Review, sign-off of the product (if appropriate) and documentation of actions and responsibilities.

The results of a Quality Review will normally be that the product is considered…

- Complete - the product is fit for purpose,
- Conditionally complete - the product is fit for purpose subject to the actions being completed, or
- Incomplete - the product requires another review cycle.

Review Follow-Up activities will usually involve completing the actions and communicating the results appropriately to management and storing the records produced during the review.

Once the Quality Review is complete the product is approved by the appropriate management person or group.

S3P32 – Quality Review Technique

The roles involved in the Quality Review process are:

The Chair - who is responsible for conducting the review.

The Presenter - who is responsible for introducing the product to the reviewers? The Presenter represents the producers of the product.

The Reviewer, who, as the name suggests, is responsible for reviewing the product.

The Administrator, who provides administrative support to the chair and records results and any recommended actions.

It is important to note that these are roles, not necessarily people. As such the minimum number of people who could carry out a review would be two, one taking the Chair and Reviewer roles and the other taking the Presenter and Administrator roles.

S3P33 – Quality Review Technique

Do you think this statement is true or false?

Answer feedback:

It is important to understand that Quality Review meetings are set up to identify errors, not to correct them. The people in the review meeting may not be the best qualified to determine solutions to any errors found so any solutions suggested during the review meeting should be noted for later consideration by the appropriate specialist.

S3P34 – Quality Review Technique

Do you think this statement is true or false?

Answer feedback:

This would be a disastrous approach to take. Quality Review meetings must take place in an atmosphere which is free of both ego and fear. The purpose of the process is to assess the product not the producer and if the producer thinks otherwise they may well become overly defensive and objectivity will be lost.

S3P35 – Plans

Now let's move on to the next PRINCE2 Theme - Plans.

Effective project management relies on effective planning because without a plan there is no control. Planning provides all the people involved in the project with information on:

- What is required?
- How it will be achieved and by whom
- When events will happen
- Whether the targets for time, cost, quality, scope, risk and benefits are achievable

There is much misunderstanding about exactly what constitutes a plan. Many people would look at a Gantt chart, for example, and consider it to be a complete project plan.

A PRINCE2 plan is much more comprehensive than that and, amongst other things, should state: what has to be produced, what has to be done to produce it, what has to be done to make sure it is produced correctly, when will it be produced, how progress will be monitored and what has to be done to control risks.

There will typically be up to 3 planning levels within PRINCE2. These are Project Plans, Stage Plans and Team Plans. The PRINCE2 approach to plans defines seven steps, which are often used iteratively. These steps can be used at each level of plan.

S3P36 – Project Plans

The Project Plan is created during the Initiating a Project process, with the Initiation Stage Plan being produced during Starting Up a Project. Subsequent delivery Stage Plans are produced within Managing a Stage Boundary.

The Project Plan provides a statement of how and when a project's time, cost, scope and quality targets are to be achieved.

It identifies the major products, activities and resources required for the project. The Project Plan also:

• Provides the Business Case with planned costs and timescales
• Identifies major control points such as management stages and milestones

The Project Plan is used by the Project Board as a baseline against which to monitor progress stage by stage. It should align with the corporate or programme management's plan.

S3P37 – Stage Plans

Stage Plans are similar to the Project Plan in content, but each element will be broken down to the level of detail required to be an adequate basis for day-to-day control by the Project Manager. A Stage Plan is required for each management stage.

Each Stage Plan is finalised near to the end of the previous stage. This approach should give more confidence in the plan because: the Stage Plan is produced close to the time when the planned events will take place, the Stage Plan is for a much shorter duration than the Project Plan and the Stage Plan is developed with the benefit of hindsight of the performance of earlier stages.

S3P38 – Team Plans

Depending on the complexity of the project and the amount of resources required the Team Manager may produce Team Plans.

Team Plans are regarded as optional. As such PRINCE2 does not prescribe a format for them as there may be more than one team on a project, possibly from different organizations and hence they may have different planning standards.

Team Managers produce Team Plans in parallel with the production of a Stage Plan, or when a work package has been accepted, during the Managing Product Delivery process.

S3P39 – Exception Plans

When it is predicted that a plan will no longer finish within the agreed tolerances, an Exception Plan may be produced to replace that plan.

An Exception Plan is prepared at the same level of detail as the plan it replaces at either Project or Stage level. Once an Exception Plan has been approved it

becomes the new baselined Project Plan or Stage Plan as appropriate.

An Exception Plan picks up from the current plan's actuals and continues to the end of that plan.

Exception Plans are not produced at team level. Should a work package be forecast to exceed its tolerances then provided it can be resolved within the stage tolerances, the Project Manager will amend or replace the work package in question.
Exception Plans require the approval of the Project Board if they replace a Stage Plan or by corporate or programme management if they replace the Project Plan.

S3P40 – Plans

From the list shown can you identify the 'seven steps in the PRINCE2 approach to plans'?

Answer feedback:

There are seven steps in the planning procedure and they are used on an iterative basis, as often as required, to form original plans or amend plans as circumstances dictate.
'Design the plan' is the first step, where we decide how we will undertake planning for this project after which we move on to 'define and analyze the products' where product based planning is used to determine the products we are going to build.
Once these are understood we can identify the activities need to make them and the order in which these will take place. This is the third step.
The effort and time required to undertake the activities is considered next after which we can prepare the schedule, often in the form of a bar or Gantt chart.
Whilst we are doing all this we will have to analyze the risks and incorporate our actions into the plan. Finally we will document the plan so the reader understands what the plan covers, the assumptions we have made and so forth.

S3P41 – Product Based Planning

According to the traditional way of planning projects, the starting point was to decide on all the activities that were needed to complete the project. PRINCE2, quite sensibly, says that a better starting point is to determine and fully understand all the products (or deliverables, as they are often referred to) which the project is to create. Having done that, it will be much easier to identify and plan the activities necessary to create them.

The product-based planning technique is closely allied to the Plans theme and it consists of four main steps:

•   Writing the Project Product Description
•   Producing a Product Breakdown Structure
•   Writing Product Descriptions for all identified products, and
•   Producing a Product Flow Diagram

A product, in PRINCE2 terms, is anything that is produced by, or on the way through a project. So in referring to products we don't just mean the physical and tangible entities that make up the final deliverable. Also included are all the items of paperwork, reports and control mechanisms that have to be produced during the course of a project's lifetime to ensure that the project is managed correctly. These are classified as "baseline" products such as the Business Case or Plan, "records" such as the Registers, or "reports" such as the Checkpoint or End Project Reports. These are all found within Appendix A of the PRINCE2 manual.

S3P42 – Product Based Planning

Suppose the project is to build a house. From the list shown, can you identify those items that you think would be classed as project products?

Answer feedback:

Well, all of these could legitimately be classed as products.

It is very rare in a project for work to begin immediately on the final end-product. More often, interim products have to be produced on which the final product will be based.

A product is therefore defined as anything that is produced by, or on the way through, the project, which can be identified, described and is tangible and measurable.

S3P43 – Product Based Planning

The Product breakdown structure (or PBS) is very similar in concept to the work breakdown structure with which you may already be familiar.

The idea is to take a top-down view of all the products which the project is going to generate, starting at the top with the finished deliverable or 'outcome' of the project and then breaking each product down into its constituent components in a hierarchical structure.

However, before we can do this a project Product Description should be written. The Senior User is responsible for specifying the project product. However in practice the Project Manager will often complete the project product description in conjunction with the Senior User and the Executive. This will provide the high level scope of the project, which in turn, will enable the top levels of the product breakdown structure to be completed.

S3P44 – Product Based Planning

Imagine you were the Project Manager building the Channel Tunnel. You would want to start the project by drawing up a very high-level product breakdown structure.
We have already filled in the top level product, which is the finished and operational tunnel.

What do you think would be reasonable major sub-products for this project?

There are no right or wrong answers here. Even in real life, how you design your Product Breakdown Structures is entirely down to your own preferences and the needs of the project. The aim here is just to practice thinking in terms of project products.

Once you are happy with the appearance of your Product Breakdown Structure, click on the Submit button to view our attempt at this one.

S3P45 – Product Based Planning

A Product Breakdown Structure is a hierarchical breakdown of the project's products. PRINCE2 does not prescribe any format for these – it could be a simple indented list, a mind map, or a diagrammatic structure. It will all depend on your organizational preferences.

There will often be products that already exist or will be provided from outside the project. These are known as external products. As external products are outside the control of the Project Manager they should be documented in the Risk Register. Details should include any threat to the plan if the external products are late or not to the required specification.

It is also useful to consider whether 'states' of products should be on the PBS, for example, dismantled, moved and assembled machinery. An alternative would be to describe these states within a single Product Description.

Product Breakdown Structures are used at Project and Stage Plan levels and are optional for Team Plans.

S3P46 – Product Based Planning

Key benefits of Product Based Planning include, clearly and consistently identifying products. This reduces the risk of overlooking key aspects of the project. Product Based Planning helps remove ambiguity and involves users in specifying the product requirements which in turn can improve communication.

It also helps to:

• Clarify the scope boundary
• Identify external products and therefore associate risks
• Create a basis for work packages for suppliers
• Gain agreement on production, review and approval responsibilities

S3P47 – Product Based Planning

Who do you think should write Product Descriptions?

Answer feedback:

The Project Manager or Team Manager should write Product Descriptions. As Project Manager you would have responsibility for ensuring that adequate product descriptions are produced. However, it is wise to involve people from the areas with expertise in the product in question.

It is especially important to involve Users or Customers in writing product descriptions and defining quality criteria.

All too often customers can ask for one thing, believing their request to be quite straightforward, but misinterpretation means that they end up with something quite different from what they expected.

By getting them to assist and then 'sign-off' the product description, you could save yourself from the expense and embarrassment of producing a product that nobody wants.

S3P48 – Product Based Planning

PRINCE2 recommends the main headings that should be included in a Product Description as shown:

Identifier - A unique key, most likely allocated by the configuration management method being used

Title - The name by which the product is known

Purpose - Why do we need this product?

Composition - What are the components that will make up the product?

Derivation - From what is the product going to be produced or from where will it be obtained?

Format and Presentation - How will the product be presented and what will it actually look like?

Development skills required - Which individual, group or skill types will be needed to create the product?

Quality Criteria - What criteria must the product meet for it to be judged 'fit for purpose?'

Quality Tolerance - Is there a range in quality criteria within which the product would be acceptable?

Quality Method - How will the quality assessment be made?

Quality Skills Required - Who is qualified to check the quality of this product and what skills will be required?

Quality Responsibilities - Identifying the Producer, Reviewers and Approvers for the product.

S3P49 – Product Based Planning

Once a complete understanding of the required products of a project has been achieved, attention needs to focus on the sequence in which those products need to be created.

Product Flow Diagrams are the technique used to show the order in which products must be created and, based on this, it then becomes relatively straightforward to produce a schedule of all the activities that are required for the project.

A Product Flow Diagram generally uses a rectangle to represent the project's products. Other symbols may also be used, for example an ellipse or circle may be used to represent an external product. Arrows are used to show their sequence. Time flows in only one direction, either from top to bottom or left to right.

The starting point for the Product Flow Diagram will be the product or products that are available right at the start of the project and the end will be the final deliverable of the whole project. Where no single starting product exists, you may find it useful to create a starting point - this could be just a symbol, for example, 'Start'. Note, this does not appear on a Product Breakdown Structure.

S3P50 – Product Based Planning

Referring back to the Channel Tunnel example, we can see from the Product Breakdown Structure for the specialist products, all the major products that have been identified.
Before work can start on any of these products, we would in fact need an External Product, which would be 'Government Approval to Proceed'.
Once approval for the project has been granted work can commence on excavating the hole for the tunnel.

Since there are no dependency issues, work can also start immediately on building the new road system around the terminals and the rolling stock that will eventually operate in the finished tunnel.

Having produced an excavated hole, the next required product is the lined tunnel; followed by a lined tunnel complete with all the required services… and so on, for each of the other branches until eventually the required end-product is arrived at.

Each of the products on a Product Flow Diagram will be built via a series of activities.

To transform an excavated hole into a lined tunnel requires a major activity – 'Build Tunnel Lining'. Then to transform this into the tunnel complete with services might require 'Install Electricity', 'Install Lighting', 'Install Ventilation', and so on. Hence it is easy to see how Product Flow Diagrams form the link between Product-Based Planning and Activity-Based Planning.

S3P51 – Product Based Planning

Would you say this statement is true or false?

Answer feedback:

It is the Product Flow Diagram that shows sequence. The Product Breakdown Structure shows the hierarchical relationships that exist - it provides no indication of sequence or timing.

S3P52 – Summary

This brings us to the end of the first of two sessions on PRINCE2 Themes.
In this session we reviewed four of the seven Themes described in PRINCE2, namely the Business Case, Organization, Quality and Plans.
In the next session we'll look at the remaining PRINCE2 themes of Risk, Change and Progress.

Session 4 – PRINCE2 Themes Part 2

S4P1- Objectives

Hello and welcome to the second session on PRINCE2 Themes.

In this session we'll look at three of the seven Themes described in the PRINCE2 manual, namely Risk, Change and Progress.

Once you have completed this session you will understand;

- How the Risk theme helps to identify, assess and control uncertainty in a project.
- How the Change theme assists in controlling potential and approved change in the project
- And how the Progress theme provides the mechanisms to monitor actual progress against the plan and take controlling action as necessary.

S4P2 - Risk - Definitions and Principles

PRINCE2 defines risk as: "An uncertain event that, should it occur, will have an effect on the achievement of objectives. It consists of a combination of the probability of a perceived threat or opportunity occurring, and the magnitude of its impact on objectives."

A threat is a risk that has a negative impact.

An opportunity is a risk that has a positive impact.

Risk management refers to the systematic application of procedures to the tasks of identifying and assessing risks, and then planning and implementing risk responses.

For risk management to work effectively, risks will need to be:

• Identified - clearly describing the risks so that there is a common understanding
• Assessed -ranking risks in terms of estimated likelihood, impact and immediacy, and
• Controlled - identifying responses, assigning owners and then executing, monitoring and controlling the responses

PRINCE2's approach to risk is based on nine risk principles:

• Understanding the project context
• Involve the stakeholders
• Establishing clear project objectives
• Developing a project risk management approach
• Reporting on risks regularly
• Defining clear roles and responsibilities
• Establishing a support structure and supportive culture for risk management
• Monitoring for early warning indicators and
• Establishing a review cycle and seek continual improvement

S4P3 - The Management of Risk

Do you think this statement is true or false?

Answer feedback:

Risk is an inherent and unavoidable factor in all projects. By definition, projects are unique undertakings and so are subject to a higher degree of unpredictability than routine or operational work. Projects also take time and no matter how well they are managed, there will always be the risk that during its lifetime, events in the world outside will change and impact on the project or the Business Case on which it is founded.

PRINCE2 itself is an attempt to reduce the avoidable and unnecessary risks within a project, but until somebody comes up with a 100% accurate way of predicting the future projects will always involve risk.

S4P4 - Starting Point

A good starting point for all projects is to find out if your organization already has a defined risk management policy in place, or if you are working within a programme, then it would be useful to find out how the programme risk management is undertaken. This will help you to define the Risk Management Strategy for your project and will include identifying how much risk you are prepared to take. This is known as the risk tolerance.

For example, imagine your organization requires its IT systems to be working uninterrupted over a month end accounting period, then any risks that may cause a disruption over a month end period would have to be mitigated.

All identified risks should be recorded within the Risk Register which should capture and maintain on all the identified threats and opportunities relating to the project.

The Risk Register is opened in the Initiating a Project process. Any risks identified during Starting Up a Project should be recorded in the Project Manager's Daily Log and transferred to the Risk Register if the Initiation stage is approved by the Project Board.

The Risk Register should contain the following information:

• A Risk identifier – which provides a unique reference for every risk entered into the Risk Register. This will typically be a numeric or alpha-numeric value.
• A Risk author – or the person who raised the risk.
• The Date registered - The date the risk was identified.
• A Risk category - describes the type of risk, in terms of the project's chosen categories, such as schedule, quality, legal and so on.
• A Risk description - describing the cause, the event, whether a threat or opportunity and the likely effect, which will describe the impact in words.
• The Probability, impact and expected value of the risk. It is helpful to estimate the inherent values or 'pre-response action' and residual values or 'post-response action'. These should be recorded in accordance with the project's chosen scales.

S4P5 - Starting Point

The Risk Register should also contain:

• Information on the risk's Proximity. Typically, this will describe how close to the present time is the risk event anticipated to happen, for example, imminently, within this stage, within the project or beyond the project. Again this

should be recorded in accordance with the project's chosen scales.

• Risk response categories will document how the project will treat the risk, in terms of the project's chosen categories, for example:

• For threats: to avoid, reduce, fallback, transfer, accept or share the risk
- And for opportunities: to enhance, exploit, share or reject the risk

• Risk response will document any identified actions to resolve the risk. This should be aligned to the chosen response categories. It's possible that more than one risk response may apply to a risk.

• The Risk status describes whether the risk is active or closed.

• The Risk owner - this is the person responsible for managing the risk. There can be only one risk owner per risk.

• And finally, the Risk actionee - this is the person or persons who will implement the actions described in the risk response. This may or may not be the same person as the risk owner.

S4P6 - Risk Management Procedure

The risk management procedure that PRINCE2 recommends contains five steps. These are:

• Identify (context and risks)
• Assess (estimate and evaluate)
• Plan
• Implement
• And Communicate

The first four steps here are executed in sequence and are iterative. The 'Communicate' step will run in parallel, in order to communicate any findings prior to the completion of the overall process.

As the project proceeds, new or updated information will become available. At this point, some of the earlier steps may need to be revisited to achieve the best result. Let's consider each step in a little more detail here.

S4P7 - Risk Identification

The first step in Risk Identification is to 'identify the context' of the project so that an appropriate Risk Management Strategy can be established. This will involve examining the Project Mandate to establish the project's objectives so that the appropriate amount of risk management can be undertaken. It is important to recognize that risk management is not about 'eliminating' risk but rather to understand the risks and where appropriate take action to bring the risks to an acceptable level.

Once the context and strategy has been established, the risks to the project (both threats and opportunities) should be identified and recorded in the Risk Register. There are many techniques that could be used to indentify risks including, review lessons, risk checklists, risk prompt lists, brainstorming and risk breakdown structures. We've provided a summary of each of these which will be displayed at the end of the page.

It is very important to clearly express the risk in terms of its;

Cause – the situation that gives rise to the risk, for example, if it rains heavily.

The Event – the threat that may occur, for example, the river may overflow, and finally the Effect – the result of the effect, for example, the crops will be damaged.

Or for an opportunity…

If the winter is very mild (the cause) then fewer people will fall ill with flu (the event) and cost savings on medicines will be made (the effect).

S4P8 - Risk Assessment

Once identified, the risks should be assessed in terms of their probability – how likely they are to occur, the impact on the project objectives should the risk materialise and when the risk would happen, or its 'proximity'.

When assessing impact, it is very important to consider the impact on the project's objectives assuming you do nothing. For example if there is a risk that

a competitor is launching a similar product before yours is released it would have no effect on your ability to release your product on time. The impact is on the benefits of your project, since you would lose market share.

It is usual for risks to be placed on a Probability Impact Grid.

This grid contains ranking values that may be used to rank threats and opportunities qualitatively. The probability scales are measures of probability derived from percentages, and the impact scales are selected to reflect the level of impact on project objectives.

The values within the grid cells are the combination of a particular probability and impact, and are determined by multiplying the probability by the impact. A Probability Impact Grid can be used to provide an assessment of the severity of a risk and enable risks to be ranked so that management time and effort can be prioritized.

For example, the Project Board may set their risk tolerance at any risk with a value greater than 0.18, and they may require a proactive response for any risk with a value greater than 0.045, as shown here.

S4P9 – Activity

Brainstorming and Risk Prompt Lists are all...?

Answer feedback:

Brainstorming and risk prompt lists are two of the risk identification techniques suggested by PRINCE2.

S4P10 - Risk Plans

Once the risks have been assessed, the appropriate mitigating actions can be considered, and one or more chosen. It is important to recognize that it may be important to consider and implement a range of options. For example, in considering the risk that your house may be burgled, you may choose to take out insurance, which is an example of risk transfer. You probably also lock your

doors when you go out, which is an example of risk reduction.

Depending on how the Risk Theme is implemented it may be necessary to consider "Secondary Risks", these are risks that relate to the new situation after the risk response has been implemented. For example, if you were to change your route to avoid a potential traffic jam then you would have to consider the risks associated with your new route.

PRINCE2 suggests six basic responses to threats these are:

- Avoid – plan the activities differently in such a way that either the risk is avoided altogether, or there is no impact
- Reduce – take some action to reduce the probability or the impact
- Fallback – put in place a plan that will be put into action should the risk occur
- Transfer – transfer the risk to a third party, usually via a contract
- Accept – a conscious decision to live with the risk
- Share –share the loss should a risk occur, again through a contract
- PRINCE2 goes on to suggest four responses for opportunities, these are:
- Exploit – take action so that the opportunity is realised
- Enhance – take action to make the opportunity more likely to happen, or increase the impact
- Reject – ignore it on the basis the benefits are not good enough
- Share – through a contract, both parties take a share of the gain – this is a form of incentivization.

Although not specified by PRINCE2 it is also possible to 'plan an option' for opportunities – if the project develops in a particular way, it would be possible to take advantage of an opportunity. Like a fallback plan for threats, this also needs planning ahead of time.

S4P11 – Activity

Given that Share is one of the six responses to a threat defined by PRINCE2; can you identify the remaining five?

Answer feedback:

The six threat responses defined by PRINCE2 are, Avoid, Reduce, Fallback, Transfer, Accept and Share.

S4P12 - Risk: Implement the Plan

The primary goal of the 'implement' step is to put the chosen risk response (or responses) into action.   During this step the plan will be amended to include the mitigating action and clear responsibilities will be identified for:

• The Risk Owner – who will be a named individual responsible for the management, monitoring and control of all aspects of a particular risk assigned to them, including the implementation of the selected responses to address the threats or to maximize the opportunities.

• And the Risk Actionee - an individual assigned to carry out a risk response action or actions, to respond to a particular risk or set of risks. They support and take direction from the risk owner.

S4P13 - Risk: Communication and Risk Budget

The fifth step of the risk process is 'communicate' and it should be carried out in parallel with the other steps. Information about risks is communicated as part of the following reports:

- Checkpoint Reports
- Highlight Reports
- End Stage Reports
- End Project Reports
- Lessons Reports

Consideration should also be given to the funding of risk mitigation actions. The money set aside for these activities is known as the risk budget and it forms part of the project budget. Therefore, the more that is spent on managing risks, the less there is for other project activities. It is very important that the money is used wisely and that risks are carefully analyzed to prevent money being wasted on low priority risks, or insufficient being spent to mitigate high priority risks.

S4P14 - Risk Responsibilities

Finally, let's have a look at risk responsibilities.

Providing the corporate risk management policy and risk management process guide is the role of corporate or programme management.

The Project's Executive is accountable for all aspects of risk management and, in particular, ensures a project Risk Management Strategy exists. The Executive also ensures that risks associated with the Business Case are identified, assessed and controlled and should escalate risks to corporate or programme management as necessary.

The Senior User must ensure that risks to the users are identified, assessed and controlled, such as the impact on benefits, operational use and maintenance. Ensuring that risks relating to supplier aspects of the project are identified, assessed and controlled (such as the creation of the project's products), is the responsibility of the Senior Supplier.

The Project Manager should create the Risk Management Strategy and create and maintain the Risk Register. Project Support may assist with the maintenance of the project's Risk Register.

They should also ensure that project risks are being identified, assessed and controlled throughout the project lifecycle.

Team Manager should participate in the identification, assessment and control of risks, whereas Project Assurance staff are responsible for reviewing risk management practices to ensure that they are performed in line with the project's Risk Management Strategy.

S4P15 - Change Theme

Let's move onto the sixth of our PRINCE2 themes, Change.

Change is inevitable during the life of a project, and every project needs a systematic approach to the identification, assessment and control of issues that may result in change.

As changes may arise from project team members, stakeholder requests, complaints or a wide range of other factors, PRINCE2 provides a common approach to Issue and Change Control.

The purpose of the Change theme in PRINCE2 is to identify, assess and control any potential and approved changes to baselines.

Issue and Change Control is a continual activity, performed throughout the life of the project. Without an ongoing and effective Issue and Change Control procedure, a project will either become totally unresponsive to its stakeholders or quickly drift out of control.

The aim of Issue and Change Control procedures is not to prevent changes, but rather to ensure that every change is agreed by the relevant authority before it takes place. Change can only be considered in relation to an established status quo, in other words, a baseline.

Therefore, a prerequisite of effective Issue and Change Control is the establishment of an appropriate Configuration Management System which records baselines for the project's products and ensures that correct versions are delivered to the customer.

It is important that the Issue and Change Control procedures are integrated with the Configuration Management System used by the project.

S4P16 - Change Theme

The term 'issue' is used to describe anything that happens during a project which, unless resolved, will result in a change to a baselined product, plan or performance target, including time, cost, scope, quality, risk and benefits.

There are three types of issue that may arise during a project, these are:

• A Request for change – a proposal to change a baseline
• An Off-specification – something that should be provided but is currently not being provided or is forecast not to be provided

• And a problem or concern – which is any other matter that requires the Project Manager to either resolve or escalate to the Project Board for a decision or action.

S4P17 - Approach to Change

During Initiating a Project the controls for addressing change, issues and configuration management will be defined. As the project progresses they will be kept under review and, if necessary, refined and updated by the Managing a Stage Boundary process.

These products are used to establish and maintain the following controls:

• Configuration Management Strategy
• Configuration Item Records
• Product Status Accounts
• Daily Log
• Issue Register and
• Issue Reports

The Configuration Management Strategy will document the procedure for Configuration Management and the Issue and Change Control procedure. It will also specify the roles and responsibilities for Configuration Management, Issue and Change Control. Records, timing of activities, assessment scales, and so forth are also covered.

When considering changes, two of the most important aspects to be considered and approved are the responsibility for agreeing to implement a change, known as the Change Authority and the method of funding for changes, known as the Change Budget.

By default the Project Board will make the decisions, but in most projects limited authority for day-to-day changes will be delegated to the Project Manager.

S4P18 - Configuration Management Documentation

The Configuration Item Records document information about a product such as its status, version and variants of each configuration item and the relationship between them.

A Product Status Account describes the state of all products within a set of limits, for example a stage, the whole project, a particular product or a set of products.

The Daily Log is used to record, amongst other things, problems or concerns that the Project Manager can manage informally.

Where an issue requires formal consideration then an Issue Report will be created and this will be documented within the Issue Register.

S4P19 - Config Management Procedure

Configuration Management procedures can vary but will typically consist of five core activities:

Planning - deciding the level at which products need to be controlled and deciding how that control should be exercised.

Identification - where all the sub-products making up the final product are specified and identified.

Control - whereby configuration items are frozen once their specification has been agreed. Changes can then only be made with the agreement of the appropriate and named authorities.

Status Accounting - the recording and reporting of all current and historical data to do with a product.

Verification - a series of reviews and audits to confirm that the information in the Configuration Management System coincides with the status of the actual products themselves.

S4P20 - Issue and Change Control

PRINCE2 provides a common and systematic approach to dealing with requests for change, off-specification and problems or concerns. This process consists of five steps, these are: Capture, Examine, Propose, Decide and Implement. Let's look at each in turn here.

• Capture – during this step the issue will be analyzed to see whether it can be

handled informally; if so then it is noted in the Daily Log and resolved. If it requires a more formal approach then an Issue Report will be raised and entered into the Issue Register.

• Examine – the issue will be subjected to an impact analysis to determine the impact on:

- The project performance targets in terms of time, cost, quality and scope
- The project Business Case, especially in terms of the impact on benefits
- The project risk profile, for example, the impact on the overall risk exposure of the project

The results will be entered into the Issue Register and the Issue Report.

• Propose – Having understood what the issue is about consideration must be given to the most appropriate course of action. There are often a number of options that could be considered and each must be reviewed and its effect on the time, costs and risks of implementing judged accordingly.

• Decide – make a decision on the most appropriate course of action. The Project Manager may be able to do this, or it may require escalation to the Project Board.

• Implement – amend the plans or work packages to take the necessary action or create an Exception Plan for approval by the Project Board.

S4P21 – Activity

Here's a short exercise. Try categorising the events shown as either;

- An Issue Report type – where a request for change should be raised,
- An Issue Report type - where an off-specification should be raised,
- A problem to be handled informally by the Project Manager or
- An Issue Report type – where a problem should be raised.

Drag the statements on screen to the most relevant location.

Answer feedback:

Statement 1 - The delay is within the Stage tolerance the Project Manager can take the corrective action and this can be dealt with informally. The project Manager should record this in his/her Daily Log.

Statement 2 - The supplier will never deliver the goods this will put the stage and possibly the Project into exception. An Issue report should be raised and escalated to the project Board immediately.

Statement 3 - Although the change can be completed free of charge it should still be recorded on an Issue Report for audit purposes as a request for change.

Statement 4 - This is something that should have been provided and is missing an Issue report noting the off-specification should be raised. The Project Board can decide whether or not to grant a concession.

Statement 5 - As this does not require any further money to implement and the delay is not in excess of tolerance the Project Manager can handle this informally. An entry into the Daily Log should be made.

S4P22 – Change - Role & Responsibilities

PRINCE2 defines a number of roles and responsibilities relevant to the Change theme.

At the highest level, corporate or programme management will provide the corporate or programme strategy for Change Control, Issue Resolution and Configuration Management.

The project's Executive will be responsible for raising issues, determining the Change Authority and Change Budget, setting the scale for severity ratings for issues and the priority ratings for requests for change and off-specifications.

The Executive will also need to respond to requests for advice from the Project Manager and make decisions on escalated issues with particular focus on continued business justification.

The Senior User may also raise concerns in the form of issues as well as make decisions on escalated issues which focus on safeguarding the expected benefits. Responding to requests for advice from the Project Manager is also a responsibility of this role.

The Senior Supplier may also raise concerns in the form of issues as well as make decisions on escalated issues which focus on safeguarding the integrity of the complete solution. Responding to requests for advice from the Project Manager is also a responsibility of this role.
The Project Manager will of course raise any issues to the Project Board. Other responsibilities include managing the Configuration Management procedure and Issue and Change Control procedure assisted by Project Support where possible.

At team level, Team Managers will raise issues to the Project Manager and implement corrective actions where necessary.

Advice on examining and resolving issues will be provided by Project Assurance. Project Support will administer the Configuration Management and Issue and Change Control procedures, maintain Configuration Item Records, produce Product Status Accounts and Assist the Project Manager to maintain the Issue Register.

S4P23 – Activity

Here's a quick question. Who is responsible for setting the change budget?

Answer feedback:

The Project Executive is responsible for setting the change budget.

S4P24 – Activity

Who is responsible for entering Issue reports in the Issue Register?

Answer feedback:

It's the Project Manager who is responsible for entering Issue reports in the Issue Register.

S4P25 - Progress Theme

Finally, let's consider the seventh and final PRINCE2 theme, Progress.

The main mission of any project management method is to enable management at all levels to exercise control over what has been planned and approved. The purpose of PRINCE2's Progress theme is to establish mechanisms to monitor and compare actual achievements against those planned in order to provide a forecast for the project objectives, including its continued viability and control any unacceptable deviations.

Progress ensures that, for each level of the project management team, the level above can: monitor progress, compare achievement with plan, review plans and options against future situations, detect problems and identify risks, initiate corrective action and authorize further work.

PRINCE2 provides two types of controls throughout the project. These are Time-Driven such as Checkpoint and Highlight Reports which are issued at a defined frequency and Event-Driven which represent a specific event occurring such as the completion of a stage or the authorization of a Work Package.

S4P26 – Controls

PRINCE2 applies the concept of 'management by exception' as far as the Project Board is concerned. That is, having approved a Stage Plan, the Project Board is kept informed by reports during the stage.

There is no need for 'progress meetings' during the stage. The Project Board knows that the Project Manager will inform them immediately if any exception situation is forecast.

The main controls for the Project Board include:

Authorizations: To authorize initiation, the project, each stage and finally its closure.
Highlight Reports: Regular progress reports during a stage. These are prepared by the Project Manager using

information derived from Checkpoint Reports, which are produced at Team level.

Exception Reports and Issue Reports: Early warning of any forecast deviation beyond tolerance levels and issues requiring their attention.

Exception Assessment: The Project Board jointly considers what action to take in response to a forecast deviation.

The main controls for the Project Manager include:

Authorizations: Authorize Work Packages including setting Work Package tolerances.
Progress Updates: Including Checkpoint Report from Team Managers or members.

Exceptions and Changes: Use of the Daily Log, Issue Register, Product Status Account, Quality Register and Risk Register during the stage.

It is also important that the Lessons Log is updated as lessons are identified and a Lessons Report issued as appropriate within the project and definitely at the end of the project.

S4P27 - Progress

Try this quick question.

Answer feedback:

In most cases the Project Board will set boundaries within which variances can occur without need for the Project Manager to refer back to them. The value of these boundaries is known as the Tolerance, which is another very important Project Board control.

S4P28 - Tolerance

No project ever goes 100% according to plan, and minor departures from plan will frequently occur. To enable the project to progress smoothly without frequent and unnecessary communication between the different levels within the project team, PRINCE2 defines tolerances for time, cost, quality, risk, benefit and scope.

These are allocated initially by corporate or programme management and then managed and implemented by the three levels of management in the project - Project Board, Project Manager and Team Manager.

Corporate or programme management sits outside the project but sets the overall requirements and tolerance levels for the project. The three levels of management within the project, who are responsible for directing, managing and delivering, will manage and implement within these tolerances and escalate any forecast breaches of project tolerance.

The Project Board has overall control at a project level, so long as forecasts remain within project tolerance, and will allocate tolerances for each management stage to the Project Manager. The Project Board has the ability to review progress and decide whether to continue, change or stop the project.

During execution of the Project Plan, if any forecasts indicate that the project is likely to exceed the agreed project tolerances, then the deviation should be referred to corporate or programme management by the Project Board in order to get a decision on corrective action.

S4P29 – Tolerance

The Project Manager has day-to-day control for a management stage within the tolerance limits laid down by the Project Board. During execution of a Stage Plan, if any forecasts indicate that the stage is likely to exceed the agreed stage tolerances, then the deviation should be referred to the Project Board by the Project Manager in order to get a decision on corrective action.

The Team Manager has control for a Work Package, within the Work Package tolerances agreed with the Project Manager. During execution of the Work Package, if any forecasts indicate that it is likely to exceed the agreed tolerances, then the deviation should be referred to the Project Manager by the Team Manager in order to get a decision on corrective action.

Tolerances for Time, Cost, and Scope are set in the Project Plan, Stage Plan and Work Package. Risk tolerance is set in the Risk Management Strategy, Stage Plan and Work Package. Quality tolerance is set in the Project Product Description and the Product Descriptions and finally, Benefit tolerance is set for the Project in the Business Case.

S4P30 – Activity

Which of those items listed is NOT a major Project Board control?

Answer feedback:
They are all Project Board controls, except Checkpoint Reports, which are produced at Team level and used as the input to Highlight Reports, which are a major Project Board control.

S4P31 – Stages

As a means of effecting adequate control, PRINCE2 mandates the use of stages - partitions within the project with decision points at their conclusion and, sometimes, during their life.

PRINCE2 differentiates between Management stages and Technical stages.

Management stages are sequential periods of time - they cannot overlap or run in parallel. Each Management stage is separated by a Project Board decision as to whether to continue the project and commit resources to the next Management stage.

Technical stages comprise sets of technical activities leading towards a particular product. They will often overlap and run in parallel and they are normally planned and managed by the Team Managers, under the direction of the Project Manager.

Some thought must be given to the handling of the interface between Management stages. In most cases it would not be sensible to stop work on the project while the Project Board meet to assess the End-Stage Report, updated Plans and updated Business Case.

To avoid such unnecessary delays, Technical stages will often overlap Management stage boundaries and some degree of planning for the next Management stage must be included in the current Management stage.

To define the number and length of management stages a number of elements are considered.

These are:

- How far ahead is it sensible to plan
- Where are key decision points needed. These are often before large items of expenditure are sanctioned
- How much risk does the project contain? For example if the project is well understood and contains few risks a longer stage may be appropriate whereas on a large complex project carrying significant risk more stages may be required.
- Finally, consider how confident the Project Board and Project Manager are in proceeding may affect the length of a management stage but remember that too many short stages will increase the management overhead whilst too few larger stages could result in reduced control.

S4P32 – Stages

What would you say is the minimum number of Management stages that can make up a PRINCE2 project?

Answer feedback:

Even the smallest PRINCE2 project has at least 2 Management stages. The first one being the Initiation stage - necessary to decide if the project is worthwhile or not, and the second one may then be the whole of the rest of the project.

S4P33 – Summary

This brings us to the end of the second session on PRINCE2 Themes.

In this session we reviewed three of the seven Themes described in PRINCE2, namely the Risk, Change and Progress. We saw how the Risk theme helps to identify, assess and control uncertainty in a project and how the Change theme assists in controlling potential and approved change in the project.

Finally we saw how the Progress theme provides the mechanisms to monitor actual progress against the plan and take controlling action as necessary.

Session 5 – Processes

S5P1 – Objectives

Hello and welcome to session 5, entitled PRINCE2 processes.

We saw in session 2 how PRINCE2 identifies seven management processes, as shown here.

The objectives of this session are to explain how these processes fit together in an overall process model, to examine each of the main processes in more detail, and to describe the information flows which exist between the different processes and activities. So let's do that now.

S5P2 – What is a Process?

We need to take a step back at this point and consider what is meant by the word "process".

A "process" is an operation (or series of operations) that transforms something into something else. In other words, a process takes inputs and produces outputs.
We are all familiar with industrial processes. An oil refinery takes in crude oil as its input, and through the process of refining produces gas, petrol and refined oil as outputs.

A car plant would take in metal, plastic and various components and through the process of manufacturing output finished cars.

In general terms, industrial processes take in raw materials and output finished goods.

The processes in PRINCE2 are management processes and like industrial processes they have both inputs and outputs.

Typical inputs for a management process will be information or requests, and typical outputs would be updated information and decisions or approvals.

If your company has undergone ISO9000 certification you will be familiar with the concept of processes. One of the requirements of the ISO9000 standard is that all the major processes within an organization, management or otherwise, should be documented in the company's Quality Manual.

The fact that PRINCE2 represents project management in terms of its processes is one of the reasons why it sits so comfortably within an ISO9000-approved quality management system.

S5P3 – The Process Model

In the PRINCE2 Manual each process is described in a stylised manner, following a common format.

The main headings of this format are:

*   Purpose – Why have this process?
*   Objective – What are the specific objectives of this process?
*   Context – How does this process fit? What is its relationship to the other PRINCE2 processes? How the process relates to the broader project activities and to corporate or programme management is also discussed.

And…

• Activities – all the PRINCE2 processes comprise a set of activities. These activities can run in series or in parallel and are a set of recommended actions designed to achieve a particular result.

Each of the seven processes within PRINCE2 has its own inputs and outputs, the outputs from one process often being the inputs to one or more other processes.

The outputs of a Process will comprise PRINCE2 Management Products such a Business Case, Plan, or Project Initiation Documentation and "Triggers". Triggers could be in the form of a verbal request, email or a more formal request depending on the organization's standards and the size and complexity of the project. PRINCE2 does not specify a format for triggers.

And so PRINCE2 represents these processes in the form of a process model, showing the various inputs and outputs and how they are inter-related.

At the highest level is corporate or programme management. Whilst it is not part of project management as such, this higher management level is important and the need for a two-way communication process must not be forgotten.

Within the project itself the highest level is Directing a Project, which is for key decision-making and direction-setting.

The other processes divide logically into three broad areas - Beginning a Project, Managing a Project and Finishing a Project.

Activities associated with Planning are described within the Plans theme which we covered in an earlier session.

S5P4 – Activity

Which of the seven PRINCE2 processes are primarily concerned with the beginning of the project?

Answer feedback:

Starting Up a Project and Initiating a Project are the two processes that are associated with the beginning of a project.

S5P5 – Directing a Project

Directing a Project runs from the end of the Starting Up a Project process until the very end and final close-down of the project.

This process is used exclusively by the Project Board who should manage by exception, monitor through reports provided by the Project Manager and control via a series of key decision points.

There are five activities within DP, as shown.

• Authorize Initiation approves the work undertaken during Starting Up a Project.

• Authorize the Project approves the outputs of the initiation stage and makes sure the project has a sound foundation before making any major commitments.

• Authorize a Stage or Exception Plan approves the plans for the next stage of

the project, or if the stage or project is in exception then the Exception Plan will require approval. This process ensures that the Project Board review the project at the end of each stage and that it is still worth doing.

• Give Ad-hoc Direction covers the informal communication with the Project Board and enables them to respond to reports during a stage.

And finally…

• Authorize Project Closure enables the Project Board to be sure that the project has been completed to their satisfaction before disbanding the project team and infrastructure. If the project has been closed prematurely then this process is still completed to make sure that the project has been brought to an end in an efficient manner.

This process does not cover the day-to-day activities of managing the project; these rest with the Project Manager.

S5P6 – Activity

Of the three issues shown, which ones do you think would be addressed by the Directing a Project process?

Answer feedback:

The Project Board makes decisions about whether the project is worthwhile, both initially and at any stage during its progress.

Day-to-day management and control of resources that have been committed to the project is the responsibility of the Project Manager.

S5P7 – Starting Up a Project

The Starting Up a Project process provides a solution to the commonly encountered problem of a lack of objectivity and planning right at the start of a project. Its purpose is to ensure that the prerequisites to Initiating a Project are in place by answering the question: Do we have a viable and worthwhile project?

The input to Starting Up a Project is the Project Mandate, which will vary in format depending on the amount of preparatory work done. For example if a feasibility study has been completed then the information in the Project Mandate will be extensive. At the other extreme the Project Mandate could be a short, less formal request to provide some new facility. It should provide the terms of reference for the project and should contain sufficient information to identify at least the prospective Executive of the Project Board. The mandate is refined into the Project Brief during Starting Up a Project.

S5P8 – Starting Up a Project

Although the Starting Up a Project process should not take very long, PRINCE2 identifies six activities, as shown.

The first activity is 'Appoint the Executive and the Project Manager'. The commissioning organization will appoint the Executive of the Project Board and then the Executive can appoint an appropriate Project Manager to undertake the work of this and subsequent processes.

The next activity – 'Capture Previous Lessons' ensures that any relevant lessons from previous projects can be taken into account whilst undertaking this project. The Lessons Log is created and populated with relevant lessons from previous projects. Subsequent Lessons are added to this log.

In order to progress with the project the Project Management Team must be put in place. This is undertaken in the activity 'Design and Appoint the Project Management Team'.

Any project must have a justification and this must be apparent from the beginning. The 'Prepare the Outline Business Case' activity puts together an Outline Business Case, which will be refined during the Initiation stage.

The Project Mandate is developed into the Project Brief which states the scope and definition of the project. The way in which the solution will be delivered is described in the Project Approach and this is done alongside the Project Brief during the

'Select the Project Approach and Assemble the Project Brief' activity.

Finally, it is necessary to make sure the work that will be undertaken during the Initiation stage is understood as it will take time and consume resources. This work is identified and scheduled in the 'Plan the Initiation Stage' activity.

In summary the outputs of Starting Up a Project are:

• The Project Management Team
• The Project Brief
• The Project Approach
• The Plan for the Initiation Stage
• The Lessons Log and the Daily Log

S5P9 – Initiating a Project

The Initiating a Project process is aimed at ensuring that a firm baseline exists for the project and that everyone involved understands what the project is setting out to achieve.

The inputs to this process are the outputs from the Starting Up a Project process.

The output is the Benefits Review Plan and the Project Initiation Documentation. This is used as a baseline for the project and is updated throughout the project at the end of each stage. At the end of the project the performance of the project will be evaluated and the Project Initiation Documentation, as baselined at the end of Initiation, is used as an input to the activity called 'Evaluate the project'.

This documentation will include the project definition, the project approach, Business Case, project management team structure and role descriptions, as well as management strategies for quality, configuration, risk and communications. The Project Plan is contained here, along with the project's Controls and a section describing how PRINCE2 will be tailored for this project will also be included.

S5P10 – Initiating a Project

Using the outputs from Starting up a Project, the Project Initiation Documentation is assembled during the

final activity of Initiating a Project. The process comprises eight activities in total.

- Prepare the Risk Management Strategy
- Prepare the Configuration Management Strategy
- Prepare the Quality Management Strategy
- Prepare the Communications Management Strategy
- Set up the Project Controls
- Create the Project Plan
- Refine the Business Case, which also includes the creation of the Benefits Review Plan.
- Assemble the Project Initiation Documentation

The Project Initiation Documentation, the Benefits Review Plan and the detailed Plan for the next stage are approved by the Project Board at the end of this stage.

S5P11 – Activity

Now, try clicking in the white boxes until the right documents are shown.

Answer feedback:

The Project mandate is the starting point or trigger for the project and often contains very little in the way of detail. The Project Brief expands on the Project mandate sufficiently for the Project Board to be able to decide whether it is worth committing resources to the production of the Project Initiation Documentation, which is the most detailed.

S5P12 – Activity

Which of these items are not included in a Project Initiation Documentation?

Answer feedback:

Plans for the Initiation Stage are an output of Starting up a Project, but they are NOT included within the Project Initiation Documentation itself. The Project mandate is also NOT included.

S5P13 – Controlling a Stage

Following the Project Board's decision to approve a stage, the Project Management team must be fully focused on the delivery of the products within the stated tolerances of cost, time and quality. This involves using three processes:

• The Controlling a Stage process, which forms the main part of the Project Manager's work and provides the direction for the day-to-day management of the stage and the overall project

• Managing Product Delivery, which is where the teams will undertake the work itself, and

• Managing a Stage Boundary, which prepares for the End Stage Assessment with the Project Board.

Controlling a Stage consists of eight activities which are bound into a cycle of Work Packages, Monitoring and Reporting, and Issues.

S5P14 – Managing Product Delivery

The objective of Managing Product Delivery is to ensure that the things which were planned to be produced during a stage are, in fact, produced.

Also, progress must be reported to the Project Manager in order that they may carry out the Controlling a Stage process.

The Managing Product Delivery process is carried out by the manager of the team undertaking the work, or the individual concerned if the job is small.

This process has an authorized work package as its input and signed off products and progress reports as its output. There are three activities as shown.

S5P15 – Managing Product Delivery

Let's consider the interaction between Controlling a Stage and Managing Product Delivery in a little more detail.

Firstly, the work packages group has three activities - Authorize a Work Package,

Review Work Package Status and Receive Completed Work Packages. Basically, the Team Manager and the Project Manager will discuss the content of the Work package and the Team Manager agrees to undertake the work in the manner described in the Work Package. This is the first activity in Managing Product Delivery (Accepting a Work Package).

As the work progresses in 'Execute a Work Package' the Team Manager will send Checkpoint Reports to the Project Manager who will review these in 'Review Work Package Status'. When the work is completed the Team Manager will advise the Project Manager via the 'Deliver Work Package' activity. The Project Manager will consider this in the 'Receive Completed Work Packages' activity and will ensure all the work has been completed prior to signing off the Work Package.

Whilst all this activity is proceeding the day-to-day monitoring and reporting must be considered via two activities – 'Review Stage Status' and 'Report Highlights'. 'Review Stage Status' requires the Project Manager to look at the 'big picture' of the project. This means looking at what has happened versus what was expected, reviewing the next chunk of work and making sure that risks and issues are under control and, if necessary, triggering corrective action.

Periodically, the Project Board will need to be informed of progress. At the frequency defined by the Board the Project Manager will issue a Highlight Report as described in the 'Report Highlights' activity.

S5P16 – Controlling a Stage

The final activity group associated with issues involves capturing the issue or risk. Issues that can be managed informally should be noted in the Daily Log, otherwise they should be entered into the Issue Register and analyzed further. Risks should be entered into the Risk Register. If the issue or risk cannot be resolved within tolerance then it will need to be escalated to the Project Board via an Exception Report using the 'Escalate Issues and Risks' activity. Finally, any action required to maintain the project

schedule is taken via the 'Take Corrective Action' activity. This can involve modifying an existing Work Package or creating a new one.

S5P17 – Managing a Stage Boundary

In session 4 we saw how the Progress Theme aims to achieve a successful project by breaking it into smaller, discrete stages, allowing the project team to focus on specific products.

By controlling the start and finish of each stage, specific attention can be given to whether the stage's products have all been completed within tolerance, whether the remaining products are still required and whether the Business Case remains valid. This is a key control process for the Project Board and incorporates all the key aspects of Directing a Project. The Project Board undertakes this work in Directing a Project and in order to prepare for the End Stage Assessment the Managing A Stage Boundary process is used.

The objectives of the process are to:

• Assure the Project Board that all products 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.

• If a phased handover of products occurred during the stage, confirm that user, operational and maintenance acceptance has occurred and follow-on actions/ recommendations for these products are in place.

In the normal course of events four activities will be completed leading to the main outputs which are an End-Stage Report, a Stage Plan for the next stage, and a Request to approve next Stage Plan. In the event that a stage or project is in exception then the first activity will be replaced with the 'Produce an Exception Plan' activity and the outputs will be an Exception Plan, End Stage Report and a request to approve Exception Plan. The outputs of Managing a Stage Boundary feed into the Directing a Project process, in particular 'Authorize a Stage or Exception Plan'.

S5P18 – Activity

Would you say this statement is true or false?

Answer feedback:

The Project Manager would determine this in Controlling a Stage. Managing a Stage Boundary is a process that is directed at the Project Board.

S5P19 – Activity

'The Managing Product Delivery process is carried out by the Project Manager.'
Is this statement true or false?

Answer feedback:

It is done by the person who is actually managing the team that is producing the product, normally the Team Manager. It may well be that the Project Manager is doing both jobs but on a big project there is likely to be a Team Manager or perhaps even several of them.

S5P20 – Closing a Project

If an undertaking is to be managed as a project - by definition, it must be finite and come to a clearly defined end. Otherwise an operational management approach would probably be more appropriate.

The end of a project may arise when all the planned work has been completed and the products finished and signed-off. Alternatively a project may be brought to a premature conclusion because of changes in requirements, lack of resources or unacceptable slippage in cost or time.

In any event the purpose of the Closing a Project process is to execute a controlled and orderly close to the project, regardless of circumstances.

The Project Manager normally performs the process and most of the work involves preparing input to the Project Board to obtain its confirmation that the project may close.

S5P21 – Closing a Project

There are five activities associated with Closing a Project, these are:

• Prepare Planned Closure
• Prepare Premature Closure
• Hand-over Products
• Evaluate the Project
• Recommend Project Closure

The main inputs to the process are:

• Product Status Account
• Project Initiation Documentation
• Issue Register
• Risk Register
• Quality Register
• Lessons Log

In 'Prepare Planned Closure' the Project Manager ensures that the expected results of the project have been achieved, in other words "Have we done everything, has the acceptance criteria been met and are we in a position to hand over the products?"

If the project has been brought to a premature close then the Project Manager must ensure that rather than abandoning the project it is brought to an orderly close and that anything that can be salvaged has been and that whatever remains to be done is accurately recorded for corporate or programme management.

In either event the remaining activities must be completed – the products are handed to the customer and operational environment and the Project Manager ensures that plans are in place to realize the benefits.

The Project Manager should evaluate the project against the Project Initiation Documentation as baselined at the end of the Initiation Stage and create an End Project Report and a Lessons Report. Finally, the Project Manager should recommend to the Project Board that the project is closed using the 'Recommend project closure' activity.

S5P22 – Activity

Which of the items shown would you expect to see in an End-Project report?

Answer feedback:

The Project Mandate is confirmed when its content is used to produce the Project Brief. It has no part to play in the End Project Report.

A Lessons Report can be completed at any time but would always be included within the End Stage Report and End Project Report.

Also, if the customer's acceptance is not documented in Closing a Project then it probably never will be recorded, which could lead to future legal complications when external suppliers are involved.

S5P23 – Process Model Walkthrough

We have seen how the seven processes in PRINCE2 relate to each other and we have also seen some of the main inputs and outputs from each of the processes.

Here we will be walking through the process model to see how information flows from one process to another and to illustrate how the whole model works in practice.

The Project Mandate triggers the first process Starting Up a Project which aims to answer the question "do we have a viable and worthwhile project"? As we work through the Starting Up process we will identify any lessons that can be applied from previous projects and appoint the people required to fill the roles in the Project team. Other activities include defining the project and deciding how to provide the solution, documenting this in the Project Brief and the Project Approach.

The outline Business Case will be prepared to ensure we know why we're doing the project and finally the work that will be undertaken during the initiation stage will need to be planned and documented in the Initiation Stage Plan. When all this is complete, we can prepare the trigger 'Request to Initiate the Project' and submit this to the Project Board for approval.

Once the Project Board has authorized the Initiation of the project they will issue the 'Authority to initiate a project' trigger to start the Initiating a Project Process. The Project Manager and team will complete the initiation activities, which will culminate in the assembly of the Project Initiation Documentation, and along with the Lesson Log and the Benefits Review Plan will issue a 'Request to deliver the project' to the Project Board.

S5P24 – Process Model Walkthrough

Assuming the Project Board approve the Project Initiation Documentation and the Benefits Review Plan they will issue a 'Project authorization notification' and having approved the Stage Plan they will issue a 'Stage Authorisation' to trigger the second stage of the project.

From now until the end of the stage the management of the project will involve cycling through the Controlling a Stage and Managing Product Delivery processes as work packages are authorized and work is undertaken by the Team Managers and their teams. As the work progresses the Project Manager will be reviewing progress of the work packages and the project overall, taking corrective action to keep things on track. As requested, the Project Manager will issue Highlight Reports to the Project Board, keeping them up to date and enabling them to manage by exception.

A key part of the Project Manager's work during the stage will be monitoring the status of existing issues and risks, capturing new ones, examining them and if necessary escalating them to the Project Board if they cause a forecast breach of tolerances and put the stage or project into exception.

S5P25 – Process Model Walkthrough

As the team managers execute the Work Package they will build the products and check their quality. As the Work Packages are completed they will advise the Project Manager via the trigger 'Completed work package'.

This cycle of production between Controlling a Stage and Managing Product Delivery is eventually broken when – towards the end of the stage, Controlling a Stage outputs a trigger 'Stage Boundary Approaching' to the Managing a Stage Boundary process.

If all is going well, Managing a Stage Boundary will produce a Stage Plan for the next stage and an End Stage Report, which along with the Benefits Review Plan and the updated Project Initiation Documentation, will give the Project Board all that they need to authorize progression to the next stage – and so the cycle will re-start for the following stage.

If things are not going according to plan, following an Exception Report the Project Board may issue an Exception Plan request and Managing a Stage Boundary will produce an Exception Plan along with the End Stage Report, Benefits Review Plan and the updated Project Initiation Documentation. This may lead to the project continuing based on a modified plan – or to the Project Board deciding to bring the project to a premature close if that is the best option.

S5P26 – Process Model Walkthrough

On a more positive note – as the work in the final stage of production nears completion a trigger called 'Project End Approaching' is issued from Controlling a Stage and the Closing a Project process will begin.

The products are handed to the customer and the operational support team. The benefits review plan is checked to make sure it contains sufficient detail to enable the benefits to be measured and realized. Lessons will be examined and a Lessons Report will be included in the End Project Report. Any outstanding work will be included in the End Project Report as a follow-on action recommendation.

The Project Initiation Documentation with the updated Business Case, the End Project Report and the Benefits Review Plan will be sent to the Project Board along with a 'Closure recommendation'.

The Project Board will confirm that the project can be closed and approve and

issue the reports to interested parties, finally issuing a 'Closure notification'.

Throughout the life of the project, the Project Board will provide ad-hoc direction. This activity enables the Project Board and the Project Manager to communicate both formally and informally throughout the project as queries arise and advice is required. This activity starts at the end of Starting up a Project and continues until the project is completed.

Notice how the process model reflects the PRINCE2 organization structure with Directing being the preserve of the Project Board, Controlling a Stage being the main area of activity for the Project Manager and Managing Product Delivery being the responsibility of Team Management.

S5P27 – Summary

This brings us to the end of session 5, PRINCE2 processes.

We began this session by defining a process in terms of an operation that converts inputs into outputs.

We saw how PRINCE2 breaks down the whole process of managing a project into seven major processes that can be represented by a process model as shown.
During this session we also examined each of the seven processes and their associated activities and saw how information flows between the various activities as a project progresses.

Session 6 – Case Study

S6P1 – Case Study

In this Case study, we will be walking through a project from beginning to end, looking at the way in which PRINCE2 was applied, the management organisation that was established and the various documents that were produced during the project's lifecycle. We will also demonstrate the way in which PRINCE2 can be tailored to suit a project of any size. Chapter 19 in the PRINCE2 manual gives considerable guidance tailoring the method.

The project took place in a company called Ace Computing Limited, and involved rebranding the company's marketing material following the acquisition of another company selling computer hardware. Prior to the acquisition, Ace Computing's core business related to software products only.

Ace Computing is a small privately owned company, which markets a range of "shrink-wrapped" software packages. The company management structure looks like this:

Helen Bell is the founder and Managing Director of the Company. Helen is from a technical background and is the inspirational force behind the company's range of products. She is also a very competent marketing person and contributes much to the company's sales and marketing strategies.

S6P2 – Case Study

Helen employs a small team of managers to develop and run the business. Mike Mayhew is Director of Sales & Marketing. Beneath Mike, there is a small territory based field sales force, a telesales team and the marketing group who handle all the company's promotional activities.

Karen Rogers is the Finance Director, heading up a team of three people who keep control of all the company's finances including raising invoices, processing credit card payments and receiving payments via cheques and automated payment systems.

Tim Goodman is the Technical Director, with two main areas of responsibility. One is Product Development, where a team of analysts and programmers produce the software packages that the company sells. The other is the internal IT function which provides computing services to all other departments, including a sophisticated telemarketing and order processing system which is used by Mike Mayhew's department.

Finally, Dave Maxwell is the Manager of the Manufacturing and Logistics Department and manages a small team of people whose job it is to ensure that the right products get to the right people at the right time.

S6P3 – Case Study

Helen has built the business based on producing software products but recently had the opportunity to purchase a small hardware supplies company managed by a former colleague. The legal process is now complete and as customers can now purchase both software and hardware, Helen would like the Ace Computing brand to change to reflect this new opportunity. So Helen has decided to setup a project to develop a new corporate brand. This will include developing a new logo and updating the company's website to incorporate the new products and all the company's documentation.

The Project Mandate for this project came in the form of a short paper, which Helen tabled for discussion at a Board Meeting.

At that same Board Meeting Helen asked Karen to assume the role of the Project Board Executive and Tim volunteered the services of Janis Kitson to act as Project Manager. Janis was a new starter in Tim's department. She was an experienced PRINCE2 Practitioner and had managed similar projects in her previous company.

The following day Karen and Janis met to design and appoint the rest of the project management team.

A copy of Helen's Project Mandate can be viewed by clicking here.

S6P4 – Case Study

As Mike Mayhew's department has responsibility for sales he was asked to act as Senior User.

Since most of the resources to be used on the project would come from his department, Tim Goodman was invited to fulfil the Senior Supplier role.

Mike is particularly busy planning the integration of staff from the hardware company and has decided to delegate his Project Assurance responsibilities. Sid Hall works for Mike as Product Quality Assurance Manager and Sid's background in quality and standards made him an ideal candidate to fill the Project Assurance role, Karen and Tim have decided to get more involved in the day-to-day elements of the project and have decided to undertake their own assurance.

As the project is relatively small, Karen has decided that she will take the role of Change Authority for any changes that will extend the project by more than one week or cost more than 10% of the total budget.

Janis has the Change Authority role for changes lasting less than one week or costing less than £1,000 up to a combined total of 10% of the project budget.

Janis and the Project Board have decided that issues should be handled informally unless they cause a deviation from stage or project tolerance.

Also, the nature of the work that went on within the development department meant that a Project Support function already existed and this was provided by Emily Barker whose main function was maintaining the Configuration Management and Filing systems for all of the development projects.

It was decided that the project did not warrant the appointment of Team Managers, the small number of specialists who would be involved would report directly to Janis.

S6P5 – Case Study

Having agreed the team, Karen and the Project Board considered previous

marketing projects to see if there were any relevant lessons and Janis contributed some valuable lessons based on her experiences in previous projects. A Lessons Log was opened and these lessons were documented.

Janis worked with the rest of the team to assemble the Project Brief. The project definition was straightforward, as Karen had covered this element in the Project Mandate. Karen also prepared the outline Business Case. The Project Product Description was produced with the help of Karen and Helen and it was agreed that the project approach would be to complete all the development in house and it wasn't necessary to define this in any more detail.

Before Janis formally presented the Project Brief to the Project Board, it was reviewed by Sid Hall, who suggested a few small corrections. While Sid was reviewing the Project Brief, Janis produced a Stage Plan for the Initiation Stage. As this was a relatively small project, this consisted of a short paper outlining when the main activities would be undertaken and the delivery dates of each product. Again, due to the relatively small size of the project, it was decided not to use a Gantt chart, a list of dates being adequate for this stage.

The Project Brief can be viewed by clicking here.

S6P6 – Case Study

At the first meeting of the Project Board the Project Brief was tabled and, following some discussion, and final sanction from Helen, the Project Board gave their authority to initiate the project. The minutes of the meeting served as the 'initiation notification' to Helen.

And so the Initiating a Project process began.

Janis was lucky because the company had used PRINCE2 before and had the basis of the strategies already prepared. As an IT company, Ace Computing already had a defined Configuration management strategy in place. This was used on the project. The Risk Management Strategy just required the scales to be set for the analysis and the risk tolerance had to be

checked with Karen and Helen. A formal Risk Budget wasn't required on this project.

The Communications Management Strategy was prepared and reflected the desire to provide a more informal approach to communication and control.

The Quality Management Strategy again referred to Ace's quality standards and the Quality Register was established.

S6P7 – Case Study

Having established the basis of the Strategies and distributed under configuration control, Janis got the team together to plan the project. The result of the planning workshop was a simple product breakdown structure in the form of an indented list of products which enable the main product descriptions to be written. These covered the new website, company logo and new document templates.

As the work was going to take less than a month in total, it was agreed that a single management stage would be used and the controls would be largely informal. All reporting would be done verbally. Written reports would only be generated when an Issue Report or Exception Report was raised.

Janis finalised the Business Case with the help of Karen and Mike and the documentation was assembled into the PID. In this case, the Project Initiation Documentation amounted to a single sheet which documented the location and filenames of the constituent parts. This allowed the team to review each element separately and made it easy to keep the elements updated when necessary.

A copy of the Project Initiation Documentation can be viewed by clicking here.

S6P8 – Case Study

As there was only one delivery stage in this project, Janis included the Stage Plan into the Project Plan and sent this to the Project Board with the rest of the Project

Initiation Documentation for them to review and hopefully approve.

As Janis had been liaising closely with the Project Board members during this short initiation period, no difficulties were identified with the Project Initiation Documentation and they gave Janis the go ahead to start the project. The minutes of the meeting recorded the 'project authorization notification' and the 'stage authorization'.

So now the real work began…

The main products were the requirements document, website specification, website design, completed website, logo and documentation.

Janis liaised with Mike Mayhew and his team to generate a requirements document.

Sid reviewed this document along with Eddie and Liz, two of the senior managers in the marketing department.

Once it had been approved the work of specification and design began.

Janis took on the specification herself, whilst Glyn started on the new logo design.

The documentation graphics and artwork was assigned to Adam who worked in Tim's production team and the job of writing the code to make the whole thing work was given to Greg Fitzpatrick.

Because Janis worked very closely with both Adam and Greg, it was decided that Checkpoint Reports were not necessary. However, Janis did produce Highlight Reports which were circulated to the Project Board members on a weekly basis.

During the second week of the stage, an issue was raised by Greg Fitzpatrick, which caused Janis some concern. Greg had been expecting to have a routine operation and his appointment had come through earlier than expected. This would result in a three week absence. As this delay caused a deviation from the time tolerance, Janis raised an Issue Report and after considering the options, raised an Exception Report for the Project Board. Janis recommended that Glyn was taken

off some routine software development, to work on the rebranding project. This meant rescheduling some activities, so that Glyn could bring his other work to an orderly close. The Board asked Janis to produce a new Project (and Stage Plan) to reflect the changes and this was reviewed and approved at the Exception Assessment.

Glyn joined the project four days later and the work continued on target.

A total of three Highlight Reports were produced during the stage and these, together with the Exception Report can be viewed by clicking here.

S6P9 – Case Study

During the stage, the quality review technique was used to assess three key products - the website specification, documentation and artwork, and logo. The new website was tested by a group of users including Sid, Eddie and Liz. This was carried out at each step in the development cycle in accordance with the plan and the Quality Register was maintained with the results. The completed products were baselined by Emily.

Mike and Helen approved the final products

Once the products were completed Janis asked the Project Board to confirm the release date which was set for the end of the month in two week's time. In the interim period, Janis prepared the end of project documentation.

Janis used the Closing a Project Process and asked Emily for a Product Status Account so that she could check all the products had been completed. Janis also discussed with the rest of the IT team whether the operational environment was ready to support the new website.

As everything was in place, Janis started work on the End Project Report and updated the Benefits Review Plan with the dates when the benefits could be checked.

The due date for implementation came, the website went live and worked perfectly and the following day, Janis finalised the

End Project Report and held her final meeting with the Project Board. Helen attended this meeting and congratulated all those involved for running the project in such an efficient manner.

Tailoring PRINCE2 had been a great success and the rebranding exercise completed with the minimum of documentation whilst retaining an excellent level of control.

The minutes of the meeting noted the 'closure notification'.

As the Senior User, Mike Mayhew was then tasked with realising the benefits in line with the benefits realisation plan.

We will leave you with a view of the some of the key documents produced during the project. By clicking on the appropriate icon, you can open up and review any of the documents that we have previously examined.

Session 7 – Exam Technique

S7P1 – Introduction

So far in this course, we have concentrated on your knowledge of PRINCE2 – what it is, what it contains and how it works in practice.

In session 7 we will provide you with some practical guidance on how best to approach the PRINCE2 Foundation examination.

S7P2 – Examination Overview

The objective of the Foundation exam is to determine that a candidate would be able to act as an informed member of a project management team on a project using the PRINCE2 method within an environment supporting PRINCE2.

In simple terms this is a test that you know what is contained within the PRINCE2 manual.

For candidates to be successful at the Foundation level they must understand:

• the purpose and responsibilities of all roles
• the seven principles, the seven themes, the seven processes and the Product-based Planning and Quality Review techniques.
• which management products are input to, output from, and updated in the seven processes, and the activities.
• the purpose of all management products and the composition of the Business Case and Product Descriptions.
• the relationship between principles, processes, themes, deliverables and roles within a PRINCE2 project.

You have already seen questions which are typical of those asked in the Foundation exam as we have worked through this course. The exam itself consists of 75 such multiple choice questions and one hour is allowed. In order to achieve a pass at least 35 questions must be answered correctly – in other words 50% or more of the questions asked. You might have spotted something odd with our calculations here! Well in fact 5 of the 75 foundation exam questions are

anonymous and aren't actually scored. These questions are included in the test to support the continuous development of the question bank.

The examination is "closed book" – in other words you cannot take notes or documentation of any kind into the exam room with you.

S7P3 – Foundation Exam

Since the two main exams, Foundation and Practitioner are so different in format, content and approach – different issues must be considered in your preparation for them.

Most people who take it do pass the Foundation exam. In fact, statistics show that over 95% of people pass at Foundation level, and 75-80% pass at Practitioner level.

However, it is also shown in the statistics that people who pass the Foundation exam with a high score almost always pass the Practitioner exam – whereas those with a borderline pass usually fail when it comes to Practitioner.

So if your ultimate aim is to become a PRINCE2 Practitioner, a good starting point is to aim to pass the Foundation exam with the highest possible score. And to do this you really do need to know the PRINCE2 Manual very well indeed.

The first tip for doing well at Foundation level is therefore to do your homework. Study the course material, read the manual and practice in the exam simulator. Once you are regularly scoring in excess of 75% in the exam simulator you can be sure that not only will you pass the real Foundation exam – you will be better prepared for your Practitioner level study.

S7P4 – Foundation Exam

Assuming that you have done all your preparation and that you have all the required knowledge, the next step is to focus on the examination itself.

As we have seen, you are allowed 60 minutes to answer 75 questions. The vast majority of people finish the exam well

within this time. So, tip 1, don't feel under time pressure. Remain cool and stick to your game plan. You have plenty of time.

The Foundation questions can be categorised into three types:

• Those that you find really easy and can answer without too much thought.

• Those that you probably know the answer to but the wording of the question needs some digesting. There are a lot of "negative" type questions so do be careful over these.

• Those that, even though you understand the question, you are not 100% sure of the answer.

A good strategy is therefore to do the exam paper in three passes. This is something that you have not had the luxury of doing in the exam simulator.

When you are first presented with the paper, work your way through, answering all the questions where the right answer is immediately obvious to you. Avoid any temptation to deliberate too long over any question. If in doubt move on to the next one.

This first pass will ensure that – in the unlikely event that you do run out of time – at least you will have answered all the easy questions. For anybody who has done the right level of background study and preparation this alone will probably be enough to secure a pass.

S7P5 – Foundation Exam

Now go back to the beginning of the paper and start work on all the second category of questions.

Once you have worked out what a question means, if you know the answer then answer the question, otherwise move on to the next unanswered question.

This time when you get to the end of the paper you should have answered all the questions that you understand and that you are confident of the answers – hopefully by now you will have answered the majority of the 75 questions.

Now it's time for the third and final pass. Go back to the start of the paper again and consider each of the questions that you have not yet answered.

At this stage you may need to be careful over the timing – what you don't want to do is run out of time and leave any questions unanswered – even if you have to guess the answers. Marks don't get subtracted for wrong answers so if you have 4 or 5 questions that you just don't know the answer to – make guesses – by random chance you will get at least one of them right.

So, count up how many questions still remain unanswered and allocate a maximum time for each one so that you will just get them all answered. If you have 10 unanswered questions and 10 minutes left – don't spend more than one minute on any one question. Again – never submit a paper unless all the questions have been answered.

One final tip – be very careful about changing any of your answers. Experience has shown that about two thirds of changes that candidates make to their answers are in fact changing a correct answer to an incorrect one. Often your first instincts are the right ones.

S7P6 – Summary

This brings us to the end of session 7 on PRINCE2 examination technique. We hope this has provided some useful pointers.

Let's conclude this session with a few pertinent reminders:

- Do your homework
- Read the PRINCE2 manual
- Practice in the Exam Simulator
- And be careful about changing your answers

Finally we hoped you enjoyed the course and we wish you good luck in your PRINCE2 studies.

S8P1: Exam Simulator Tutorial

Welcome to the PRINCE2 Foundation Exam Simulator. The exam consists of 75 multiple choice questions which are randomly selected from our database.

You have 60 minutes to complete the examination and the time remaining is shown on the bottom of the page.

Once you begin the exam you will be presented with a page that looks like this. You will notice that the top portion of the page contains a question reference matrix. You can choose to answer the questions in numerical sequence by clicking the forward and back buttons, or you can select a question by clicking its number in the matrix. You can come back to any question you've previously answered in the same way.

Once you are happy with your answers, you can submit them for marking by clicking the submit button - shown here.

At this point you will be given your score. Valuable feedback on which of your answers were correct or incorrect is also provided. Again you can review your answers by selecting them in the question reference matrix. Green question numbers indicate a correct answer and those in red were marked incorrect.

At the end of the quiz you will be given an assessment of your performance and have the opportunity to print off a certificate of your result. If at any point you exit the quiz before completion, you will have to restart from the beginning.

Please note although the pass mark for the exam simulator is set to 50%, we recommend that you should be achieving an 80% or above pass rate on a regular basis before attempting the official exam. This will also provide you with a good cross-section of the hundreds of questions within the exam simulator database.

Good Luck.

Glossary

A

Accept (risk response)

A risk response to a threat where a conscious and deliberate decision is taken to retain the threat, having discerned that it is more economical to do so than to attempt a risk response action. The threat should continue to be monitored to ensure that it remains tolerable.

Acceptance

The formal act of acknowledging that the project has met agreed acceptance criteria and thereby met the requirements of its stakeholders.

Acceptance criteria

A prioritized list of criteria that the project product must meet before the customer will accept it, i.e. measurable definitions of the attributes required for the set of products to be acceptable to key stakeholders.

Activity

A process, function or task that occurs over time, has recognizable results and is managed. It is usually defined as part of a process or plan.

agile methods

Principally, software development methods that apply the project approach of using short time-boxed iterations where products are incrementally developed. PRINCE2 is compatible with agile principles.

Approval

The formal confirmation that a product is complete and meets its requirements (less any concessions) as defined by its Product Description.

Approver

The person or group (e.g. a Project Board) who is identified as qualified and authorized to approve a (management or specialist) product as being complete and fit for purpose.

Assumption

A statement that is taken as being true for the purposes of planning, but which could change later. An assumption is made where some facts are not yet known or decided, and is usually reserved for matters of such significance that, if they change or turn out not to be true, there will need to be considerable re-planning.

Assurance

All the systematic actions necessary to provide confidence that the target (system, process, organization, programme, project, outcome, benefit, capability, product output, deliverable) is appropriate. Appropriateness might be defined subjectively or objectively in different circumstances. The implication is that assurance will have a level of independence from that which is being assured. See also 'Project Assurance' and 'quality assurance'.

Authority

The right to allocate resources and make decisions (applies to project, stage and team levels).

Authorization

The point at which an authority is granted.

avoid (risk response)

A risk response to a threat where the threat either can no longer have an impact or can no longer happen.

B

Baseline

Reference levels against which an entity is monitored and controlled.
baseline management product

A type of management product that defines aspects of the project and, once approved, is subject to change control.

Benefit

The measurable improvement resulting from an outcome perceived as an advantage by one or more stakeholders.

Benefits Review Plan

A plan that defines how and when a measurement of the achievement of the project's benefits can be made. If the project is being managed within a programme, this information may be created and maintained at the programme level.

Benefits tolerance

The permissible deviation in the expected benefit that is allowed before the deviation needs to be escalated to the next level of management. Benefits tolerance is documented in the Business Case. See also 'tolerance'.

Business Case

The justification for an organizational activity (project), which typically contains costs, benefits, risks and timescales, and against which continuing viability is tested.

C

Centre of excellence

A corporate coordinating function for portfolios, programmes and projects providing standards, consistency of methods and processes, knowledge management, assurance and training.

Change Authority

A person or group to which the Project Board may delegate responsibility for the consideration of requests for change or off-specifications. The Change Authority may be given a change budget and can approve changes within that budget.

Change budget

The money allocated to the Change Authority available to be spent on authorized requests for change.

Change control

The procedure that ensures that all changes that may affect the project's agreed objectives are identified, assessed and either approved, rejected or deferred.

Checkpoint

A team-level, time-driven review of progress.

Checkpoint Report

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

Closure notification

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

Communication Management Strategy

A description of the means and frequency of communication between the project and the project's stakeholders.

Concession

An off-specification that is accepted by the Project Board without corrective action.

Configuration item

An entity that is subject to configuration management. The entity may be a component of a product, a product, or a set of products in a release.

Configuration Item Record

A record that describes the status, version and variant of a configuration item, and

any details of important relationships between them.

Configuration management

Technical and administrative activities concerned with the creation, maintenance and controlled change of configuration throughout the life of a product.

Configuration Management Strategy

A description of how and by whom the project's products will be controlled and protected.

Configuration management system

The set of processes, tools and databases that are used to manage configuration data. Typically, a project will use the configuration management system of either the customer or supplier organization.

Constraints

The restrictions or limitations that the project is bound by.

Contingency

Something that is held in reserve typically to handle time and cost variances, or risks. PRINCE2 does not advocate the use of contingency because estimating variances are managed by setting tolerances, and risks are managed through appropriate risk responses (including the fallback response that is contingent on the risk occurring).

Corporate or programme standards

These are over-arching standards that the project must adhere to. They will influence the four project strategies (Communication Management Strategy, Configuration Management Strategy, Quality Management Strategy and Risk Management Strategy) and the project controls.

Corrective action

A set of actions to resolve a threat to a plan's tolerances or a defect in a product. cost tolerance

The permissible deviation in a plan's cost that is allowed before the deviation needs to be escalated to the next level of management. Cost tolerance is documented in the respective plan. See also 'tolerance'.

Customer

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

Customer's quality expectations

A statement about the quality expected from the project product, captured in the Project Product Description.

D

Daily Log

Used to record problems/concerns that can be handled by the Project Manager informally.

Deliverable

See 'output'.

Dependencies (plan)

The relationship between products or activities. For example, the development of Product C cannot start until Products A and B have been completed. Dependencies can be internal or external. Internal dependencies are those under the control of the Project Manager. External dependencies are those outside the control of the Project Manager – for example, the delivery of a product required by this project from another project.

Dis-benefit

An outcome that is perceived as negative by one or more stakeholders. It is an actual consequence of an activity whereas, by definition, a risk has some uncertainty about whether it will materialize.

DSDM Atern

An agile project delivery framework developed and owned by the DSDM consortium. Atern uses a timeboxed and

iterative approach to product development and is compatible with PRINCE2.

Embedding (PRINCE2)

What an organization needs to do to adopt PRINCE2 as its corporate project management method. See also, in contrast, 'tailoring', which defines what a project needs to do to apply the method to a specific project environment.

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 the original Project Initiation Documentation.

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. According to the size and criticality of the project, the review may be formal or informal. The authority to proceed should be documented as a formal record.

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.

Enhance (risk response)

A risk response to an opportunity where proactive actions are taken to enhance both the probability of the event occurring and the impact of the event should it occur.

Event-driven control

A control that takes place when a specific event occurs. This could be, for example, the end of a stage, the completion of the Project Initiation Documentation, or the creation of an Exception Report. It could also include organizational events that may affect the project, such as the end of the financial year.

Exception

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

Exception assessment

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

Exception Plan

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

Exception Report

A description of the exception situation, its impact, options, recommendation and impact of the recommendation. This report is prepared by the Project Manager for the Project Board.

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 maintains its business focus, that it has clear authority, and that the work, including risks, is actively managed. The Executive is the chair of the Project Board. He or she represents the customer and is responsible for the Business Case.

Exploit (risk response)

A risk response to an opportunity by seizing the opportunity to ensure that it will happen and that the impact will be realized.

F

Fallback (risk response)

A risk response to a threat by putting in place a fallback plan for the actions that

will be taken to reduce the impact of the threat should the risk occur.

Follow-on action recommendations

Recommended actions related to unfinished work, ongoing issues and risks, and any other activities needed to take a product to the next phase of its life. These are summarized and included in the End Stage Report (for phased handover) and End Project Report.

G

Governance (corporate)

The ongoing activity of maintaining a sound system of internal control by which the directors and officers of an organization ensure that effective management systems, including financial monitoring and control systems, have been put in place to protect assets, earning capacity and the reputation of the organization.

Governance (project)

Those areas of corporate governance that are specifically related to project activities. Effective governance of project management ensures that an organization's project portfolio is aligned to the organization's objectives, is delivered efficiently and is sustainable.

H

Handover

The transfer of ownership of a set of products to the respective user(s). The set of products is known as a release. There may be more than one handover in the life of a project (phased delivery). The final handover takes place in the Closing a Project process.

Highlight Report

A time-driven report from the Project Manager to the Project Board on stage progress.
host site

A site where project work is being undertaken (for example, an office or construction site).

Impact (of risk)

The result of a particular threat or opportunity actually occurring, or the anticipation of such a result.

Inherent risk

The exposure arising from a specific risk before any action has been taken to manage it.

Initiation stage

The period from when the Project Board authorizes initiation to when they authorize the project (or decide not to go ahead with the project). The detailed planning and establishment of the project management infrastructure is covered by the Initiating a Project process.

Issue

A relevant event that has happened, was not planned, and requires management action. It can be any concern, query, request for change, suggestion or off-specification raised during a project. Project issues can be about anything to do with the project.

Issue Register

A register used to capture and maintain information on all of the issues that are being managed formally. The Issue Register should be monitored by the Project Manager on a regular basis.

Issue Report

A report containing the description, impact assessment and recommendations for a request for change, offspecification or a problem/concern. It is only created for those issues that need to be handled formally.

L

Lessons Log

An informal repository for lessons that apply to this project or future projects.

Lessons Report

A report that documents any lessons that can be usefully applied to other projects. The purpose of the report is to provoke action so that the positive lessons from a project become embedded in the organization's way of working and that the organization is able to avoid the negative lessons on future projects.

Logs

Informal repositories managed by the Project Manager that do not require any agreement by the Project Board on their format and composition. PRINCE2 has two logs: the Daily Log and the Lessons Log.

M

Management product

A product that will be required as part of managing the project, and establishing and maintaining quality (for example, Highlight Report, End Stage Report etc.). The management products stay constant, whatever the type of project, and can be used as described, or with any relevant modifications, for all projects. There are three types of management product: baselines, records and reports.

Management stage

The section of a 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 will wish to review progress to date, the state of the Project Plan, the Business Case and risks, and the next Stage Plan in order to decide whether to continue with the project.

Milestone

A significant event in a plan's schedule, such as completion of key Work Packages, a technical stage, or a management stage.

O

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 issue.

Operational and maintenance acceptance

A specific type of acceptance by the person or group who will support the product once it is handed over into the operational environment.

Outcome

The result of change, normally affecting real-world behaviour and/or circumstances. Outcomes are desired when a change is conceived. They are achieved as a result of the activities undertaken to effect the change.

Output

A specialist product that is handed over to a user(s). Note that management products are not outputs but are created solely for the purpose of managing the project.

P

Performance targets

A plan's goals for time, cost, quality, scope, benefits and risk.

Plan

A detailed proposal for doing or achieving something which specifies the what, when, how and by whom. In PRINCE2 there are only the following types of plan: Project Plan, Stage Plan, Team Plan, Exception Plan and Benefits Review Plan.

Planned closure

The PRINCE2 activity to close a project.

planning horizon

The period of time for which it is possible to accurately plan.

Portfolio

All the programmes and stand-alone projects being undertaken by an organization, a group of organizations, or an organizational unit.

Premature closure

The PRINCE2 activity to close a project before its planned closure. The Project Manager must ensure that work in progress is not simply abandoned, but that the project salvages any value created to date, and checks that any gaps left by the cancellation of the project are raised to corporate or programme management.

Prerequisites (plan)

Any fundamental aspects that must be in place, and remain in place, for a plan to succeed.

PRINCE2

A method that supports some selected aspects of project management. The acronym stands for Projects in a Controlled Environment.

PRINCE2 principles

The guiding obligations for good project management practice that form the basis of a project being managed using PRINCE2.

PRINCE2 project

A project that applies the PRINCE2 principles.

Probability

This is the evaluated likelihood of a particular threat or opportunity actually happening, including a consideration of the frequency with which this may arise.

Problem/concern

A type of issue (other than a request for change or offspecification) that the Project Manager needs to resolve or escalate.

Procedure

A series of actions for a particular aspect of project management established specifically for the project – for example, a risk management procedure.

Process

A structured set of activities designed to accomplish a specific objective. A process takes one or more defined inputs and turns them into defined outputs.

Producer

The person or group responsible for developing a product.

Product

An input or output, whether tangible or intangible, that can be described in advance, created and tested. PRINCE2 has two types of products – management products and specialist 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 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.

Product-based planning

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

Programme

A temporary flexible organization structure created to coordinate, direct and oversee the implementation of a set of related projects and activities in order to deliver outcomes and benefits related to the organization's strategic objectives. A programme is likely to have a life that spans several years.

Project

A temporary organization that is created for the purpose of delivering one or more business products according to an agreed 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?

Project Assurance

The Project Board's responsibilities to assure itself that the project is being conducted correctly. The Project Board members each have a specific area of focus for Project Assurance, namely business assurance for the Executive, user assurance for the Senior User(s), and supplier assurance for the Senior Supplier(s).

Project authorization notification

Advice from the Project Board to inform all stakeholders and the host sites that the project has been authorized and to request any necessary logistical support (e.g. communication facilities, equipment and any project support) sufficient for the duration of the project.

Project Brief

Statement that describes the purpose, cost, time and performance requirements,

and constraints for a project. It is created pre-project during the Starting up a Project process and is used during the Initiating a Project process to create the Project Initiation Documentation and its components. It is superseded by the Project Initiation Documentation and not maintained.

Project Initiation Documentation

A logical set of documents that brings together the key information needed to start the project on a sound basis and that conveys the information to all concerned with the project.

Project initiation notification

Advice from the Project Board to inform all stakeholders and the host sites that the project is being initiated and to request any necessary logistical support (e.g. communication facilities, equipment and any project support) sufficient for the initiation stage.

Project lifecycle

The period from the start-up of a project to the acceptance of the project product.

Project management

The planning, delegating, monitoring and control of all aspects of the project, and the motivation of those involved, to achieve the project objectives within the expected performance targets for time, cost, quality, scope, benefits and risks.

Project management team

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

Project management team structure

An organization chart showing the people assigned to the project management team roles to be used, and their delegation and reporting relationships.

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

An external product generated by the authority commissioning the project that forms the trigger for Starting up a Project.

Project office

A temporary office set up to support the delivery of a specific change initiative being delivered as a project. If used, the project office undertakes the responsibility of the Project Support role.

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 Documentation. 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 product

What the project must deliver in order to gain acceptance.

Project Product Description

A special type of Product Description used to gain agreement from the user on the project's scope and requirements, to define the customer's quality expectations, and to define the acceptance criteria for the project.

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.

Proximity (of risk)

The time factor of risk, i.e. when the risk may occur. The impact of a risk may vary in severity depending on when the risk occurs.

Q

Quality

The totality of features and inherent or assigned characteristics of a product, person, process, service and/or system that bears on its ability to show that it meets expectations or satisfies stated needs, requirements or specifications.

Quality assurance

An independent check that products will be fit for purpose or meet requirements.

Quality control

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

Quality criteria

A description of the quality specification that the product must meet, and the quality measurements that will be applied by those inspecting the finished product.

Quality inspection

A systematic, structured assessment of a product carried out by two or more carefully selected people (the review team) in a planned, documented and organized fashion.

Quality management

The coordinated activities to direct and control an organization with regard to quality.

Quality Management Strategy

A strategy defining the quality techniques and standards to be applied, and the various responsibilities for achieving the required quality levels, during a project.

Quality management system

The complete set of quality standards, procedures and responsibilities for a site or organization. In the project context, 'sites' and 'organizations' should be interpreted as the permanent or semi-permanent organization(s) sponsoring the

project work, i.e. they are 'external' to the project's temporary organization. A programme, for instance, can be regarded as a semi-permanent organization that sponsors projects – and it may have a documented quality management system.

Quality records

Evidence kept to demonstrate that the required quality assurance and quality control activities have been carried out.

Quality Register

A register containing summary details of all planned and completed quality activities. The Quality Register is used by the Project Manager and Project Assurance as part of reviewing progress.

Quality review

See 'quality inspection'.

Quality review technique

A quality inspection technique with defined roles and a specific structure. It is designed to assess whether a product that takes the form of a document (or similar, e.g. a presentation) is complete, adheres to standards and meets the quality criteria agreed for it in the relevant Product Description. The participants are drawn from those with the necessary competence to evaluate its fitness for purpose.

Quality tolerance

The tolerance identified for a product for a quality criterion defining an acceptable range of values. Quality tolerance is documented in the Project Product Description (for the project-level quality tolerance) and in the Product Description for each product to be delivered.

R

Records

Dynamic management products that maintain information regarding project progress.

Reduce (risk response)

A response to a risk where proactive actions are taken to reduce the probability of the event occurring by performing some form of control, and/or to reduce the impact of the event should it occur.

Registers

Formal repositories managed by the Project Manager that require agreement by the Project Board on their format, composition and use. PRINCE2 has three registers: Issue Register, Risk Register and Quality Register.

Reject (risk response)

A response to a risk (opportunity) where a conscious and deliberate decision is taken not to exploit or enhance an opportunity, having discerned that it is more economical to do so than to attempt a risk response action. The opportunity should continue to be monitored.

Release

The set of products in a handover. The contents of a release are managed, tested and deployed as a single entity. See also 'handover'.

Reports

Management products providing a snapshot of the status of certain aspects of the project.

Request for change

A proposal for a change to a baseline. It is a type of issue.

Residual risk

The risk remaining after the risk response has been applied.

Responsible authority

The person or group commissioning the project (typically corporate or programme management) who has the authority to commit resources and funds on behalf of the commissioning organization.

Reviewer

A person or group independent of the producer who assesses whether a product meets its requirements as defined in its Product Description.

Risk

An uncertain event or set of events that, should it occur, will have an effect on the achievement of objectives. A risk is measured by a combination of the probability of a perceived threat or opportunity occurring, and the magnitude of its impact on objectives.

Risk actionee

A nominated owner of an action to address a risk. Some actions may not be within the remit of the risk owner to control explicitly; in that situation there should be a nominated owner of the action to address the risk. He or she will need to keep the risk owner apprised of the situation.

Risk appetite

An organization's unique attitude towards risk taking that in turn dictates the amount of risk that it considers is acceptable.

Risk estimation

The estimation of probability and impact of an individual risk, taking into account predetermined standards, target risk levels, interdependencies and other relevant factors.

Risk evaluation

The process of understanding the net effect of the identified threats and opportunities on an activity when aggregated together.

Risk management

The systematic application of principles, approaches and processes to the tasks of identifying and assessing risks, and then planning and implementing risk responses.

Risk Management Strategy

A strategy describing the goals of applying risk management, as well as the procedure that will be adopted, roles and responsibilities, risk tolerances, the timing of risk management interventions, the tools and techniques that will be used, and the reporting requirements.

Risk owner

A named individual who is responsible for the management, monitoring and control of all aspects of a particular risk assigned to them, including the implementation of the selected responses to address the threats or to maximize the opportunities.

Risk profile

A description of the types of risk that are faced by an organization and its exposure to those risks.

Risk Register

A record of identified risks relating to an initiative, including their status and history.

Risk response

Actions that may be taken to bring a situation to a level where exposure to risk is acceptable to the organization. These responses fall into a number of risk response categories.

Risk response category

A category of risk response. For threats, the individual risk response category can be avoid, reduce, transfer, accept or share. For opportunities, the individual risk response category can be exploit, enhance, reject or share.

Risk tolerance

The threshold levels of risk exposure which, when exceeded, will trigger an Exception Report to bring the situation to the attention of the Project Board. Risk tolerances could include limits on the plan's aggregated risks (e.g. cost of aggregated threats to remain less than 10% of the plan's budget), or limits on any individual threat (e.g. any threat to operational service). Risk tolerance is documented in the Risk Management Strategy.

Risk tolerance line

A line drawn on the summary risk profile. Risks that appear above this line cannot be accepted (lived with) without referring them to a higher authority. For a project, the Project Manager would refer these risks to the Project Board.

Role description

A description of the set of responsibilities specific to a role.

S

Schedule

Graphical representation of a plan (for example, a Gantt chart), typically describing a sequence of tasks, together with resource allocations, which collectively deliver the plan. In PRINCE2, project activities should only be documented in the schedules associated with a Project Plan, Stage Plan or Team Plan. Actions that are allocated from day-to-day management may be documented in the relevant project log (i.e. Risk Register, Daily Log, Issue Register, Quality Register) if they do not require significant activity.

Scope

For a plan, the sum total of its products and the extent of their requirements. It is described by the product breakdown structure for the plan and associated Product Descriptions.

Scope tolerance

The permissible deviation in a plan's scope that is allowed before the deviation needs to be escalated to the next level of management. Scope tolerance is documented in the respective plan in the form of a note or reference to the product breakdown structure for that plan. See 'tolerance'.

Senior Responsible Owner

A UK government term for the individual responsible for ensuring that a project or programme of change meets its objectives and delivers the projected benefits. The person should be the owner of the overall business change that is being supported by the project. The Senior Responsible Owner (SRO) should ensure that the change maintains its business focus, that it has clear authority, and that the context, including risks, is actively managed. This individual must be senior and must take personal responsibility for successful delivery of the project. The SRO should be recognized as the owner throughout the organization.

The SRO appoints the project's Executive (or in some cases may elect to be the 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). The Senior Supplier 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.

Share (risk response)

A risk response to either a threat or an opportunity through the application of a pain/gain formula: both parties share the gain (within pre-agreed limits) if the cost is less than the cost plan; and both share the pain (again within pre-agreed limits) if the cost plan is exceeded.

Specialist product

A product whose development is the subject of the plan. The specialist products are specific to an individual project (for example, an advertising campaign, a car park ticketing system, foundations for a building, a new business process etc.) Also known as a deliverable or output.

Sponsor

The main driving force behind a programme or project. PRINCE2 does not define a role for the sponsor, but the sponsor is most likely to be the Executive

on the Project Board, or the person who has appointed the Executive.

Stage

See 'management stage' or 'technical stage'.

Stage Plan

A detailed plan used as the basis for project management control throughout a stage.

Stakeholder

Any individual, group or organization that can affect, be affected by, or perceive itself to be affected by, an initiative (programme, project, activity, risk).

Start-up

The pre-project activities undertaken by the Executive and the Project Manager to produce the outline Business Case, Project Brief and Initiation Stage Plan.

Strategy

An approach or line to take, designed to achieve a long-term aim. Strategies can exist at different levels – at the corporate, programme and project level. At the project level, PRINCE2 defines four strategies: Communication Management Strategy, Configuration Management Strategy, Quality Management Strategy and Risk Management Strategy.

Supplier

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

T

Tailoring

The appropriate use of PRINCE2 on any given project, ensuring that there is the correct amount of planning, control, governance and use of the processes and themes (whereas the adoption of PRINCE2 across an organization is known as 'embedding').

Team Manager

The person responsible for the production of those products allocated by the Project Manager (as defined in a Work Package) to an appropriate quality, timescale and at a cost acceptable to the Project Board. This role reports to, and takes direction from, the Project Manager. If a Team Manager is not assigned, then the Project Manager undertakes the responsibilities of the Team Manager role.

Team Plan

An optional level of plan used as the basis for team management control when executing Work Packages.

Technical stage

A method of grouping work together by the set of techniques used, or the products created. This results in stages covering elements such as design, build and implementation. Such stages are technical stages and are a separate concept from management stages.

Theme

An aspect of project management that needs to be continually addressed, and that requires specific treatment for the PRINCE2 processes to be effective.

Time tolerance

The permissible deviation in a plan's time that is allowed before the deviation needs to be escalated to the next level of management. Time tolerance is documented in the respective plan. See also 'tolerance'.

Time-driven control

A management control that is periodic in nature, to enable the next higher authority to monitor progress – e.g. a control that takes place every two weeks. PRINCE2 offers two key time-driven progress reports: Checkpoint Report and Highlight Report.

Tolerance

The permissible deviation above and below a plan's target for time and cost without escalating the deviation to the next

level of management. There may also be tolerance levels for quality, scope, benefit and risk. Tolerance is applied at project, stage and team levels.

Tranche

A programme management term describing a group of projects structured around distinct step changes in capability and benefit delivery.

Transfer (risk response)

A response to a threat where a third party takes on responsibility for some of the financial impact of the threat (for example, through insurance or by means of appropriate clauses in a contract).

Trigger

An event or decision that triggers a PRINCE2 process.

U

User acceptance

A specific type of acceptance by the person or group who will use the product once it is handed over into the operational environment.

User

The person or group who will use one or more of the project's products.

V

Variant

A variation on a baselined product. For example, an operations manual may have an English variant and a Spanish variant.

Version

A specific baseline of a product. Versions typically use naming conventions that enable the sequence or date of the baseline to be identified. For example, Project Plan version 2 is the baseline after Project Plan version 1.

W

Waterfall method

A development approach that is linear and sequential with distinct goals for each phase of development. Once a phase of development is completed, the development proceeds to the next phase and earlier phases are not revisited (hence the analogy that water flowing down a mountain cannot go back).

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, 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.