MgmtPlaza

The PRINCE2® **Training** Manual

A common sense approach to learning and understanding PRINCE2

Version 1.0h
(Check latest version)

Buy a copy

Covers the PRINCE2 Practitioner syllabus

Link to PRINCE2 **Foundation** Self Study guide
Link to PRINCE2 **Practitioner** Self Study guide

PRINCE2 ATO:

MgmtPlaza

By Frank Turley, The PRINCE2 Coach
MgmtPlaza – Affiliate of TAG

Practitioner Level

The PRINCE2® Training Manual

Thank you for reading our PRINCE2 Training Manual. The main objective of this book is to provide an easy-to-read and easy-to-understand PRINCE2® manual. The idea for this book came from the questions I received from people trying to learn PRINCE2 and after reading the official PRINCE2 manual "Managing Successful Projects with PRINCE2".

The official PRINCE2 Manual for the Project Manager is an excellent reference manual but can be rather difficult to pick up and read if you are new to both project management and PRINCE2.

So this book is meant to be – and is – an easy introduction to PRINCE2 and is quickly becoming the most read book for people wishing to learn about PRINCE2 and prepare for Foundation Exam and Practitioner Exam.

Feedback: We welcome any feedback (suggests to improve or corrections), see next page for my email address.

Evaluate / Buy this book

You are very welcome to evaluate this book and if you find the book useful, we would appreciate if you would buy a copy. The cost of this PRINCE2 Training Manual is just: €24.00, $29, £19, see our **shop**.

Free PRINCE2Self Study Course

We offer a free full Self Study course if you but your official PRINCE2 Exam from us. Our Self-Study course includes, Audio Course, Books, 550 Q&A course, Practice Exams, etc…

- **Link** to PRINCE2 Foundation Self Study guide:
- **Link** to PRINCE2 Practitioner Self Study guide:
- **Link** to Exam Purchase Page

Acknowledgements

Written	Frank Turley	Copyright © 2010 Frank Turley
Expert Reviewer	Peter Krischel	LinkedIn
Expert Reviewer	Danny Vandeweyer	LinkedIn

Thanks also to the follow people for their feedback on this book:
Cesar Lopez, **Dimitri De Ruelle**, **Eralp Tezcan**, **Laurent George**,

Distribution Copyright

About the Author

Frank Turley (The PRINCE2 Coach) has been a Project Manager for more than 15 years and a PRINCE2 Practitioner. He is also a Project Manager trainer and coach and has written the following training material for PRINCE2:

- Introduction to PRINCE2 CBT & Podcast
  The CBT and Audio course are based on the Introduction to PRINCE2 book (the most read book on PRINCE2). This introduction course is used by persons who are preparing for a classroom training or who wish to refresh their PRINCE2 knowledge. **Link**
- PRINCE2 Audio Course
  This is the first PRINCE2 Foundation Audio Course that allows you to learn PRINCE2 while driving, walking, or gardening. This training stands out, as all new PRINCE2 terms are explained with examples, thus making it very easy to understand and take in. **Link**
- Learn PRINCE2 Thru Questions Podcast (LTQ)
  This LTQ course provides more than 550 questions on PRINCE2 in an audio format to allow you to check your knowledge and learn about PRINCE2 at the same time. **Link**

You can contact Frank at:
E-mail : frank.turley@MgmtPlaza.com
LinkedIn : www.linkedin.com/in/frankturley

About TAG

Trans-Atlantic Consulting Group (hereinafter, "TAG") was established in 2001 by Peter Krischel. Since 2001, TAG has grown to be a global provider of PRINCE2 Project Management training and consulting services with training and consulting partners around the world. We have trained over 8,000 project managers in more than 20 countries using a global network of business partners.

Trans-Atlantic Consulting Group is an accredited PRINCE2 training organization (ATO). PRINCE2 is a process-based approach for project management, providing an easily tailored and scalable method for the management of all types of projects. This method is the *de facto* standard for project management in the UK and is also practiced worldwide.

About MgmtPlaza

MgmtPlaza is a registered PRINCE2 affiliate of Trans-Atlantic Group and is managed by Frank Turley. Our mission is to make it easy for people to learn and use PRINCE2. We just focus on providing the following

- An easy to use PRINCE2 Self-Study
- Public and in-house PRINCE2 training
- PRINCE2 coaching services/workshops to Project Managers, Senior Managers, etc…

Table of Contents

The PRINCE2® Training Manual ii
Evaluate / Buy this book ii
Free PRINCE2Self Study Course ii
Acknowledgements ii
Distribution Copyright iii
About the Author iii
About TAG iii
About MgmtPlaza iii
1 Introduction – PRINCE2 1
1.1 The PRINCE2 Manual 1
1.2 What are Projects? 1
1.3 Why a Project Management Method? 2
1.4 What is PRINCE2? 2
1.5 Six variables / six performance targets 3
1.6 PRINCE2 Structure 3
1.7 What does PRINCE2 not cover? 4
1.8 Benefits of using PRINCE2: 4
1.9 What does a Project Manager do? 5
1.10 Learn Thru Questions 6
2 The Process Model and Project Timeline 8
2.1 The PRINCE2 Process Model 8
2.2 Project Timeline 9
2.2.1 Starting Up a Project 10
2.2.2 Initiating a Project Process / Initiation Stage 11
2.2.3 Controlling a Stage – 1st delivery stage 12
2.2.4 Next delivery stages 13
2.2.5 Last delivery stage and Closing a Project 14
2.2.6 Exception Plan example 15
2.2.7 Timeline Summary 15
3 Principles 16
3.1 Introduction to principles 16
3.2 Principles: Continued Business Justification 16
3.3 Principles: Learn from Experience 16
3.4 Principles: Defined Roles and Responsibilities 17
3.5 Principles: Manage By Stages 17
3.6 Principles: Manage by Exception 17
3.7 Principles: Focus on Products 18
3.8 Principles: Tailoring or Tailor to suit the Project Environment 18

3.9 Learn Thru Questions 19
4 Themes Introduction 21
4.1 Introduction to Themes 21
4.2 List of Themes 21
4.2.1 Theme: Business Case 21
4.2.2 Theme: Organization 22
4.2.3 Theme: Quality 22
4.2.4 Theme: Plans 23
4.2.5 Theme: Risk 23
4.2.6 Theme: Change 23
4.2.7 Theme: Progress 24
4.3 Learn Thru Questions 24
5 Business Case Theme 26
5.1 Introduction to Business Case Knowledge 26
5.2 What happens in the real world? 26
5.3 The Business Case knowledge provided by PRINCE2 26
5.4 What does a Business Case do for the project? 27
5.5 How to best describe what you get from a project? 27
5.6 Different types of Business Case 28
5.7 The path to creating the Business Case 29
5.8 Step 1: Develop the Business Case 29
5.9 Step2: Verify the Business Case 30
5.10 Step 3: Maintain the Business Case 31
5.11 Step 4: Confirm the Benefits 31
5.12 The Benefits Review Plan 32
5.13 Example of a Poor Business Case 33
5.14 The Contents of a Business Case 33
5.15 Example of Business Case for CRM Project 35
5.16 Appraisal Techniques 36
5.17 Business Case: Who is responsible for what? 37
5.18 Foundation and Practitioner Exam 37
5.19 Learn Thru Questions 38
6 Organization 41
6.1 Introduction to Organization Knowledge 41
6.2 What happens in the real world? 41
6.3 The Organization Knowledge provided by PRINCE2 41
6.4 Organization Definitions 42
6.5 Three Project Interests / 3 Stakeholder Categories 42
6.6 The four levels of Organization 43
6.7 Project Board 46
6.8 The Project Board Roles 46
6.9 Project Assurance: User, Business & Supplier 47

6.10 The Change Authority Role 48
6.11 The Project Manager Role 49
6.12 Team Manager & Project Support 49
6.13 Project Support and centre of excellence 50
6.14 Project Manager and the Project Organization 50
6.15 Stakeholder Engagement 51
6.16 The Communication Management Strategy 52
6.17 Responsibilities for Organization Theme 52
6.18 Foundation and Practitioner Exam 53
6.19 Learn Thru Questions 53
7 Quality 57
7.1 Introduction to Quality Knowledge 57
7.2 What happens in the real world? 57
7.3 The Quality Knowledge provided by PRINCE2 57
7.4 Quality Lingo 58
7.5 Introduction to the PRINCE2 Approach to Quality: 59
7.6 Part 1: Quality Planning Introduction 59
7.6.1 Quality Plan Steps – Quality Audit Trail 60
7.6.2 The Customer's Quality Expectations 61
7.6.3 Acceptance Criteria 62
7.6.4 The Project Product Description 63
7.6.5 Project Product Description Example 63
7.6.6 The Quality Management Strategy Document 65
7.6.7 Product Descriptions 66
7.6.8 Quality Register 67
7.7 Part 2: Quality Control Introduction & Quality Methods 68
7.7.1 Quality records, approval records and acceptance records 69
7.8 The PRINCE2 Quality Review Technique 69
7.9 Responsibilities 70
7.10 Quality Summary 71
7.11 Foundation and Practitioner Exam 72
7.12 Learn Thru Questions 72
8 Plans 76
8.1 Introduction to Plans Knowledge 76
8.2 What happens in the real world? 76
8.3 The Plans Knowledge provided by PRINCE2 77
8.4 Plans Lingo 77
8.5 Three levels of a Plan 78
8.6 The Path to Planning 79
8.7 The Project Plan, Stage Plan and Team Plan 80
8.8 The Exception Plan – Introduction 80
8.9 The PRINCE2 Planning Steps and Design the Plan 81

8.10 Step 1: Design the Plan – First of the 7 steps: ... 82
8.11 Step 2: Product-Based Planning Introduction ... 82
8.12 PBP Step 1: Write the Project Product Description ... 83
8.13 PBP Step 2: Create the Product Breakdown Structure ... 83
8.14 Product-Based Planning - Example ... 84
8.15 PBP Step 3: Write the Product Descriptions ... 86
8.16 PBP Step 4: Product Flow Diagram ... 87
8.17 Step 3: Identify Activities and Dependencies ... 88
8.18 Step 4: Prepare Estimates ... 88
8.19 Step 5: Prepare the schedule ... 89
8.20 Document the Plan ... 91
8.21 Examples of Risks in Planning ... 91
8.22 The Product Checklist ... 91
8.23 Responsibilities ... 92
8.24 Plans Summary ... 93
8.25 Foundation and Practitioner Exam ... 93
8.26 Learn Thru Questions ... 94
9 Risk Theme ... 98
9.1 Introduction to the Risk Knowledge ... 98
9.2 What happens in the real world? ... 98
9.3 Purpose of the knowledge in the Risk Theme ... 98
9.4 Risk Lingo ... 99
9.5 Risk Lingo - What is Risk Management ... 100
9.6 The Management of Risk Method & Risk Context ... 100
9.7 The Risk Register - Risk History ... 101
9.8 The Risk Management Procedure Introduction ... 102
9.9 Step 1: Identify ... 103
9.10 How to Express the Risk ... 104
9.11 Step 2: Assess Risk ... 105
9.12 Step 2: Assess Risk: Estimating ... 105
9.13 Step 2: Assess Risk – Evaluate ... 107
9.14 Step 3: Plan is about Planning the Responses ... 107
9.15 Plan the Responses to Threats ... 108
9.16 Plan the Responses to opportunities ... 109
9.17 Step 4: Implement the Responses ... 110
9.18 Step 5: Communicate ... 111
9.19 What is a Risk Budget? ... 111
9.20 Risk Roles and Responsibilities ... 111
9.21 Risk Summary ... 112
9.22 Learn Thru Questions ... 113
10 Change ... 118
10.1 Introduction to Change Knowledge ... 118

10.2 What happens in real world? ... 118
10.3 Purpose of knowledge in the Change Theme ... 119
10.4 Change Lingo ... 119
10.5 The PRINCE2 Approach to Change ... 120
10.6 Configuration Management Strategy ... 120
10.7 How to prioritize issues & track severity ... 121
10.8 Change Authority and Change Budget ... 121
10.9 Management Products used by the Change Theme ... 122
10.10 The Configuration Management Procedure ... 124
10.11 Issue and Change Control Procedure: ... 125
10.12 Capture: Issue and Change Control Procedure: ... 126
10.13 Examine: Issue and Change Control Procedure: ... 127
10.14 Propose ... 128
10.15 Decide ... 129
10.16 Implement ... 129
10.17 Roles and Responsibilities ... 130
10.18 Summary ... 131
10.19 Learn Thru Questions ... 131
11 Progress ... 136
11.1 Introduction ... 136
11.2 What happens in the real world? ... 136
11.3 Purpose of the information in the Progress Theme ... 137
11.4 Progress, Progress Controls, Exceptions and Tolerances ... 137
11.4.1 When are the Six Tolerances set? ... 138
11.5 What is the PRINCE2 Approach to Progress? ... 138
11.6 What are the 3 Project Board Controls? ... 140
11.7 Use of Management Stages for Control ... 141
11.8 What are Technical Stages? ... 142
11.9 Event-Driven and Time-Driven Controls ... 143
11.10 How does the Project Manager review progress? ... 143
11.11 Capturing and reporting lessons ... 145
11.12 Reports used to Report Progress ... 145
11.13 What is Raising Exceptions? ... 146
11.14 Progress Responsibilities ... 146
11.15 Progress Summary ... 147
11.16 Learn Thru Questions ... 147
12 Introduction to Processes ... 150
12.1 Introduction to Processes ... 150
12.2 The PRINCE2 Processes ... 150
12.3 Pre-Project ... 150
12.4 Initiation Stage ... 151
12.5 Next Stage or Stages after the Initiation Stage ... 151

12.6 The PRINCE2 Process Model Introduction 152
12.7 Introduction to the Seven Processes 152
12.8 Learn Thru Questions 153
13 Starting Up a Project 155
13.1 Introduction 155
13.2 Purpose & Objective of the Starting Up a Project Process 155
13.3 Activities Introduction 155
13.4 Appoint the Executive and the Project Manager 157
13.5 Capture Previous Lessons 157
13.6 Design and appoint the Project Management Team 158
13.7 Outline Business Case 158
13.8 Select Project Approach and Assemble Project Brief 159
13.9 Plan the Initiation Stage 160
13.10 Summary of Activities 161
13.11 Learn Thru Questions 161
14 Initiating a Project 163
14.1 Introduction 163
14.2 Purpose & Objective 163
14.3 Activities 163
14.3.1 Prepare the Risk Management Strategy 164
14.3.2 Prepare the Configuration Management Strategy 165
14.3.3 Prepare the Quality Management Strategy 166
14.3.4 Prepare the Communication Management Strategy 167
14.3.5 Setting Up the Project Controls 168
14.3.6 Create the Project Plan 169
14.3.7 Refining the Business Case 170
14.3.8 Assemble the Project Initiation Documentation 171
14.4 Learn Thru Questions 172
15 Directing a Project 174
15.1 Introduction 174
15.2 Introduction to the Directing a Project 174
15.3 Introduction to Activities 175
15.3.1 Activity 1: Authorize initiation 176
15.3.2 Activity 2: Authorize the project 176
15.3.3 Activity 3: Authorize a Stage or Exception Plan 177
15.3.4 Activity 4: Give *ad hoc* Direction 178
15.3.5 Activity 5: Authorize Project Closure 179
15.4 Learn Thru Questions 180
16 Controlling a Stage 183
16.1 Introduction 183
16.2 Purpose & Objective 183
16.3 Context 183

16.4 Introduction to Activities 184
16.4.1 Activity 1: Authorize a Work Package 185
16.4.2 Activity 2: Review Work Package Status 186
16.4.3 Activity 3: Receive complete Work Packages 186
16.4.4 Activity 4: Review the stage status 187
16.4.5 Activity 5: Report Highlights 188
16.4.6 Activity 6: Capture and Examine Issues & Risks 189
16.4.7 Activity 7: Escalate issues and risks 190
16.4.8 Activity 8: Take Corrective Action 191
16.5 Learn Thru Questions 192
17 Managing Product Delivery 194
17.1 Introduction 194
17.2 Purpose & Objective 194
17.3 Managing Product Delivery Activities 194
17.3.1 Activity: Accept a Work Package 195
17.3.2 Activity: Execute a Work Package 196
17.3.3 Activity: Deliver a Work Package 197
17.4 Learn Thru Questions 198
18 Managing a Stage Boundary 200
18.1 Introduction 200
18.2 Purpose & Objective 200
18.3 Context 200
18.4 Managing a Stage Boundary Activities 201
18.4.1 Activity 1: Plan the next Stage 202
18.4.2 Activity 2: Update the Project Plan 202
18.4.3 Activity 3: Update the Business Case 203
18.4.4 Activity 4: Report stage end 204
18.4.5 Activity 5: Produce an Exception Plan 205
18.5 Learn Thru Questions 206
19 Closing a Project 208
19.1 Introduction 208
19.2 Purpose & Objective 208
19.3 Context 208
19.4 Closing a Project Activities 209
19.4.1 Activity 1: Prepare planned closure 209
19.4.2 Activity 2: Prepare premature closure 210
19.4.3 Activity 3: Handover products 211
19.4.4 Activity 4: Evaluate the project 211
19.4.5 Activity 5: Recommend Project Closure 212
19.5 Learn Thru Questions 213
20 Tailoring PRINCE2 to the project environment 216
20.1 Introduction and What Tailoring Is 216

20.2 What is Tailoring? 216
20.3 General Approach to Tailoring 216
20.4 What to change when tailoring 217
20.5 Working in a Program Environment 218
20.5.1 Tailoring the Themes of Quality, Plans, Risk, Change & Progress 218
20.5.2 Tailoring Processes & Management Products 219
20.6 Project Scale – Simple Projects 219
20.6.1 Tailoring: Project Scale Introduction 219
20.6.2 Tailoring for Simple Project: Effect on Themes 220
20.6.3 Tailoring: Simple Projects 221
20.7 Tailoring: Commercial Customer/Supplier Environment 221
20.7.1 Tailoring: Effect on Business Case 222
20.7.2 Tailoring: Effect on Organization 222
20.7.3 Tailoring: Effect on Quality & Risk 222
20.7.4 Tailoring: Effect on Plans 223
20.7.5 Tailoring: Effect on Processes 223
20.8 Tailoring: Project Type 224
20.8.1 Tailoring: Project Type: Lifecycle Models 224
20.8.2 Tailoring: Project Type: The Feasibility Project 224
20.8.3 Tailoring: Project Management Bodies of Knowledge 224
Appendix A 226
Simple Glossary 226

1 Introduction – PRINCE2

1.1 The PRINCE2 Manual

The official PRINCE2 manual for the Project Manager is called “Managing Successful Projects with PRINCE2”; this is an excellent reference manual.

The manual is designed for:

- Experienced Project Managers who want to learn PRINCE2
- Project Managers who want to have a reference manual for PRINCE2

We provide the PRINCE2 Training Manual, which is different from the official PRINCE2 manual in the following ways:

- It is much more of a training manual and less of a reference manual.
- PRINCE2 terms are explained with examples, which makes it easier to understand.
- Manual is written in plain English so that you understand it the first time you read it.
- A lot of examples of management documents are provided and we will continue to add more.
- A project timeline overview has been provided to help understand how a project is divided.
- Questions at the end of each chapter provide a good way to test your knowledge.
- Diagrams are less complex and easier to read.

Two other comments on the PRINCE2 Training Manual:

- It is available in PDF format, which makes it easy to search and find the information you are looking for.
- The MgmtPlaza PRINCE2 Audio Course is based on the PRINCE2 Training Manual so you can listen to the PRINCE2 Training Manual while driving, or walking. This is an excellent way to learn and expand your knowledge.

To summarize everything, if you want to learn PRINCE2 then use the PRINCE2 Training Manual and if you want a good reference manual after your training, then use the official PRINCE2 manual “Managing Successful Projects with PRINCE2”.

1.2 What are Projects?

Projects are seen as a way to introduce change, hence they are unique by nature, i.e., two identical projects are not done. Now some of you may be thinking that in your company the same projects keep repeating. Well, if they are exactly the same, then these are referred to as processes; and processes that repeat are referred to as “business as usual” or operations.

Let us start with a more general definition of a project. I got this from Wikipedia.

A project is a unique series of actions designed to accomplish a unique goal within specific time and cost limitations.

I like this definition, as it is concise and easy to understand. It mentions terms like “series of actions,” “unique goal” and “within the constraints of time and money.”

Another definition of a project is as follows:

A project is a temporary endeavor undertaken to create a unique product or service.

This might sound like something from Star Trek but it is actually from the Project Management Body of Knowledge (PMBoK).

Now let us hear what PRINCE2 says about what a project is**.** This is a quote from the manual:

“A project is a temporary organization that is created for the purpose of delivering one or more business products according to an agreed Business Case.”

You may not have understood this, as you need to know a little more about PRINCE2 first. It should start to make more sense in a few minutes after I start explaining what is meant by the words like *temporary organization* and *unique,* which appear in the definition.

The word *organization* refers to the project team, the persons involved in the project and how they relate to each other. Each project has a definite start and end, so it is temporary. Remember, projects that go on forever are referred to as “operations” or “business as usual” and are not projects (e.g., maintenance of a software application).

The word *unique* refers to the fact that these series of actions have not been done before. It is something new. For example, creating another car on an assembly line is not a project but an operation process. Introducing new state-of-the-art robots into the production line, however, would be a project, as this has not been done before.

Business Case is the document that exists in a PRINCE2 project. It includes information such as why the project is a good idea from a business point of view, the benefits, costs and time information.

1.3 Why a Project Management Method?

Project Management deals with planning, delegating, monitoring and controlling the project; in other words the administration of the project.

Let us look at the role of the Project Manager.

The role of the Project Manager is to achieve project objectives within the targets set for time, cost, quality, scope, benefits and risk.

Let us look at some typical things that can go wrong in a project:

I will use the building of a house as a sample project. This should be easy enough for the majority of people to understand unless you were born and have lived all of your life on a submarine. Coming back to the house project, let us suppose that you are using different subcontractors and all this needs to be coordinated so that work gets done properly.

You might find out just one week before the plumbers are due to arrive that they may be delayed for one month. This will have a series of effects on most other work, as it will be difficult to reschedule other contractors and you may still have to pay part of their costs due to the agreement that you have with them. Let us consider another example: you may find during the installation of the window frames that the allocated space is too small.

So project management is needed to better plan, monitor work, do numerous checks and signoffs, deal with risk, deal with issues as they arise, identify areas to cut costs, and so on. Other common project failures are:

- Insufficient product definitions at the start, resulting in the wrong product being developed.
- Lack of communication, which may cause a black cloud over the project.
- Poor estimation of time and cost, which may cause the project to run out of money.

So I am sure now you can see that there is a need for a good Project Management method.

1.4 What is PRINCE2?

PRINCE2 is a generic method for Project Management. It can be used for any project, from running a 1- to 2-day project for the TV program such as “The Apprentice” (a popular TV program in the UK and US) to a company acquisition -- or even to the construction of the main stadium for the London 2012 Olympic Games.

PRINCE2 separates the management layer from the work to create the required products that the project has to produce (specialist work). This means that the same management layer can be used for different types of projects. The Management Layer refers to the organization of the project, such as Project Board, Project Manager and Teams. You will see this more clearly when we discuss the process model later.

Another popular project method is the Project Management Framework, which is based on the book PMBoK (You may have heard of PMI. PMI stands for the Project Management Institute.) This method is very popular in the US while PRINCE2 is very popular in Europe.

PRINCE2 is principle-based, meaning that a PRINCE2 project includes 7 principles. These will be discussed and explained in the next chapter. The 7 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

1.5 Six variables / six performance targets

The 6 variables / performance targets are : Timescales, Costs, Quality, Scope, Benefits and Risk.

An easy way to remember these is to use the words **T**e**CQ**uila **S**o**B**e**R** with Tequila spelled with TeCQ. This will give you Timescales, Costs, Quality, Scope, Benefits and Risks.

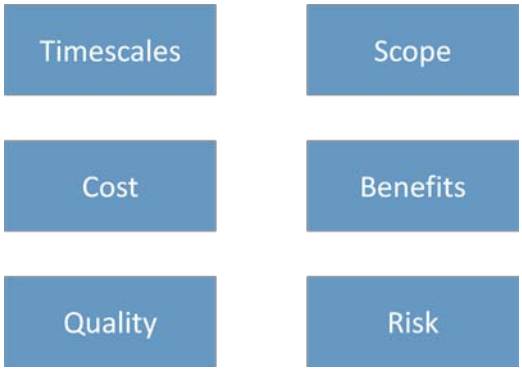


Fig 1.1 The six project variables / six performance targets

Timescales: The question to ask for timescales: When will the project be finished?

Cost: Projects have to give a return on investment; therefore, the questions to ask are: Are the costs being controlled? and Are we within budget?

Quality: Will the product be usable at the end of the project (in other words fit for purpose)?

Scope: Is the scope well-defined and clear to all stakeholders? Care must be taken by the Project Manager to avoid scope creep, which is to allow new requirements to be added during the project.

Benefits: Why are we doing this project and what are the benefits? Benefits must be clear and known by the Project Manager, and the benefits need to be delivered.

Risk: All projects are unique and therefore have risk. How much risk can we take on and how can risk be managed? For example, in a project concerned with building a house, what happens if one of the subcontractors does not show up?

PRINCE2 is a method that deals with the planning, delegation, monitoring and control of all six project variables which are, as you already know: Timescales, Costs, Quality, Scope, Benefits and Risks. The PMBok refers to these 6 variables as the 6 competing Project Constraints.

1.6 PRINCE2 Structure

The PRINCE2 method consists of 4 main parts and PRINCE2 has chosen the word **Elements (**also called **Integrated Elements**) to represent these 4 parts. These elements are Principles, Themes, Processes and Tailoring. Use the structure of the manual to help you remember. First,

you have the Principles, then Themes, then Processes and finally the last chapter which is Tailoring.

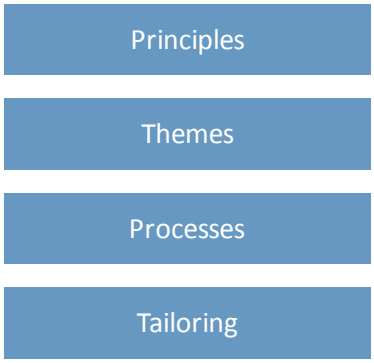


Fig 1.2 PRINCE2 Structure

- **Principles**: PRINCE2 says that each project should consist of the 7 PRINCE2 principles (in other words, "best practices").
- **Themes**: Themes answer the question regarding what items must be continually addressed during each project, e.g., Business Case, Organization, Quality and Configuration Management.
- **Processes**: Processes answer the question regarding what activities are done during the project and by whom. Processes also answers "What products are to be created and when?"
- **Tailoring**: Tailoring answers one of the most common questions from a Project Manager, "How do I best apply PRINCE2 to my project or my environment?"

1.7 What does PRINCE2 not cover?

It's important to note what PRINCE2 does not cover and this can be listed in 3 categories. These are

- Specialist Aspects
- Detailed Techniques
- Leadership Capability

Specialist Aspects refers to the fact that PRINCE2 is very generic and can be applied to any type of project. Therefore PRINCE2 does not give specific information to run certain projects, for example, how best to structure a financial project organization or how to realize the benefits of a specialist financial product.

Detailed Techniques: There are many techniques that can be used during a project like "Critical Path Analysis" or how best to run a brainstorm workshop. PRINCE2 advises to choose the techniques that are suitable for your project, but it does not provide information on them. PRINCE2 does provide information on Product-Based Planning and the Quality Review technique, however.

Leadership Capability: Leadership, motivational ability and other soft skills are important for good project management, but there are many different kinds of leadership skills and styles. PRINCE2 advises to choose the best training programs that suit your particular environment.

1.8 Benefits of using PRINCE2:

As you might possibly imagine, there are many advantages to using a Project Management method; this also applies to PRINCE2. I will list a few of them here. You don't need to remember them, but it is good to be aware of them. I will also include some examples where necessary.

Benefit 1: Best Practice: PRINCE2 has been used for more than 30 years in many thousands of projects, and PRINCE2 keeps learning from these projects. So all the feedback, suggestions, learning from other methods and discussions have benefited PRINCE2 and helped it become a best practice.

Benefit 2: PRINCE2 can be applied to any kind of project. This means that PRINCE2 can be used for projects as small as organizing a meeting, to huge projects the size of running an election, organizing a conference, constructing a bridge, or an IT project.

Benefit 3: PRINCE2 provides a structure for roles and accountability (also referred to as "Roles and Responsibility"). All persons on the Project Team should know what is expected of them. This is even more important for the Project Managers, as they have the duty of checking that tasks are completed as agreed.

Benefit 4: PRINCE2 is product-focused; meaning that the product is well-defined at the start of the project and is made known to all stakeholders. As a result, everybody has the same idea of what they are working on and the expected end-product.

Benefit 5: PRINCE2 uses Management by Exception. This allows the Project Manager to handle certain project issues, but once an issue goes beyond a certain tolerance, it becomes an exception. It should then be escalated to the next higher management layer. We could say that Management by Exception allows the above management layer to manage a lower management layer.

Benefit 6: PRINCE2 continues to assess the viability of the project from a Business Case point of view and this happens throughout the project lifecycle. If, for example, the expected return on investment is no longer probable at any point in the project, then the project should be stopped.

Benefit 7: PRINCE2 has a well-defined structure for reports and Management Products. "Management Products" is the name given by PRINCE2 to refer to any document that is created to help manage the project. This includes Project Brief, Business Case, Project Plan, Highlight Reports and End Stage Report. You can refer to Appendix A for a description of each of these products.

Benefit 8: PRINCE2 promotes learning and a continual improvement mindset (also known as "Lessons Learned"). You are encouraged to learn from other projects at the start of a project. During the project, you are encouraged to add a lesson to the Lessons Log and at the end of the project you should pass on lessons to future projects.

You will see other benefits as you continue with this course.

1.9 What does a Project Manager do?

You might already have a good idea about what a Project Manager does, but very often the Project Managers find themselves doing a lot of tasks as they try to keep the project on track. This might seem like a good idea at first, but they will end up not managing the project in the long run.

Let us start at the very beginning. There is a project to do and, therefore, a Project Plan must be created. This is usually one of the first tasks for the Project Manager when the project starts up. They create the plan with help from specialists and it includes tasks such as leading a planning workshop, defining products, activities and dependences, estimating resources required, scheduling these activities and defining roles and responsibilities.

The main objective for the Project Manager is to see that the project goes according to the plan. The Project Manager continues to review the completed tasks, get signoffs, and confirm that the following tasks can start and so on. In other words, the Project Manager monitors how well the work is going according to the Project Plan.

Elevator Interview

I will repeat this line in case that you are in an Elevator someday and somebody asks what you do. You can say "I monitor how well the work is going according to the project plan".

Monitor the 6 variables / performance targets

The Project Manager will also constantly monitor the 6 variables we just discussed above that are part of any project. These are Timescales, Costs, Quality, Scope, Benefits and Risk.

Dealing with Issues

They also have to deal with issues as they arise. In the case of small issues, they might choose to handle these themselves (e.g., getting a supplier to work an extra day to solve the issue and get

the project back on track). If an issue arises such that could force the staget to go beyond the set tolerances, the Project Manager can escalate it to the Project Board.

Speed up the project

Another task of the Project Manager that is sometimes forgotten is to look for opportunities to speed the project up and reduce the costs.

Lastly, I recommend that Project Managers spend the necessary amount of time defining and agreeing Roles and Responsibilities at start of the project. Depending on your company, you might need good soft skills to do this. This will benefit the project and could also prevent some stakeholders from passing their work and responsibility back to the Project Manager.

1.10 Learn Thru Questions

Try and answer the following, these are taken from the Learn Thru Questions audio course. Check the answers in the Learn Thru Questions document available on our site: You can also listen to these questions and answers (use the **LTQ audio course**)

Q01: Who is the "Managing Successful Projects with PRINCE2" manual designed for? Name 2 types of readers.

Q02: Wikipedia provides a useful definition of a project, so complete the following sentence: "A project is a unique series of actions designed to accomplish a _____."

Q03: Complete the following definition of PRINCE2 in your own words: "A project is a temporary organization that is created for the purpose of _____."

Q04: In the PRINCE2 definition of a project, what do you think is meant by the term "A temporary organization"?

Q05: Name some of the tasks that Project Management deals with.

Q06: Finish the sentence: "Project Management is the planning, delegating, monitoring and control of all aspects of the project to achieve the project objectives within the expected performance target for ____." (**Tip:** think of the 6 project variables.)

Q07: A project can go wrong for many reasons. Can you think of what might go wrong if there is a poor product description, poor communication or poor estimation? (**Note:** This is not really a question but an exercise.)

Q08: What is meant by the following sentence: *"PRINCE2 separates the management layer from the specialist work."*? Explain with an example.

Q09: What is meant by the following statement: *"PRINCE2 is principle-based"?*

Q10: Try to list some of the 7 principles. (Don't worry about the exact names, as you will only have to recognize the names in the exam.)

Q11: Name some of the 6 variables that must be controlled in any project.

Q12: Explain the variable cost and why it needs to be controlled.

Q13: Explain the variable scope and why it needs to be controlled.

Q14: Complete the following sentence: *"PRINCE2 is a method that deals with the planning, delegation, monitoring and control of _____."*

Q15: Name the four elements of PRINCE2.

Q16: Which PRINCE2 element is referred to in the following sentence: *"They are the 7 best practices that should exist in each PRINCE2 project."*

Q17: Which PRINCE2 element is referred to in the following sentence: "They are the items that must be continually addressed during each project (e.g., Business Case, Organization and Quality)."

Q18: Which PRINCE2 element is referred to in the following sentence: "This element lists the activities that are done during the project. It lists the products that will be created and when they will be created."

Q19: What do you think is meant by the statement, "PRINCE2 does not provide detailed techniques"?

Q20: What do you think is meant by the statement, "PRINCE2 does not provide leadership capability"?

Q21: List 4 advantages of using a Project Management method like PRINCE2.

Q22: Name one of the first plans that the Project Manager creates in the project that is based on the Plan Product Description found in the Appendix of the PRINCE2 manual.

Q23: Describe in your own words what the main objective of the Project Manager is.

Q24: Should the Project Manager also try to look for opportunities to speed up the project and reduce costs or ignore these opportunities and just focus on getting the project to run according to the plan?

2 The Process Model and Project Timeline

2.1 The PRINCE2 Process Model

Hopefully you have seen and read the Introduction to PRINCE2 book (based on the PRINCE2 Process Model). This provides a helicopter view of PRINCE2 and is perhaps the best way to get an introduction to PRINCE2. So if you have not read it, then I suggest that you STOP right here and visit our site **www.MgmtPlaza.com** to get a copy.

This Introduction to PRINCE2 book will:

- give you a high-level introduction to the PRINCE2 Process Model
- Show the relationship between processes and themes
- Show how a project starts and how it moves from one process to another
- Explain when, where and by whom the important documents are created
- Cover the role of the Project Manager and Project Board
- Explain how the Project Board controls the project
- And show how a typical project closes

The diagram below shows how a project starts and the typical next steps until the project is complete. This makes it easier to see how all the chapters of a PRINCE2 manual work together.

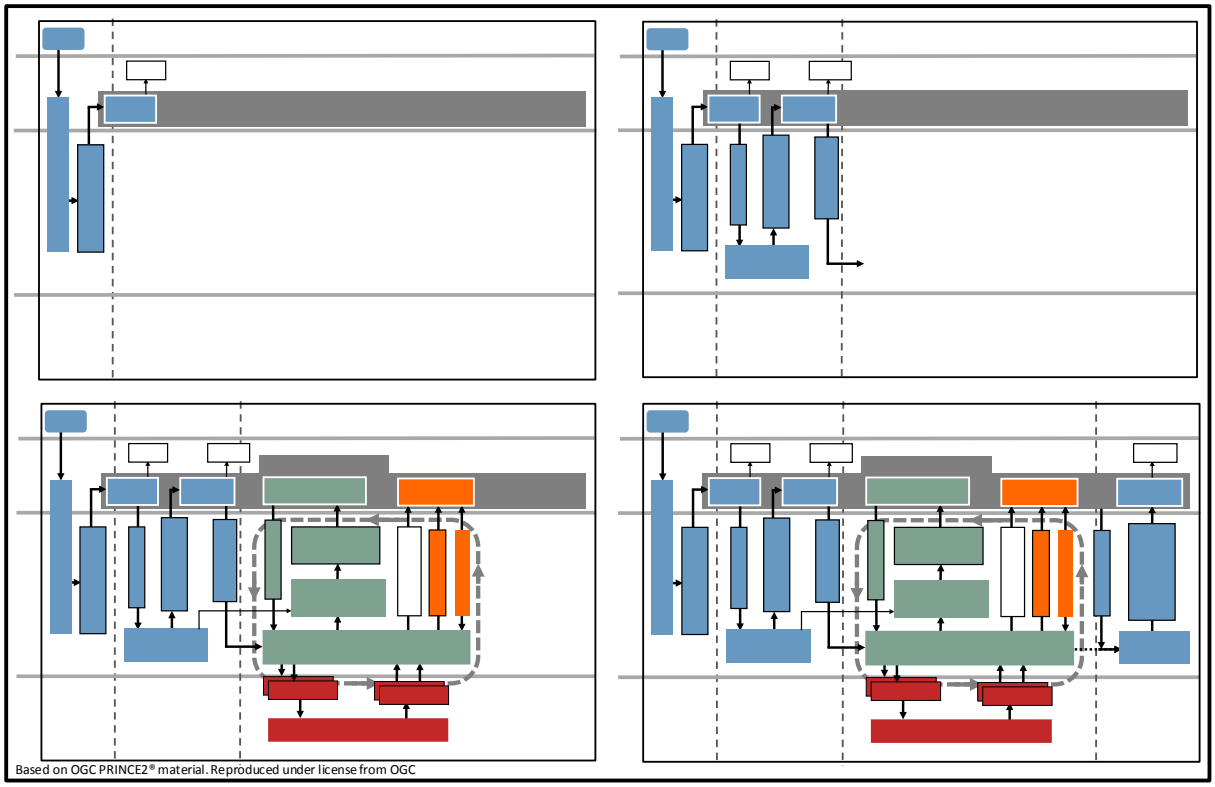


Fig 2.1 The PRINCE2 Process Model diagrams

At the end of the Introduction to the PRINCE2 book you will be able to understand the full Process Model; in fact, this is a *must* before starting to read this manual. You should also be able to draw the Process Model and be able to explain it to another person. If you don't understand the Process Model, then learning PRINCE2 can be very difficult, as you will not be sure of or know how to use the knowledge that you will be gaining in the Themes, or understand how this knowledge fits into Project Management. This is why people trying to self-study from reading the official PRINCE2 manual ("Managing Successful Project with PRINCE2") find it very difficult if they are not already used to Project Management or have worked in a PRINCE2 environment.

If you attend a MgmtPlaza/TAG PRINCE2 Foundation Course, we start the course by asking you to do this, because it shows whether or not you have done your pre-course work. If you can draw the PRINCE2 Process Model, then you enjoy this course a lot more, understand a lot more, remember it longer and score higher in the exams.

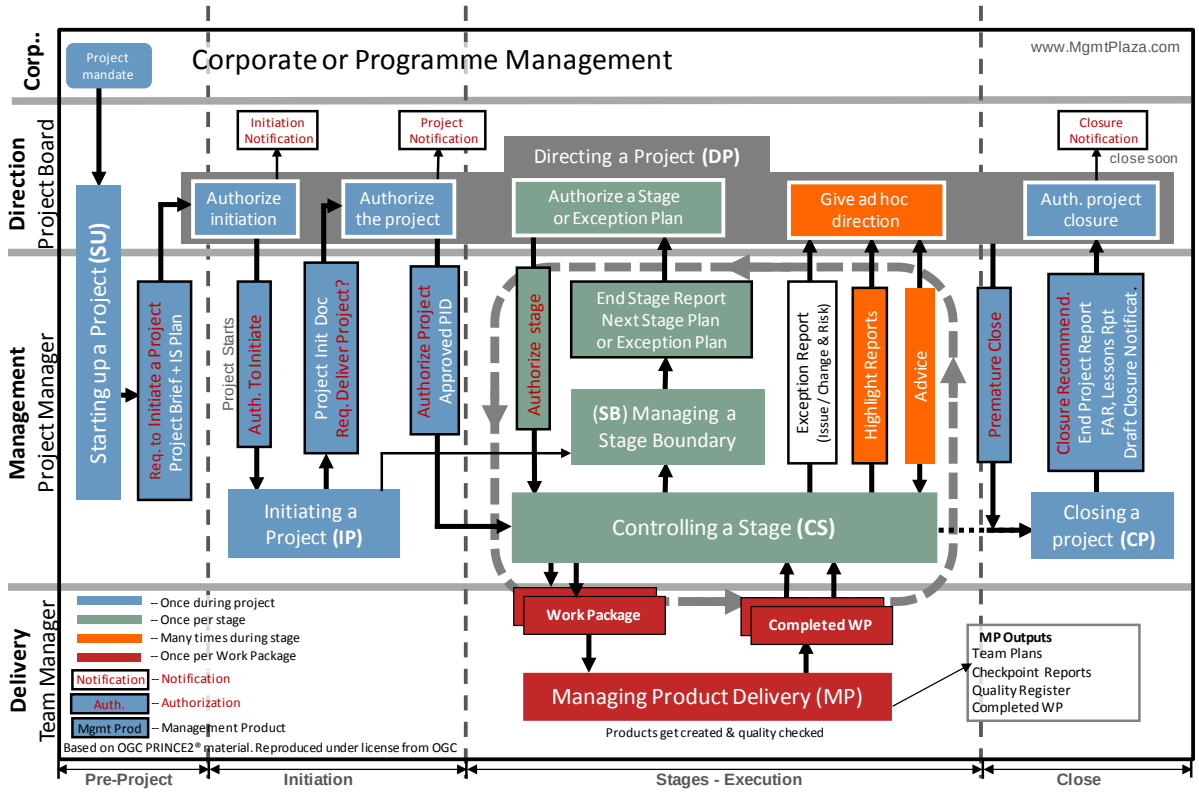


Fig 2.2 The PRINCE2 Process Model diagram

Blue items

- All blue items are executed once in a project. Those items are (a) Starting up the Project, (b) Initiating the Project, (c) Creating the Project Initiation Documents, (d) Creating the Project Plan and (e) Closing the Project.

Green items

- All green items are executed once for each stage.
- You can see from the diagram that Controlling a Stage and Managing Stage Boundaries work together. So if a project has four stages after start-up, then the items in green are executed four times.
- There is just one exception that happens at the end of the final stage after all products have been delivered: the Closing a Project process follows the Controlling a Stage process, so Managing a Stage Boundary is not done at the very end of the final stage of a project.

Orange items:

- Orange items can be executed multiple times in a stage. For example, a Highlight Report can be sent by the Project Manager to the Project Board each week during a stage. And the Project Board can give Guidance and Instructions to the Project Manager at any time.

Dark Red items

- Dark Red items can be implemented multiple times during a stage, as the Project Manager can give a Work Package to a number of Team Managers.
- A Team Plan can be created for each Work Package.

Don't worry if you don't understand all these terms now; they will be explained in detail later in this book.

2.2 Project Timeline

Although we think our Process Model diagram is good at showing how a project works, it does not give an idea of a project timeline. The solution for this is to look at the project from another point of view. For this reason we have created the project timeline overview.

The objective of this project timeline overview is to:

- Give you an idea of a sample project
- Give you an idea of how the processes might relate to each other in a project
- Show when the Project Board gets involved in a project
- Show which processes are done once and which are done more than once
- Show how stages relate to each other and how the Closing a Project process is part of the last stage.

2.2.1 Starting Up a Project

The Trigger to start the project is the project mandate. As you can see from the diagram, it appears from outside the project team. PRINCE2 says that the project mandate is created by someone from the Corporate or Program Management.

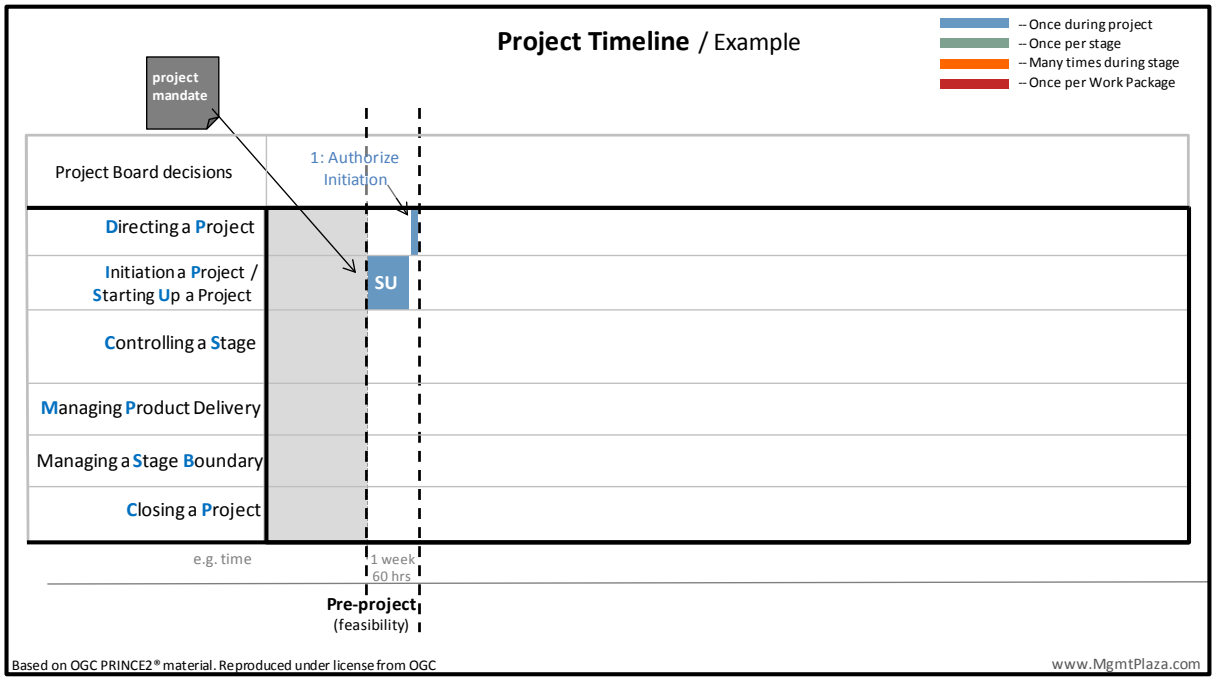
Starting Up a Project (**SU**) is the first process and has the following main outputs that are given to the Project Board:

- The Project Brief, which contains the outline of the Business Case
- The Initiation Stage Plan, which is the plan for the Initiation Stage
- The Project Product Description

At the bottom of the diagram you can see the text “Pre-Project”. The SU process is considered to be outside the project. Actually, the project does not start until the Project Board takes their first decision. So the SU process provides the information to start the project.

Project Board 1st Decision:

The very first decision the Project Board considers is whether to allow the Initiation Stage to start. This is known as “Authorize Initiation.” They determine whether the project is worth doing (desirable, viable and achievable) and check and approve the plan for the Initiation Stage.



Fix 2.3 Timeline example: Starting Up a Project

Timing:

- The Starting Up a Project process can be very short compared to the rest of project.
- This project example is about 8 months, but an average time for a Starting Up a Project could be one week, so these figures are just to give you an idea. It will differ from project to project.

2.2.2 Initiating a Project Process / Initiation Stage

After the first Project Board decision, the Project Manager uses the approved Initiation Stage Plan to run the Initiation Stage. This is the first stage of the project.

The Initiation Stage has the following main outputs that form part of the PID:

- The four strategy documents (i.e., Risk, Quality, Configuration & Communication Management)
- The Business Case document (which is the responsibility of the Executive)
- The Project Plan
- The Product Descriptions
- Project Controls describing how the project will be controlled
- Roles & Responsibilities / Project Management Team Structure

Most of the work in this first stage is facilitated by the Project Manager, with lots of support from:

- the Executive to develop (refine) the Business Case.
- persons representing the users help with product descriptions and quality requirements
- specialists (also known as “Subject Matter Experts”) can also help with Product-Based Planning, which includes the creation of the Product Descriptions and estimating which is part of planning.
- Senior user provides the expected benefits information which are measurable and when (timeline) they are expected to be realized. This information is stored in the Benefits Review Plan

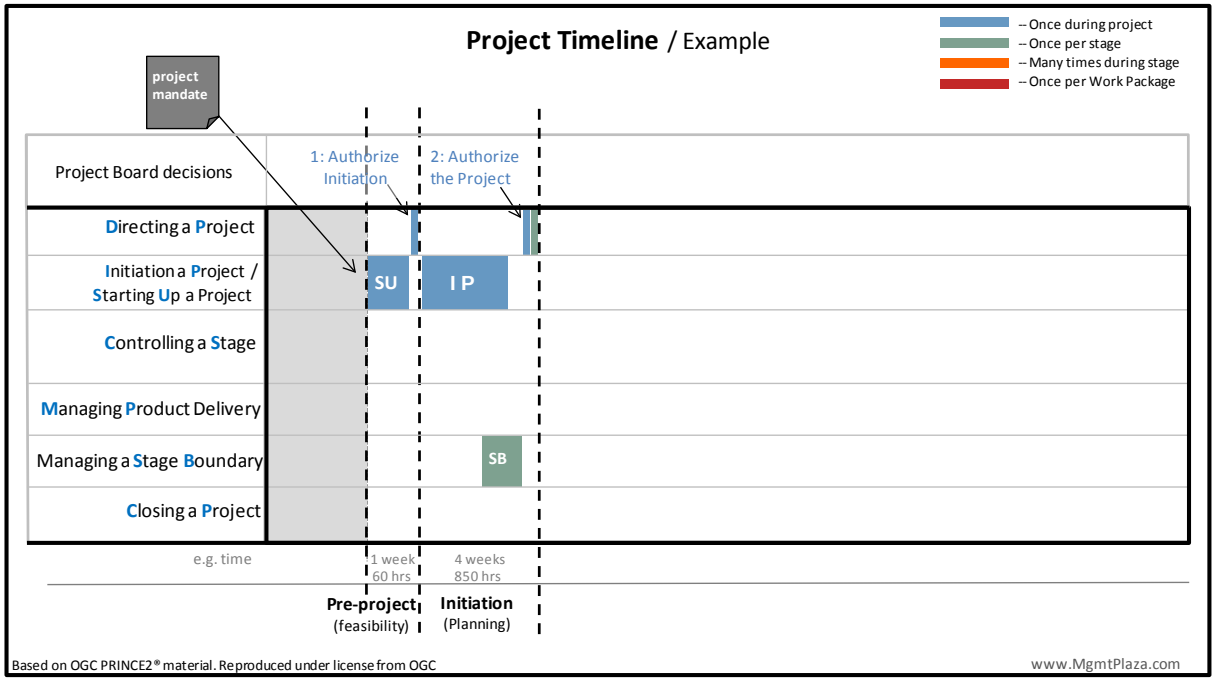


Fig 2.4 Timeline example: Initiation Stage

Project Board: 2nd Decision:

At the end of the Initiation Stage, the Project Board is ready to make their 2nd decision, which is to decide if the project should be allowed to continue to the 2nd stage, as they will only authorize one stage at a time. They will review most of the information in the PID, especially the Business Case, which includes an overview of the Risks, Benefits & ROI information. They will also review the Project Plan and the plan for the 2nd stage of the project. If the Project Board agrees, then they:

- Authorize the Project – so the project can start
- Authorize the Next Stage – so the first delivery stage can start.

Timing:

- The Initiation Stage, or the Initiating a Project process, is longer than the Starting Up a Project process and usually not as long as a normal stage, but, again, this depends on the project.
- In the example above, the IP Stage is 4 weeks, while the next stage is 8 weeks.

2.2.3 Controlling a Stage – 1st delivery stage

Controlling a Stage is where the Project Manager does most of their day-to-day work. They mainly do the following activities:

- Give out work to Team Managers in Work Packages, check up on the status of these Work Packages and accept Work Packages back when complete.
- Continually review the stage status – where are we now compared to the Stage Plan.
- Provide regular reports to the Project Board.
- Capture and examine issues and risks, and escalate if necessary.
- Take corrective action to solve issues within their tolerance.

Managing a Stage Boundary (SB):

As you can see in the diagram below, the SB (Stage Boundary) process starts towards the end of the stage and before the Controlling a Stage process ends. The objectives of the Stage Boundary process are to prepare the following information for the Project Board:

- End Stage Report – how well the stage did compared to the Stage Plan
- Update the Business Case and Project Plan with actuals to date
- Next Stage Plan – A plan for the next stage that needs to be approved
- Benefits Review Plan – Check and update if expected benefits have or have not been realized

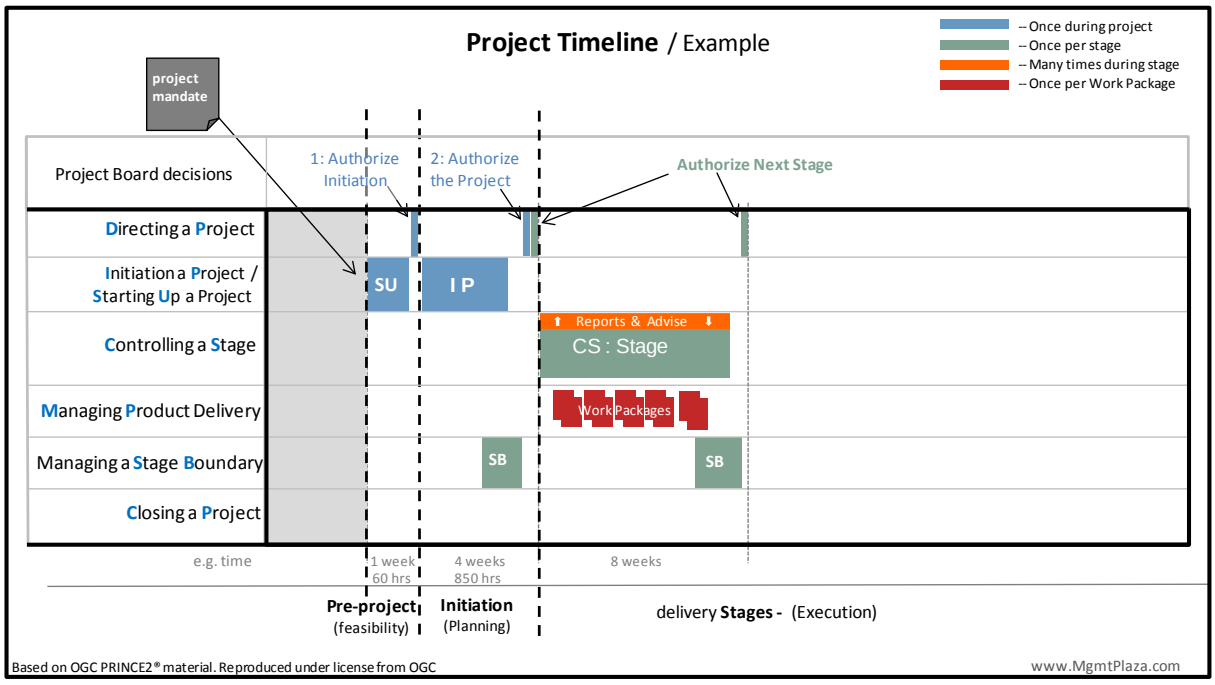


Fig 2.5 Timeline example: Controlling a Stage / Delivery Stage

Project Board Decision:

At the end of the stage, the Project Board will do the following

- Review the current stage using mainly the End Stage Report
- Compare the progress of the project so far with the baselined Project Plan

- Review the Business Case to see if the project is still viable, and check risk information
- Check the Next Stage Plan, which is the plan to run the next stage.
- Review the Benefits Review Plan and compare expected benefits so far with actuals

The very last thing that the Project Board does is to “Authorize the Next Stage” so that the Project Manager can continue with the next delivery stage.

Timing:

- In this example, the delivery stage is 8 weeks long. This will of course depend on the type of project and you will learn more about this in the Planning Theme.
- You will also learn what is meant by the term ‘planning horizon’.

2.2.4 Next delivery stages

Projects can have more than 2 stages and they are all separated by a Project Board decision, as the Project Board uses stages to keep control of the project.

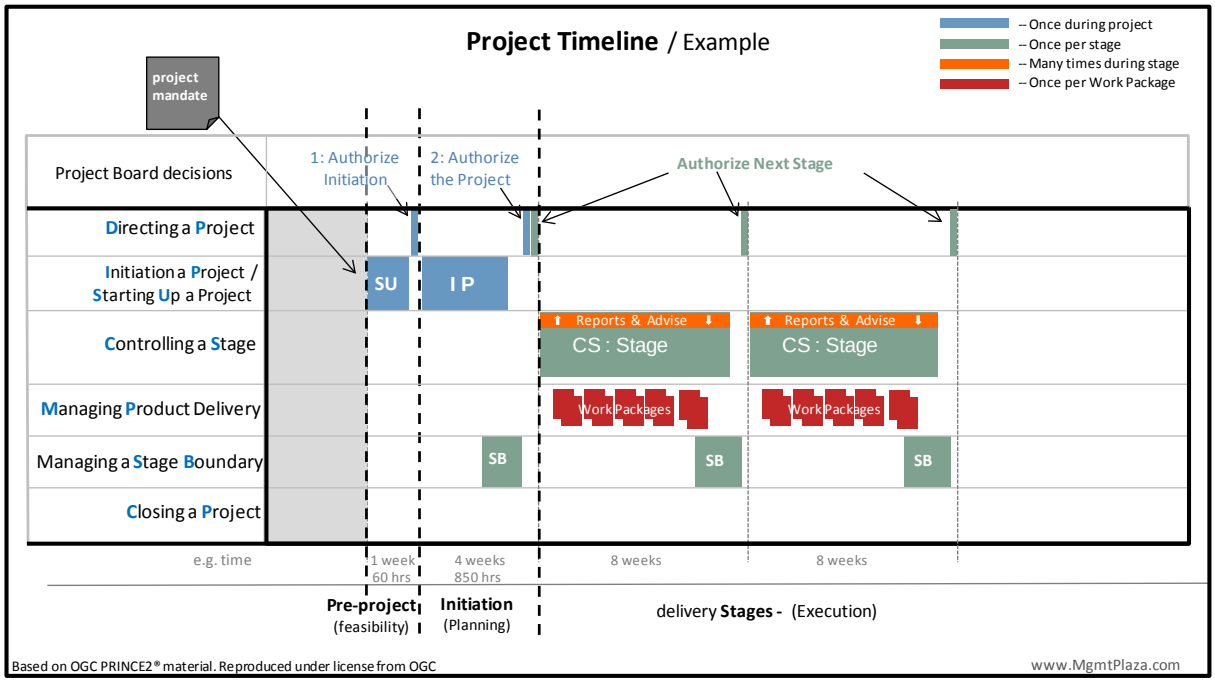


Fig 2.6 Timeline example: Next Delivery Stages

As you can see from the example, this current delivery stage follows the same management pattern as the previous stage. The main differences between the two stages will be the content of the Work Packages given to the teams to develop.

Project Board Decision:

The Project Board will carry out the same activities as described at the end of the last stage.

Timing:

- In this example the current stage is the same as the last stage and, again, this can vary depending on the project. For example, if there was little risk involved in the 2nd delivery stage and the Project Board has lots of confidence in the Project Manager after they have seen them manage the first stage, they might decide to lengthen the stages to 10 or 12 weeks.

2.2.5 Last delivery stage and Closing a Project

The project will continue until all delivery stages are complete and it will be closed at the end of the last stage. A good way to remember this is, “The Closing a Project process is always the last part of the last stage.”

Normally towards the end of a stage, the Stage Boundary process is used to report on the current stage and plan the next one. As you can see from the diagram below, the Stage Boundary process is not used, but the Closing a Project process starts up near the end of the Controlling a Stage process. The Closing a Project process is where the Project Manager prepares the project for closure.

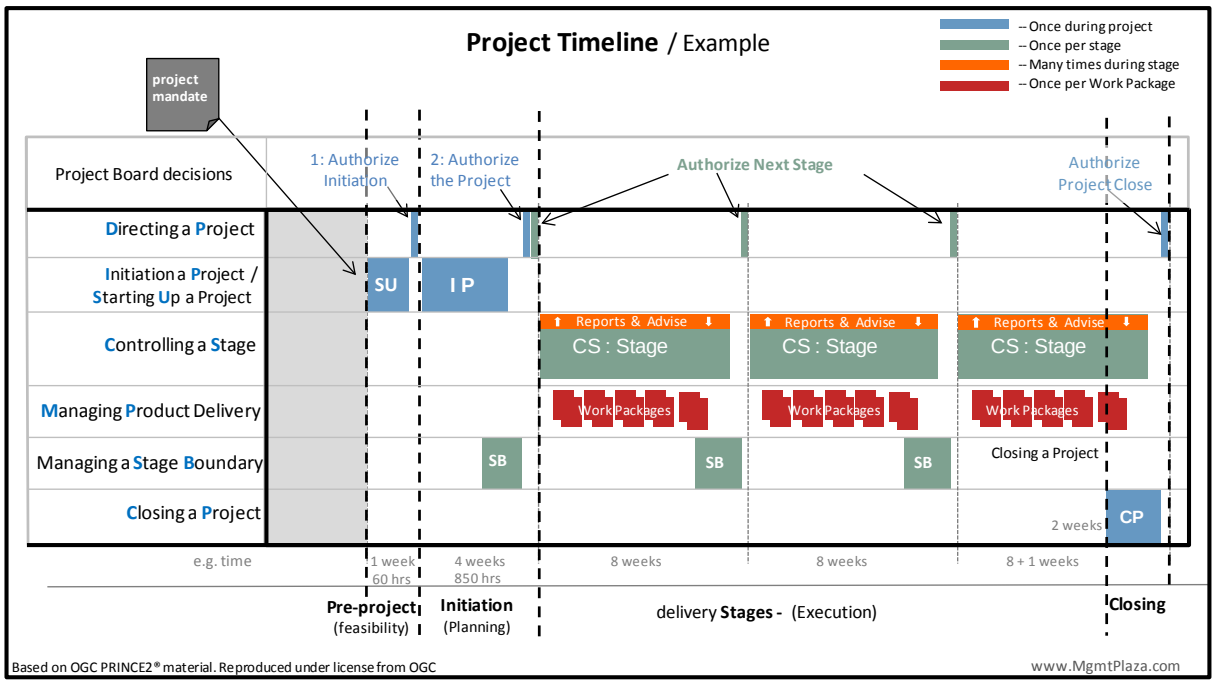


Fig 2.7 Timeline example: Closing a Project

The objectives of the Closing a Project process are to:

- Update the Project Plan to show what has been delivered, approved and when
- Hand over products and obtain acceptance
- Evaluate the project and create the End Project Report
- Benefits Review Plan – Check and update if expected benefits have or have not been realized

The last thing that the Project Manager will do in the Closing a Project process is to recommend Project Closure to the Project Board. You can see it is not the Project Manager that closes the project. Again, we say that the Project Manager prepares the project for closure.

Project Board Decision:

The last decision the Project Board will take is to close the project. This is known as “Authorize Project Closure.” Before taking this decision they will do the following:

- Review the baselined documents (Business Case and Project Plan) from the PID with the current documents to see how the project has performed compared to the original goals
- Confirm that products have been accepted and signed off
- Check the Lessons Learned report and hand it over so that it can be used for future projects
- Review the Benefits Review Plan and compare expected benefits so far with actuals

Timing:

In this example the stage is 9 weeks and the Closing a Project process is done over a period of two weeks. Again, this will be different for each project but it does give you an idea.

2.2.6 Exception Plan example

As you can see from the diagram, I have not included an Exception Plan example. I hope to add this in the future.

2.2.7 Timeline Summary

The objectives of this Project Timeline were to:

- Give you an idea of a sample project
- Give you an idea of how the processes may relate to each other in a project
- Show when the Project Board gets involved in a project
- Show which processes are done once and which are done more than once
- Show how stages relate to each other and how the Closing a Project process is part of the last stage.

The Timeline diagram has also shown:

- How the project can be divided up into Pre-Project, Initiation Stage, Delivery Stages and finally the Closing Stage.
- Which processes happen once or more than once in a project, e.g., the blue-colored processes, such as Starting Up a Project, Initiating a Project and Closing a Project, all happen just once.

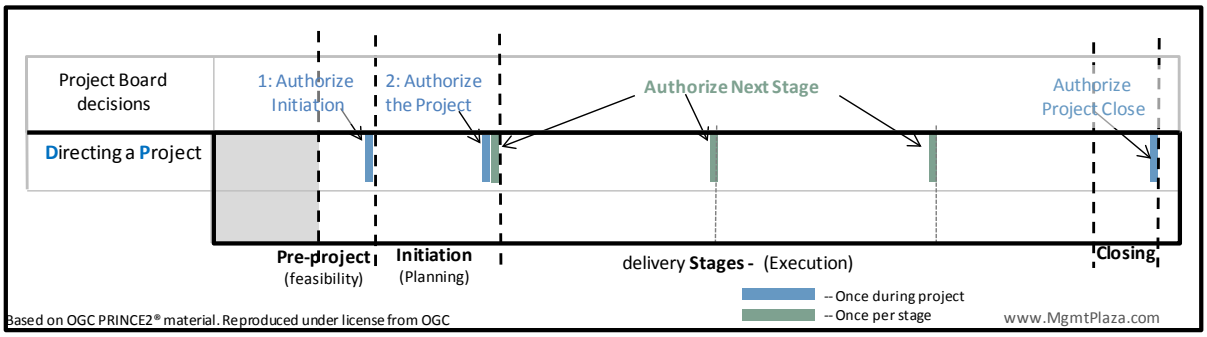


Fig 2.8 Project Board Decisions

.

3 Principles

3.1 Introduction to principles

The PRINCE2 manual states that PRINCE2 is principle-based. This means that each PRINCE2 project should include the 7 principles and if even one of these principles is missing from the project, it cannot be considered a PRINCE2 Project.

I like the following definition of a Principle:

- Principles provide a framework of good project practice for those involved in a project.

From a PRINCE2 point of view, a Principle is a core value that must always exist in a PRINCE2 project.

There are seven principles and they can be summarized as:

- Continued business justification
- Learn from experience
- Define roles and responsibilities
- Manage by stages
- Manage by exception
- Focus on products
- Tailor to suit the project environment

To sum it up, think of principles as guides for good practice.

3.2 Principles: Continued Business Justification

A PRINCE2 project must have continued business justification. This means that the reason to start the project must make sense from a business point of view and there must be a clear Return on Investment. For example, the project will cost €20,000 but over the first 2 years, it will deliver a savings of €80,000 for the company. “Does the project have business justification?” is the same as asking “Does the project have a valid Business Case?” If at any time during the project, the expected Return on Investments falls, for example, by about 80%), then the project will most likely be stopped.

The Business Case document details the full Business Case, showing why the project should be done, the costs, the expected benefits and timescales. This material is also referred to as the business justification information. As the Business Case document is one of the first documents created in a project, it will prevent some projects that have few real benefits for the company from starting. The business justification is then checked throughout the lifetime of the project. This, for example, can happen at the end of each stage.

Even projects that are started to comply with new legislation require justification. For example, the cost of not complying with new legislation might affect the company’s market share or the company could lose clients. This could therefore be given a monetary value.

3.3 Principles: Learn from Experience

PRINCE2 project teams should learn from previous projects. They should therefore take initiative to uncover previous lessons learned and take these into account during the life of the project.

We have mentioned before that Projects are unique, meaning that there is always something new. This creates an element of risk in each project. We can also say that each project has some unknowns which must be investigated. Now you can see why PRINCE2 urges the project team to take the necessary initiative to learn from similar projects that may have been done in the same company and if not, then get advice from other external people (for example, bring in outside consultants).

"Learn from experience" covers the full lifetime of the project, from Starting Up a Project, as the project progresses until the Project Closes. Any lesson learned during the project should be documented. Documented lessons should be passed on so they are available for future projects.

PRINCE2 also states that it is the responsibility of everyone involved with the project to seek lessons learned rather than waiting for some else to provide them.

3.4 Principles: Defined Roles and Responsibilities

In any project, people need to know what to do and what they can expect from others. From my perspective, this is one of the most important principles to get right from the beginning. PRINCE2 states that a project should have defined and agreed roles and responsibilities within an organization structure that engages the Business, User and Supplier Stakeholder interests.

Projects can have people from different departments or companies, so it is important that the project has a clear team structure, otherwise it might be impossible to manage the project.

According to PRINCE2, a project has 3 primary stakeholders. They are the Business sponsors, Users and Suppliers.

- Business sponsors are those who make sure the project delivers value for money.
- Users are usually the people who will use the products once created. They receive the benefits.
- Suppliers provide the resources and expertise to the project and produce the products.

These three primary stakeholders must be correctly represented in the Project Management Team.

To summarize the principle "Defined Roles and Responsibilities," a good Project Management structure answers the question "What is expected of me and what can I expect from others?"

3.5 Principles: Manage By Stages

A good way to go about doing any large task or project is to break it up into manageable chunks. In PRINCE2 we refer to the manageable parts as stages. Actually they are called Management Stages. A PRINCE2 Project is planned, monitored and controlled on a stage-by-stage basis. These stages are referred to as Management Stages, as they are separated by Decision Points (also known as "Control Points") by the Project Board.

At the end of each stage, the Project Board assesses the performance of the last stage, the Business Case, the plan for next stage, and decides whether to proceed with the next stage. The Project Board has greater control over the project when the number of stages is high, but this also gives them more work. Fewer stages in a project indicate that the Senior Management will have less control and a lesser amount of work for the Project Board.

Let us look at some of the advantages of stages. Stages provide a good approach to project planning, as they:

- Allow the project to be divided into a number of manageable chunks.
- Have a high-level Project Plan for the whole project and a very detailed plan for the current stage.
- Make sure that the plans for future stages can also learn from previous stages . For example, if one team delivers their products quicker than expected, then this can be taken into account when creating the plan for the next stage.

There are a minimum of two management stages in a project: The Initiation Stage and one further Management Stage. The Close a Project Process is part of the 2nd Stage in a two-stage project.

3.6 Principles: Manage by Exception

This is a term that people who are new to PRINCE2 will most likely not have heard before. Because it is important that you understand it, I will start a simple explanation and then give you

the PRINCE2 definition. The Project Manager has some tolerance to play with, when it comes to factors like time, cost, and scope, before they have to advise the Project Board that there is or might be a problem (e.g., cost can change ±10%). If the problem is small and it remains within the tolerances (e.g., the costs increase by 2% -- less than the 10% tolerance), then the Project Manager can deal with it and doesn't have to alert the Project Board and take up their time. Manage by Exception is used by each level in the Project Organization to manage the level below. The layer below should only notify the above management layer if there is a big issue that is outside their tolerance. The PRINCE2 name for a big issue which means the issue is outside the agreed tolerance is Exception.

Now imagine you are sitting on the Project Board. If everything is going OK, you won't hear from the Project Manager except for the regular reports during a stage and at the end of the stage, unless there is an exception, hence the term Manage by Exception.

The PRINCE2 definition for Manage by Exception is as follows: A PRINCE2 project has defined tolerances for each project objective to establish limits of delegated authority.

PRINCE2 lists 6 tolerances that can be set. These are Time, Cost, Quality, Scope, Risk and Benefit. I will give examples only for Quality, Scope, Risk and Benefit, as Time and Cost are easier to understand.

- Tolerance Quality: You are creating a new GSM and you want the keyboard to work for an average user for 7 years but you have a tolerance of ±5%.
- Tolerance Scope: The requirements for a new GSM will have mandatory requirements plus 'nice to have' requirements. So the project can decide which 'nice to have' requirements to include, but must include the mandatory requirements.
- Tolerance Benefit: A Benefit is a measurable improvement resulting from the project for one or more of the stakeholders. These are benefits for the project stakeholders. For example, increase marketing share by 5%, or create a new profitable market segment. One question asked throughout the project is: Is the project still on track to meet the expected benefits?
- Tolerance Risk: Again, I'll use the example of the GSM. There will be a set tolerance level for risk and if you hear of something that is above this level then you will notify the Project Board. For example, you find out that the risk is now very high -that one of the providers cannot supply a 5 mega pixel camera with the correct integration specifications. This can cause many issues for your project.

To summarize, Manage by Exception provides the above management layer with a system to manage and control the lower management layer and they don't need to be annoyed by each small issue.

3.7 Principles: Focus on Products

You can imagine what happens when a product is not correctly described. All project stakeholders can have different ideas on what the product should be. This can cause many unnecessary meetings; time delays, unnecessary new requirements, misunderstanding of the quality required, additional costs and even an end product being produced that is of no use to anybody.

A detailed Product Description will guide the project, build correct expectations and help to the deliver the required products. The PRINCE2 manual states the following: A PRINCE2 project focuses on the definition and delivery of products, in particular, their quality requirements.

Good Product Descriptions provides clarity, as it defines the product's purpose, composition, derivation, format, quality criteria and quality method. Good Product Descriptions also make it easier to determine resource requirements, dependences and activities.

3.8 Principles: Tailoring or Tailor to suit the Project Environment

A PRINCE2 project should be tailored to suit the project's size, environment, complexity, importance, capability and risk. If your project is a small one, such as to host a workshop with 10 people, or a very large one, like building a nuclear power plant, then you should tailor PRINCE2 to suit the project, as PRINCE2 can be applied to any type of project.

One criticism most project methods often get is that, “We don’t need a Project Method. Our projects are not that big and a project method will add a lot of unnecessary paperwork to each project”. This would happen if you try to follow PRINCE2 like a robot. But that is not the way to use PRINCE2. I often use the popular TV program, The Apprentice, as an example. This is usually a 2-day project where 2 teams compete with each other and each team has a Project Manager. You can see that PRINCE2 can be used by each Project Manager and the paperwork can be just a checklist with some notes. You can also see that most Project Managers keep making the same mistakes week after week. This shows that they don’t understand the principle of Learn from Experience or Lessons Learned.

The purpose of tailoring is to:

- Ensure that the Project Method relates to the project’s environment (i.e., if working in a financial environment, then align it with the existing management structure).
- Ensure that the project’s controls are based on the project’s scale complexity, importance, capability and risk. (e.g., if there is a lot of risk in your project environment, then more time should be spent on dealing with Risk).

The Project Initiation document should describe how the PRINCE2 method is tailored for that particular project.

(Refer to chapter 20, “Tailoring” of this manual, for more information.)

3.9 Learn Thru Questions

Try to answer the following questions that are taken from the Learn Thru Questions audio course. You can check the answers in the Learn Thru Questions document available from **www.MgmtPlaza.com**.

Q01: What does the following statement mean: “PRINCE2 is principle-based”?

Q02: List about 3 or 4 of the 7 Principles. Don’t worry about getting the names 100% correct. I will list all 7 principles so you can compare.

Q03: How would you explain principles from a PRINCE2 point of view to another person? Answer in your own words.

Q04: What is the name of the principle that deals with business reasons behind the project (in other words the Business Case)? **Tip:** the first word begins with C.

Q05: In which document will you find Business Justification to start the project? This document becomes part of the Project Initiation Documentation.

Q06: What should happen if during the Project, the business justification is no longer valid?

Q07: What does the principle Continued Business Justification prevent at the start of a project?

Q08: When does the Project Manager check for Business Justification in the project, for example, to ensure that the Business Case is still valid?

Q09: What is the name of the principle that deals with Lessons Learned?

Q10: As projects are unique by nature, what should the people involved at the start of a project do to reduce risks and unknowns and not make the same mistakes as in previous projects?

Q11: According to PRINCE2, who has the responsibility to seek Lessons Learned?

Q12: What do you think should happen if there were no similar projects or only insufficient ones that the project team could learn from within their organization?

Q13: PRINCE2 states that Lesson Learned covers the complete lifecycle of the Project. There are 3 phases for lessons – at the start of the project, during the project and at the end of the project. Can you list what the Project Manager & Stakeholders may do in these parts?

Q14: What is the name of the principle that deals with Roles & Responsibilities?

Q15: What is the key question that the principle "Defined Roles & Responsibilities" answers?

Q16: Name the three primary stakeholders that are represented in a PRINCE2 project, in other words, who are the Project Management Team?

Q17: Business Sponsors are 1 of 3 primary stakeholders in the Project Management Team. What do they do?

Q18: Users are 1 of 3 primary stakeholders in the Project Management Team. What do they do?

Q19: Suppliers are 1 of 3 primary stakeholders in the Project Management Team. What do they do?

Q20: What three interests should be represented on the Project Board?

Q21: What is the name of the principle that deals with stages?

Q22: Why are stages referred to as Management Stages?

Q23: Complete the following sentence: "A PRINCE2 Project is planned, monitored and controlled on a _____."

Q24 Name one task that the Project Board does at the end of each stage?

Q25: Does PRINCE2 advise to have a detailed Project Plan and a detailed Stage Plan for the current stage?

Q26: What is the minimum number of stages in a project?

Q27: Can you explain what is meant by Manage by Exception? (Any similar answers to the one I give will be fine.)

Q28: PRINCE2 lists 6 tolerances that can be set. These are also known as the Project Variables. Can you name some of them? (**Tip:** Think TeCQuila SoBeR)

Q29: What principle in PRINCE2 provides the above management layer with a system to manage and control so as not to be annoyed by each small issue?

Q30: What does a Project deliver? **Tip:** Think about the definition of a Project. (I am looking for a one-word answer.)

Q31: What do you think would happen if there is a poor description of the product that the Project is to produce?

Q32: What advantage does a good Product Description have?

Q33: What message is the principle "Tailor to suit Project Environment" trying to get across? (Don't worry about matching the words in the answer; any similar answer is good)

Q34: Can PRINCE2 be applied to any type and size of project?

Q35: In which document should it be described how the PRINCE2 method is tailored for that particular project?

4 Themes Introduction

4.1 Introduction to Themes

The word 'themes' is used by other OGC methods – for example, the Program Management method – and it has a similar meaning which is why it is now used by PRINCE2. It is also used in the PMBok (Project Management Body of Knowledge), which is the main project framework used in the US.

Now let us examine what Themes are.

Themes are the parts of the project that need to be continually addressed throughout the project lifecycle. Perhaps a better way to explain themes is : Themes are knowledge areas, so each Theme provides knowledge (how to go about) on a specific area of project management such as the Business Case, Planning, Quality, etc…

> What activities will you do at the start of the project to set it up, define it and use to monitor and maintain the project throughout its lifecycle?

The answer to this question will be the themes. Given below are some examples:

- We need a Business Case to define the reason for doing the project and to check to see if this reason is still valid. This is covered in the Business Case Theme.
- We need to know who is who, what they are doing and what are their responsibilities. This is covered in the Organization Theme.
- We need to create the Product Descriptions and then create a Project Plan to guide the project and produce the products. This is covered in the Plans Theme.
- We need to monitor how the intended products will match users' expectations, and then determine that the users will be able to utilize these products as expected. This is covered in the Quality Theme.
- We also need a way to evaluate and manage risks. This is covered in the Risks Theme.

Remember that Themes are activities that you do at the start of the project to set it up and then use to monitor and maintain the project throughout its lifecycle. We can also say that Themes provide guidance on how things should be done during the project.

Themes will also be tailored to suit the project you are working on. This will depend on the project you are trying to do and the environment you are working in. For example, if you are building a lunar module, you have only one chance to get it right, so the Quality and Risks themes would be used in much detail.

How do Processes Relate to Themes?

The PRINCE2 processes address the chronological flow of the project. In other words, processes guide you through the typical activities that you need to do at different stages during the project, and these are mostly one of activities.

Example: The Start-Up activities and the Project Initiation activities are all executed once. The themes that you worked on in these processes, however, will be used throughout the project lifecycle. Themes are therefore used throughout the project.

4.2 List of Themes

I will briefly discuss each Theme, explaining what each one does, and what questions they help to answer. This will make it much easier for you to visualize and remember.

4.2.1 Theme: Business Case

The Business Case answers questions like:

- Why are we doing this project?
- What are the business reasons?
- What are the benefits for the organization?

The Business Case Theme also describes how to define the Business Case. It will be possible to see if there is a valid Business Case at the start of the project and how to check if the Business Case still has value throughout the project. The Executive is responsible for creating the Business Case, but it can be written by others or with help from others. For example, the Executive might involve a person from the financial department to assist with all financial information.

The project mandate document usually contains an outline of the Business Case. At the start-up of the project, this would be expanded to the Outline Business Case, which becomes part of the Project Brief and then becomes a separate Business Case document which becomes part of the PID.

The first Business Case document can be completed once the project plan is ready, as it requires the cost, timescale and product information.

The Business Case should be updated at the end of each stage to include the latest cost, time and product information, and to verify that the Business Case is still valid.

The PRINCE2 Manual provides a Product Description for a Business Case in Appendix A.

4.2.2 Theme: Organization

The Organization Theme answers the following questions:

- Who is who in the project?
- Who is sponsoring the project?
- Who is responsible for the Business Case?
- Who represents the Users and Suppliers?
- What are the exact roles and responsibilities?
- Who is the Project Manager?

A good way to remember this is with the following question: What are the rules of engagement?

The Organization Theme provides information on the Project Management Team, and its structure and accountability.

A PRINCE2 project is based on a customer/supplier environment. One party is the customer, who will specify the result and most likely pay for the project. The other party is the supplier, who will provide the resources, do the work and deliver the results.

PRINCE2 states that a successful Project [Management] Team should:

- Have Business, User and Supplier representation.
- Have defined responsibilities for directing, managing, and delivering the project.
- Have an effective strategy to manage communication flows to and from stakeholders.

4.2.3 Theme: Quality

The Quality Theme answers the questions:

- What quality level must the product be at by the end of the project so that it can be correctly used as intended, or in other words, be fit for use?
- What can we do to check the quality during the project and make sure the project delivers the required level of quality?

This theme helps to uncover the quality requirements. The PRINCE2 approach to quality is to focus on products as early as possible, question the level of quality expected of each product produced in the project, and then document this in the Product Descriptions.

The Quality Management Strategy document is used to define how quality will work in the project, such as standards to be applied, and the various responsibilities for achieving the required quality levels during the project.

4.2.4 Theme: Plans

This Theme answers questions such as:

- How to go about creating the project product?
- What will be the steps involved?
- How to do product based planning?
- What quality has to be attained?
- How much will it cost?
- What will be the level of detail required for each plan?
- Who from the Organization is involved and what is their responsibility?
- When will certain things be done?
- Who needs to receive a copy of the plans?

A PRINCE2 plan is not just a Gantt chart; it is a lot more comprehensive. It is a document that describes how, when and by whom a specific target or set of targets is to be achieved. These targets will include the project's products, timescales, costs, quality and benefits. There is a lot of text in a plan to help explain what will happen.

The Project Plan is updated at the end of each stage to show what has been done, the products developed so far and the plan for the next stage. The project plan gives an updated picture of the status of the project that can be compared against the baselined Project Plan to see how well the project is going when compared to the original plan.

You will learn about the different levels of plan: (a) the Project Plan, which is a high-level plan and is mostly used by the Project Board; (b) the Stage Plan, which acts as a day-to-day plan for the Project Manager; and (c) the Team Plan, which is used by the Team Manager.

4.2.5 Theme: Risk

Each project is unique, as it tries to do something new. There is always a certain amount of risk attached to each project.

This Theme helps to uncover the following information:

- What are the risks?
- What if the risks happen?
- How can risks be identified, analyzed and documented?
- How can the possibility of risk be reduced?
- How can risk be managed and monitored throughout the project?

Risk is an uncertain event or set of events that if they should occur, would have a positive or negative effect on the project. The word *Threat* is used to describe a risk that would have a negative impact on the project's objectives. The word *Opportunity* is used to describe a risk that would have a favorable impact on the project's objectives.

See Risk as having an impact on the project's objective rather than on the project itself. In other words, a risk can impact what the project wishes to achieve. Risk Management refers to the procedure to follow to identify and assess risk. Moreover, it refers to planning and how to respond to these risks. The Risk Management Strategy document describes the specific Risk Management techniques.

4.2.6 Theme: Change

All projects will have issues and most projects will have requests for change, as in new requirements. This Change Theme deals with the question: “What is the impact of this issue?”

Therefore, this theme describes (1) how the project can assess these issues and requests, (2) act upon and (3) manage them. All of these issues and changes can have a direct impact on the original Project Plan. Any proposed change must be correctly dealt with. All projects need a good Issue and Change Management approach from identification, assessment and control of issues.

Issues and Change Control happen during the full lifecycle of the project. Remember, the objective is not to prevent changes but to get changes agreed upon and approved before they can take place. The Change Theme also covers Configuration Management. Each project requires a Configuration Management System, which tracks products, issues and changes. The Configuration Management Strategy document describes how issues and changes will be handled in the project. It will answer questions such as:

- How should products be planned, identified, controlled and verified?
- How should issues and changes be handled?
- What tools will be used (e.g., SharePoint, Niku Clarity, Shared Drive)?
- What data should be kept for each product (e.g., Product Description, Configuration Item Records, etc.)?

4.2.7 Theme: Progress

During the project lifecycle, the project needs to be monitored. Highlight and Stage reports have to be written to show how the project is progressing in relation to the agreed plan. Checks must be done to ensure that the escalation process is working correctly. It is necessary to continually evaluate throughout the project lifecycle whether the project should be continued with or not.

This theme, therefore, addresses with the following concerns:

- How the project will be controlled?
- When reporting will be done?
- Where we are now compared to the plan?
- Is the project still viable?

The purpose of the Progress Theme can be explained in three parts:

- To establish how to monitor and compare actual achievements against those that have been planned.
- To provide a forecast for the project objectives and the project's continued viability.
- To be able to control any unacceptable deviations.

In other words, Progress is about checking development of the project when compared to the plan, checking the project viability and controlling any deviations. Control is all about decision-making and is central to project management, ensuring that the project remain viable against its approved Business Case.

4.3 Learn Thru Questions

Try and answer the following, these are taken from the Learn Thru Questions audio course. Check the answers in the Learn Thru Questions document available on our site: You can also listen to these questions and answers (use the **LTQ audio course**)

Q01: What is a Theme? (Try to give a definition in your own words.)

Q02: List some of the 7 themes.

Q03: Which Theme asks the following questions?

- Why are we doing the project?
- What are the main reasons?
- What are the benefits for the company?

Q04: Which Theme deals with Roles and Responsibilities, the Project Team Structure and accountability?

Q05: Which Theme deals with making sure the product is fit for its intended use at the end of the project and how to check the progress during the project?

Q06: Which Theme deals with product-based planning, the level of detail required for each plan and deciding on the number of stages?

Q07: What are some of the questions asked by the Risk Theme? (Just give one or two suggestions.)

Q08: What Theme deals with project issues and new requirements?

Q09: Which Theme deals with the questions, (1) “How are we doing compared to the Project Plan?” (2) How will the project be controlled? (3) How often does a Highlight Report need to be sent to the Project Board? And (4) Should we carry on with the project”?

5 Business Case Theme

5.1 Introduction to Business Case Knowledge

Let us take a look at what will be covered in this Business Case Theme.

- The purpose of the Business Case Theme.
- What is a Business Case?
- What is meant by the terms *Output*, *Outcome* and *Benefits*? You will be able to give an example after this section.
- Types of Business Case.
- The path to creating a Business Case. This includes the steps *Develop*, *Verify*, *Maintain* and *Confirm* and who is responsible for each step.
- The four points in the project where the Business Case can be verified.
- The approach to confirming the benefits and how the Business Review Plan is used during and after the project.
- The typical contents of the Business Case.
- The Business Case roles and responsibilities.

5.2 What happens in the real world?

Before I heard of PRINCE2, I had the opportunity to be a Project Manager on a number of projects and I did not see a real Business Case document in most of them. However, someone somewhere in the organization had requested the project and found some budget to pay for this.

Did they write a Business Case document? Perhaps they did, or perhaps this was just decided at a management meeting where one person presented the reasons why they needed a product, got permission, and agreed on a budget with the rest of the management team.

If you are a Project Manager, ask to see the Business Case for the project. You will learn what questions to ask about the Business Case by reading this Theme. If you work for a supplier that is generally contracted out to clients, then you may not get access to the Business Case, but you should have an idea of the potential value (benefits) of the project for the client.

As you will learn later, suppliers are supposed to have their own Business Case. Again, I have never seen this in paper format, but it usually goes something like this: If the cost to hire a permanent employee is €30 per hour, then the supplier needs to charge €50 per hour. If the client pays €50 per hour (+- 5%), then the supplier's Business Case is valid.

5.3 The Business Case knowledge provided by PRINCE2

The purpose of the knowledge in the Business Case Theme is to provide a structure to judge whether the Business Case is desirable, viable, achievable and worth the continued investment that is made during the project.

Let us look at that statement again and break it up.

- Provide a structure: Provide guidelines to follow.
- Desirable: Determine if this product is really needed.
  Compare the benefits against the dis-benefits
- Viable: Is it possible to do? Are we capable of delivering?
- Achievable: Is it possible to deliver the benefit?
- Worth the continued investment: Will it be worth the investment made during the project? If not, then the project must be stopped.

Business Justification:

"Business Justification" is a popular term in a number of methods and is now used by PRINCE2. Business Justification means that there is a valid business reason for doing the project and it remains valid throughout the project. As you may remember, Business Justification is also one of the 7 principles of PRINCE2.

The Executive is responsible for creating the Business Case. It is created at the start of the project and maintained during the project by the Project Manager. The Senior User is responsible for specifying the benefits and these are included in the Business Case.

It contains the following information:

- Reasons for doing the project as you would expect
- Estimate Costs and Timescale
- Benefits and dis-benefits
- Overview of risks

5.4 What does a Business Case do for the project?

The Business Case gathers the information to allow the management to judge if a project is desirable, viable and achievable and therefore worthwhile to invest in. The Business Case is normally developed at the start of the project unless it is provided by Corporate or Program Management. Once created, it is then maintained throughout the life of the project. A good question to ask here is "Why is the Business Case maintained and what does this mean?"

Let me give you an example to explain this. Your company will invest €100,000 in a Sales application and it expects to have a return on its investment in 20 months due to reduction of two administrative persons. Less administrative work will be required, as clients will be able to order and view all account information online instead of via the telephone. This sounds like a good project.

However 3 months into the project, you find out the following: Two of your bigger clients don't wish to use web-based applications in their purchasing department, so you will need to keep one admin person. Therefore, the return on your investment will change, as it will take 32 months instead of 20 months to recoup the cost of the project. The Business Case needs to be updated with this information.

Here is another example. You find out during the project that integrating your CRM application with your stock system to provide real time information will not go as planned. In fact, you need to spend €30,000 to upgrade the stock system software to do this. Again, this will affect your ROI and you must update the Business Case.

As Project Manager, you want to show that the project is still worth doing (if you think it is), but you will recommend to the Project Board to stop the project if not.

As you can see then, the Project Manager is constantly asking "*Is the continued investment in this project still worthwhile?*"

5.5 How to best describe what you get from a project?

PRINCE2 uses the terms "*Output*, *Outcome* and *Benefits.*" These terms help to describe what we get from a project. My objective here is to explain what these terms mean and, also, how they differ from one another.

I don't like definitions that hang in the air and prefer to use a focused question to help explain something. So I will start with the 3 simple questions to help explain *Output*, *Outcome* and *Benefits*.

Question to uncover Output:	What is the product that will be delivered by the project?
Question to uncover Outcome:	What can the users do better with this product?
Question to uncover Benefits:	List the measurable improvements of using this product?

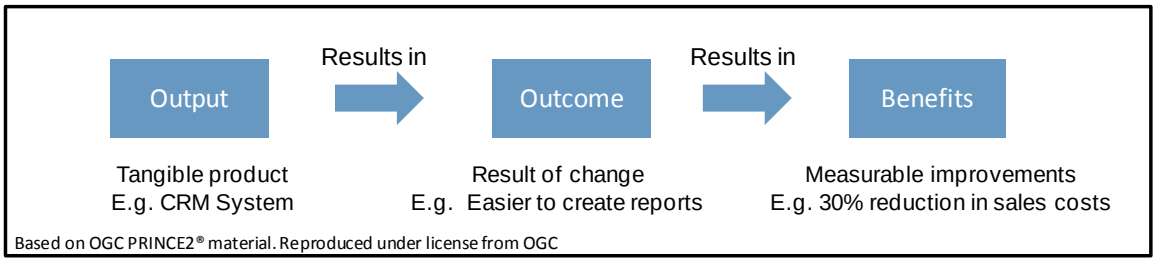


Fig 5.1 Output, Outcome and Benefits

Outputs: The Outputs of a project are the products that the users will use. These are also known as specialist products and the project is set up to create these products.

Outcome: You may have heard the expression "outcome is a result of change". From a PRINCE2 project point of view, we say that an Outcome is the result of the change derived from using the project's outputs.

Benefits: PRINCE2 says that Benefits are the measurable improvement, resulting from an outcome that is perceived as an advantage by one of the stakeholders. Try to see Benefits as the measurable advantages of using the product. Benefits can be realized during the project, but most benefits are usually realized after the project has closed and sometimes a long time after.

Now let us use an example and say that a company installs a new Sales (CRM) system.

Output Question: What is the product that will be delivered by the project?

- This will be the Sales system.

Outcome Question: What can the users do better (different) with this product?
Some answers could be:

- Sales orders are processed quicker and more accurately
- Client can assess data online and track orders
- Easier for administration staff to track orders
- Easier to get reports from the system

Notice how all the answers are very vague, and there is no mention of percentage (%) faster.

Benefits Question: What are the measurable benefits of using this product?
Some answers could be:

- 40% cost-reduction in handling client data
- 15% increase in sales as users can order online
- Overall revenue increased by 12% annually

Exercise: Think about the last project that you were involved with and work out the Output, Outcome and Benefits for it.

5.6 Different types of Business Case

We might assume that each Business Case has to show a big return on investment; this is not always the case. Nonetheless, each project should have a Business Case, as there could be many different reasons for doing the project.

Here are some reasons:

- **A Compulsory project:** The Company may have to unavoidably do this, for example, due to a change in legislation or because a software provider is pulling support for an application and the result is a need to migrate to another application.
- **Not-for-profit project:** Organize a charity event for a local hospital.
- **Evolving project:** This is where one or more people may be working on an idea or issue as part of their standard job, such as Research. They wish to develop a prototype to test and to get market feedback. This requires a Project. Another more common example is a

software project where all the requirements may not be known at the beginning, and each stage can deliver new functionality that will be put directly into production.

- **Customer/supplier project:** PRINCE2 is based on a customer/supplier environment. Therefore the customer and supplier can have their own Business Case. By default Business Case refers to the Business Case of the customer. The Business Case is owned by the Executive.
- **Multi-organization project:** Some examples are joint ventures, research and government projects.

Each of these project types will have their own output, outcome and benefits. What would be a good question to check the viability for each of these projects? This is where the focus on Benefits comes in. The question to ask is "*Are the benefits achievable with this project or should we consider another option?*" If, during the project, a better way presents itself to reach the same benefits at a lower cost, it should be considered.

5.7 The path to creating the Business Case

The Business Case is developed in the Initiation Stage and maintained during the project. The Business Case is first verified by the Project Board so that the project can start. It is then verified at key decision points during the project, such as at the end of each stage.

There are 4 steps to create the Business Case. They are:

- Develop
- Verify
- Maintain
- Confirm the Benefits

5.8 Step 1: Develop the Business Case

This is the same as Create the Business Case. The Business Case is created and first completed in the Initiation Stage, and it becomes part of the Project Initiation Documentation. The Executive is responsible for creating the Business Case, but it can be written by others or with help from others. For example, the Executive might involve a person from the financial department to assist with the financial information.

Stage	Description
Before the project starts	The project mandate document usually contains an outline of the Business Case and will explain the reason why the project is needed. Remember the project mandate is the trigger for the project.
Pre-Project (SU)	The Business Case information will be taken from the project mandate, if included, and will be what we call the outline Business Case, which will be part of the Project Brief.
Initiating a Project (IP)	The Business Case document is usually written by the Executive with help from other people. The detailed Business Case document takes the following information from the costs, timescale and product information from the Project Plan. The Business Case can also take information from the Risk Register and Project Brief. As the Business Case relies on information from the Project Plan, it cannot be completed until the Project Plan is ready and it is not completed until near the end of the Initiation stage. The Business Case document becomes part of the PID

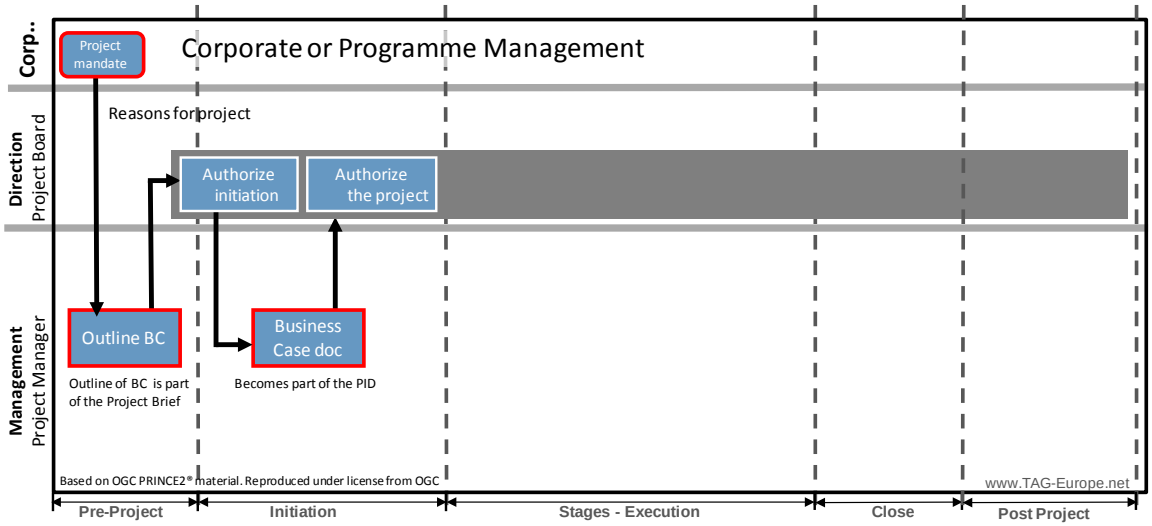


Fig 5.2 Develop the Business Case

5.9 Step2: Verify the Business Case

What does verify the Business Case mean? It means to determine whether the Business Case is worthwhile. This verification is done at a number of points in the project.

Where do you think would be good points in the project for the Project Board to Verify the Business Case or, in other words, to see if the Business Case is worthwhile? You will find it much easier to understand these if you have listened to the Process Model podcast. (**Tip:** Think about the Project Board decisions points.)

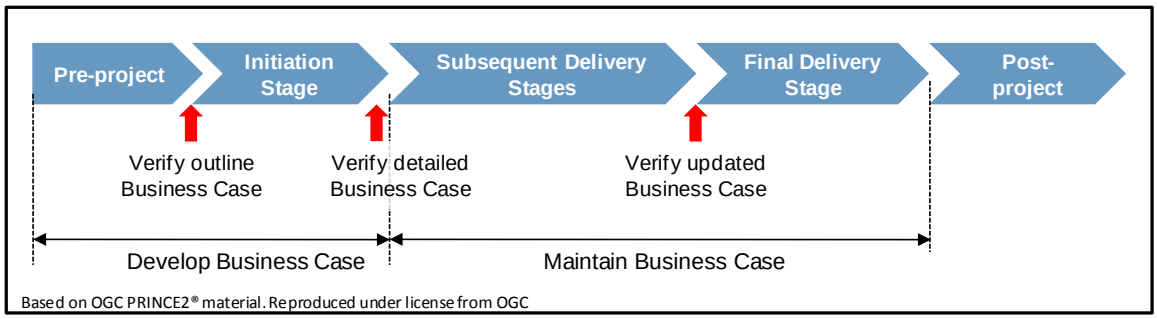


Fig 5.3 Verification Points

- **Verification Point 1**: At the end of the "Starting Up a Project" process. This is the very first process and it plans the Initiation Stage. The Project Board must see the value before they will invest and allow the Initiation Stage to begin.
- **Verification Point 2:** At the end of the Initiation Stage (remember the Initiation Phase produces the PID, Project Plan etc…). The Project Board needs to decide whether to authorize the project to start so the first stage can begin.
- **Verification Point 3:** This is for the Project Manager during the Controlling a Stage process. Any new issue or risk or change to a risk can affect the Business Case. The Project Manager will always ask if this issue or risk affects the Business Case.
- **Verification Point 4:** The Project Manager updates the Business Case if there are changes in project costs, timescales, risks or benefits.

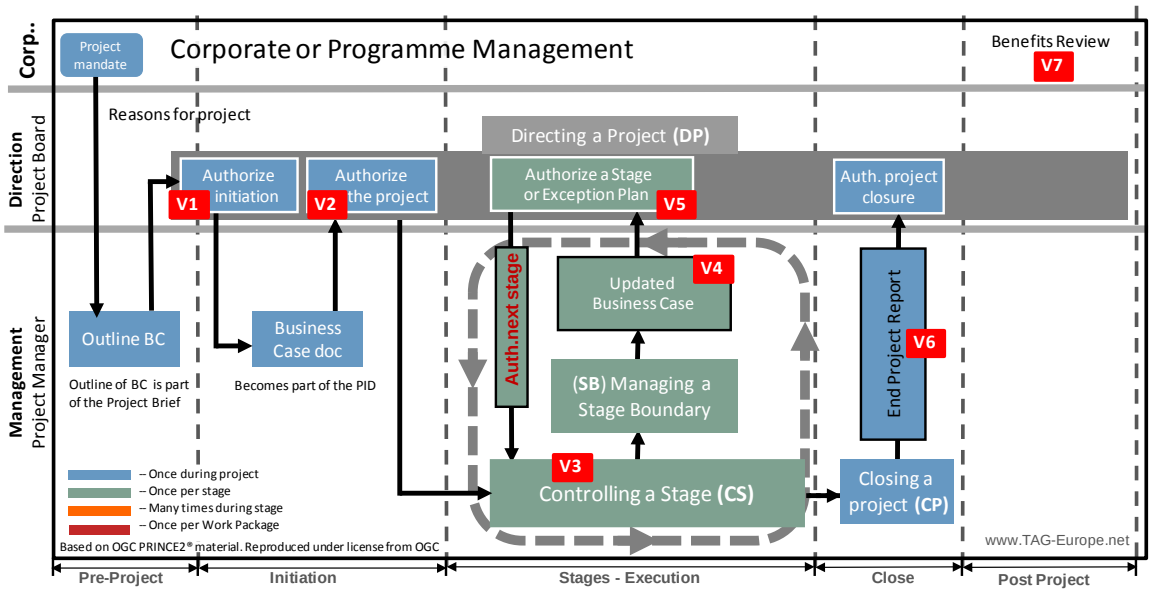


Fig 5.4 Business Case verification points

- **Verification Point 5:** At the end of each stage and before the next stage, the Project Board decides to release funds for the next stage to start.
- **Verification Point 6:** During the Closing a Project process, the Project Manager assesses the performance of the project in reaching its expected outcomes and benefits.
- **Verification Point 7:** After the project, a Benefits Review will be performed by someone from Corporate or Program Management.

I just mentioned 7 verification points. There are others, but the ones I mentioned are the most important ones and the easiest to remember.

5.10 Step 3: Maintain the Business Case

What is meant by Maintain the Business Case?

Maintain the Business Case refers to keeping the Business Case up to date to reflect what is happening in the project. It may be done when assessing Risks or Issues, or at the end of a stage. For example some of the typical changes can be: increase or reduction of costs, new information on a risk and so on.

The Business Case is also referred to as a *living document*, meaning it is continually updated during the project to reflect reality.

So when is a good time to update the Business Case during the project? A good time to update the Business Case is at the end of every stage, as you will have the true cost of the last stage, and perhaps the updated cost of the next stage, along with any information on issues and risk.

In evolving projects, some deliverables may already be put into products and therefore the project will be receiving some of the expected benefits. This information also needs to be added to the Business Case.

One final point to remember here is that the Executive has the responsibility to all project stakeholders that the project remain desirable, viable and achievable at all times.

5.11 Step 4: Confirm the Benefits

The approach to confirm the benefits is in 4 steps:

1. Identification of the benefits by the Senior User. These are documented.
   - o These benefits are stored in the Business Case and the Benefits Review Plan.
2. Select objective measurements that reliably prove the benefits.

o Examples: x% reduction in costs, x% increase in process time, x% reduction of products failing quality tests, x% increase in sales.

o These measurements will enable you to determine if the benefits are realized or not.

3. Collect the baselined measures so that they can be used to compare the improvements. Baselined measures refer to recording the current status of the current day.

o For example, with the CRM application, it is possible to record the average amount of time for a client to order today, the cost of handling each order, customer satisfaction survey, and so on.

4. Decide how, when and by whom the benefit measures will be collected. I will explain this using the CRM application as example.

o Example 1: The Account Manager might be responsible for the client survey.

o Example 2: The Office Manager might provide the information to show the average time for each order.

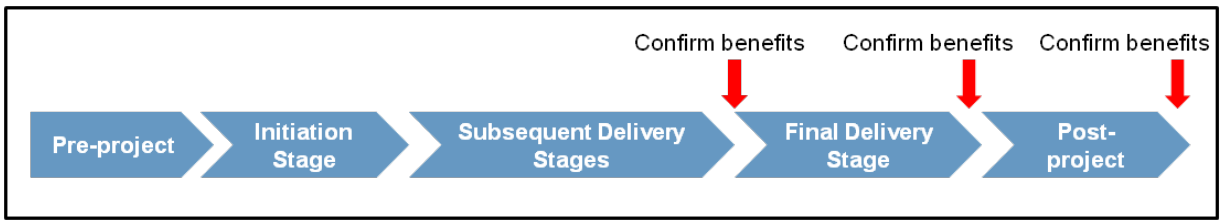


Fig 5.5 Confirm the benefits

As you can clearly see, these steps are all about ensuring that benefits are correctly measured.

When do you think most benefits are realized, during or after the project?

Most project benefits are realized after the project has been shut down. Consequently, there has to be a process to continue to check the project benefits. The Benefits Review Plan is also used to determine this. It is created by the Project Manager during the Initiation Stage and it is one of the documents that the Project Board should look for before authorizing the project to start.

The Benefits Review Plan may be updated at the end of each stage in the project, as some benefits can be realized during the project and/or new benefits can be identified

Now you may ask who takes ownership of the Benefits Review Plan once the project has stopped, as the Project Manager is no longer available. It usually is someone in Corporate or Program Management. They will ask the Senior User to provide information and evidence to confirm the benefits.

5.12 The Benefits Review Plan

The purpose of the Benefits Review Plan is to identify the benefits and most importantly, to select how the benefits can be measured so that it is possible to show that they have been reached. You can then compare the new results to the current situation, which leads us to the next point, which is to collect the baselined measures.

For example, for the CRM application, we can measure the following and baseline this information:

- Average cost to handle each order by telephone and follow up
- Average time and cost to create sales reports
- Average time providing information to clients about orders and past orders
- Customer satisfaction (take a survey today)

Lastly, the Benefits Review Plan must include information on the expected timeline for these benefits, i.e., when the benefits can be expected and measured, and who will gather the information.

Tip: If you can't measure a benefit, then don't claim it.

Who is responsible?

- The Senior User Role is responsible for specifying the benefits. After the project is finished and the project team is disbanded, one of the persons responsible from the Senior User Role will be reporting on the realized benefits to the Corporate or Program Management. They have to clearly show that the expected benefits have been reached or provide information otherwise.
- The Executive is responsible to ensure that benefits reviews are planned and executed. These can happen during *and* after the project.
- The Project Manager reports to the Project Board on any expected benefits that have been realized during the project, and updates the Benefits Review plan. They will also plan the post-project benefits reviews in the last stage of the project.

5.13 Example of a Poor Business Case

I will stay with the CRM application for this topic.

Let us say that CRM project went ahead as planned and was delivered, and users were given access. Three months later, the project is seen as a failure because:

- Users were still calling to order over the telephone instead of using the online application, so the company could not reduce the number of administrative personnel.
- When asking the clients why they were still ordering by telephone and not online, they got the response, "*We would you like to confirm that you have the items in stock and when we can get delivery"*.

So where did it all go wrong?

- Perhaps they got carried away with the idea of providing a Web interface.
- Perhaps the competition had done something similar.
- Perhaps they did not seem to understand the types of questions that clients ask and why they ask these questions when ordering via the phone.
- Perhaps administrative personnel were not included in the Requirements workshops.

As you can imagine, the Project Manager may have run a successful project, delivered on time and within budget. Three months later, however, it was obvious that the Benefits were not going to be realized.

5.14 The Contents of a Business Case

Business Case Introduction

The Business Case should describe the reasons for the project and includes information on the estimated costs, risks and expected benefits. Appendix A of the manual contains a product description for the Business Case. It should contain the following parts:

- Executive Summary
- Reasons
- Business Options
- Expected Benefits and expected dis-benefits
- Timescale
- Costs
- Investment Appraisal
- Major Risks

Reasons:

The Business Case should say why the project should be done, i.e., the reasons for doing the project. Remember the different types of projects that were discussed earlier.

- Example 1: The reason for the CRM application could be reduced costs, increased user satisfaction and increased sales.
- Example 2: Another project might be the merging of two departments due to an acquisition.

For now there is no need to provide detailed information or figures. The Reasons information should already be included in the project mandate so that you could get the information from it.

Note: The Reasons information can also be further expanded in the Initiation Phase.

Business Options

PRINCE2 teaches that there are always three options to consider concerning any investment. These are:

- Do nothing
- Do the minimum
- Do something

"Do nothing" may seem a bit strange but let me give you an example. Suppose we discover that the benefits of the CRM project will not be reached, as more than 66% of customers will never wish to order online and prefer to use the telephone. Then it is better that we absolutely do nothing. The "do nothing" option should always be the starting one, as the Project Board can compare the fact of doing nothing with other options put forward that would require investment. If you think about it, this is a good idea instead of rushing ahead into every project just to keep people busy.

The "Do the minimum" and "Do something" options would normally require a detailed Business Analysis showing costs, benefits, desire and viability.

Expected Benefits:

The Business Case should list each benefit and provide information on how tangible and intangible benefits can be measured and when they can be measured.

- An example of an intangible benefit might be happier workers. This can be measured with the help of a survey.
- The Senior User will be responsible for supplying the list of benefits with the necessary information about benefits and the names of the persons who are responsible for each of them. These persons have the responsibility to monitor the benefits and report to the Senior User and Project Manager.
- Remember, the Benefits Review Plan will contain all the information on how to measure the benefits during and after the project.

Expected Dis-Benefits

According to PRINCE2 a dis-benefit is an outcome that is seen as negative by one or more stakeholders. Another name might be a negative side-effect. For example, with the online CRM application, the clients will now order and track their orders online without ever having contact with administrative personnel from the company. This could have a negative effect as the administrative people in the company communicate less with the customers via telephone.

Timescales

The Timescales section deals with such matters as when the project is expected to start and end. It will also include when the benefits will be realized and when the project will pay for itself, so it is not just the time of the project.

Costs

This section provides detailed cost information for the project. It also includes information on ongoing costs in Operations and Maintenance that will start once the project is complete.

Investment Appraisal

This section uses information from both the Costs and Benefits sections. It compares the benefits over a period of time (most likely in years) to the full cost of the project and ongoing maintenance. The Investment Appraisal shows the stakeholders the value of the project.

There are many appraisal techniques that you can choose from such as: Net Benefits, Return on Investment, Payback Period, Net Present Value, etc. It is a good idea to use a technique that is used in your company.

Major Risks

There are always risks in each project and the Business Case must contain an overview of these risks. Note that the Risk Register contains more detailed information about these risks. The Project Board will justify the Project based on cost, benefits and risks. The Business Case must contain a summary of the risks and highlight the more major ones.

5.15 Example of Business Case for CRM Project

Example Business Case document for CRM project

Executive Summary

We recommend the development and implementation of a Web-Based Customer Relationship Management system to allow our clients to order online, view order history and download report information to Excel. We forecast to recover the cost of the project in 18 months, with a benefit of €24,000 for the following 3 years.

Reasons:

The reasons for this project are as follows:

- To make it easier for clients to order and view order history. This could also result in an increase in sales.
- One of our biggest competitors is offering such a system and their salespeople are promoting this as a valuable service.
- To help to reduce our costs, as we can reduce one of our in-house sales persons.
- To reduce the errors we have today with incorrect orders.
- To make it much easier for our in-house salesperson to follow-up on orders and provide the correct information to the shipping department.
- To provide better sales reporting for Sales Manager with minimum effort.

Expected Benefits

- Reduce sales administrative costs by 30%
- Forecast increase in sales by 5% to 10%
- Prevent loss of existing clients to another competitor
- Forecast reduction of 66% in errors in the ordering process
- Provide required sales information to Sales Manager with minimum effort

Expected Dis-Benefits

- Most clients will now order and track their orders online without ever having to contact administrative personnel from the company. This could have a negative effect as the administrative people in the company communicate less with the customers.

Timescales

- Project time: 5 months
- Project Start: February 1st: Start with Requirements Analysis
- Project Finish: August 1st
- Tolerance: +-3 weeks
- First Benefit Reviews will be 3 & 6 months after go-live

Costs

- Estimated costs are €24,000
- Estimated yearly maintenance and support is: €4,000

- Change Budget (20% of the cost): €6,800 will be available

Investment Appraisal (Simple)

- Estimate cost for project are: €34,000
- Estimate to save one of the two Admin Sales roles: €26,000 a year
- Estimate to increase sales and therefore profit by 5%: €12,000
- Estimated Return on Investment is less than 18 months

Risks

- CRM provider may not be able to deliver our exact requirements using their easy-to-use configuration tools and may need to use more development services.
- All competitors may start using a similar system which will affect our expected increase in sales.
- Clients may not like to use the system and may insist on ordering via telephone.

5.16 Appraisal Techniques

I will discuss two appraisal techniques and this type of information can be placed in the Business Case document.

Simple Cash Flow Example

- This technique provides a simple year-by-year overview showing the money coming in the business versus the expenditures, which is the money going out.
- The Net Cash Flow is the difference year-on-year, and it always starts with year 0, i.e., when you start spending on the project.
- The following table is an example for the CRM project with made-up numbers

Year	Income	Expenditure	Net Cash Flow
0	0	€ 24,000	€-24,000
1	€ 26,000	€ 4,000	€ 22,000
2	€ 28,000	€ 4,000	€ 24,000
3	€ 30,500	€ 4,500	€ 26,000

- As you can see, it just compares year by year and does not show when the project has paid for itself.

Return on Investment (ROI)

- The Return on Investment appraisal method is a popular method and easy to create and understand.
- It calculates an average income over the life of the projects and compares it to the original investment so that you can clearly see when the project has paid for itself.

	Year	Cash Flow
Investment	0	€-24,000
	1	€ 22,000
	2	€ 24,000
	3	€ 26,000
	4	€ 28,000
Total Income after 5 years		**€ 76,000**
Average Income per year (4 years)		**€ 19,000**
ROI (compare to original amount)		**0.79%**

Again, this is just an example and you do not need to know these for the Foundation or Practitioner exams.

5.17 Business Case: Who is responsible for what?

Corporate or Program Management

What do you think the Corporate or Program Management is responsible for with regard to the Business Case?

- They provide the project mandate, which will most likely include some information on the Business Case.
- The Corporate or Program Management is interested in hearing about the Benefits of the project.
- During the project, the Project Manager will report on the Benefits to the Program Management and will update the Benefits Review Plan.
- And after the project is completed, the Corporate or Program Management will be responsible for the Benefits Review Plan. They have the responsibility of following up to ensure that the benefits have been realized.

Executive

What do you think the Executive is responsible for with regard to the Business Case?

- The Executive is responsible for the Business Case and the Benefits Review Plan during the project.
- The Executive is also responsible to develop a viable Business Case, securing funding for the project and ensuring the project is aligned with corporate strategy.

Senior User

What do you think the Senior User is responsible for with regard to the Business Case?

- The Senior User is responsible for specifying the Benefits and then for ensuring that they are realized by the project.
- They are also responsible for ensuring that the products produced by the project deliver the desired outcomes, in other words, that they can be used as expected.

Project Manager

What do you think the Project Manager is responsible for with regard to the Business Case?

- The PRINCE2 manual says that the Project Manager prepares the Business Case on behalf of the Executive but this does not happen often in the real world. I prefer to say that the Project Manager can assist the Executive in preparing the Business Case.
- For each new or revised issue and risk, they will also do Impact Analysis of the Business Case to see if the issue or risk affects the Business Case.
- They also assess the Business Case at the end of each stage, this information is required by the Project Board and they also keep the Benefits Review Plan updated during the project.

Project Assurance

What do you think Project Assurance is responsible for with regard to the Business Case?

- Remember that Project Assurance provides a kind of audit service on each project to check that it is progressing as planned.
- From a Business Case point of view, they can assist in the development of the Business Case and they will monitor the Business Case for external events. Remember, the Project Manager operates inside the project, so they only see internal events.
- Project Assurance also verifies and monitors the Benefits Review Plan.

5.18 Foundation and Practitioner Exam

Foundation Course & Exam

- Get an understanding of this chapter, especially the path to creating and maintaining the Business Case, the Roles & Responsibilities and the type of information contained in a Business Case
- You need to be able to answer 66% of the following questions

Practitioner Course & Exam

- You need to know all areas of this chapter except the example appraisal methods
- Suggest creating a Business Case document for a project that you have worked on. This will help you remember this in the future.
- You need to able to answer 90% of the following questions

5.19 Learn Thru Questions

Try and answer the following, these are taken from the Learn Thru Questions audio course. Check the answers in the Learn Thru Questions document available on our site: You can also listen to these questions and answers (use the **LTQ audio course**)

Q1: What do you think is the main information that exists in a Business Case? Just think about this before answering. In the answer, I will mention a couple of sections.

Q2: What is meant by the term 'Business Justification' from a PRINCE2 point of view?

Q3: Finish the sentence. "The purpose of the Business Theme case is to provide a structure to judge if the business case is desirable _____."

Q4: What are the four steps to creating a Business Case? (**Tip:** They begin with D, V, M, and C)

Q5: Who has the responsibility of creating the Business Case and who can assist?

Q6: What does the step *Verify* mean in creating the Business Case?

Q7: In which document might a summary of the Business Case first appear?

Q8: What management product must be complete before the Business Case can be completed?

Q9: Which question does the Business Case answer about the project: *Who*, W*hy*, *What*, *When*, *How*, *How Much*?

Q10: Can you list a few of the places in the project where the Business Case is verified (i.e., check to see that it is still worthwhile)?

Q11: Who do you think has the responsibility to all project stakeholders that the project remains desirable, viable and achievable at all times?

Q12: Who has the responsibly to identify the benefits and write them down and gather this information so it can be used to measure improvements?

Q13: What kinds of measurements would you **gather at the start of a project** so you could use them to measure the benefits after the project is complete? (**Tip:** Think about a new CRM application.)

Q14: In which document are the expected benefits stored? It also includes the current status at the start of the project and may be updated at the end of each stage to show the benefits that have already been realized during that stage.

Q15: Who creates the Benefits Review Plan, when it is updated during the project, and by whom?

Q16: Who takes ownership of the Benefits Review Plan once the project has stopped and the project manager is no longer available to work on the project? Also, who is asked to provide the information and evidence on the benefits?

Q17: Can you name three of the sections that may exist in the Business Case document and that are described in the Business Case product description in Appendix A?

Q18: What kinds of information do you think the **Reasons** section should include in the Business Case document and where does this information come from?

Q19: PRINCE2 says that there are 3 basic business options concerning any investment, the first one is 'Do nothing'; name the other two.

Q20: What kind of information should be included in the Expected Benefits section of the Business Case and which document will contain information on how and when the benefits will be measured?

Q21: What kind of information should the **Timescales** section cover in the Business Case document? (**Tip:** Think ROI & Benefits)

Q22: What kind of information should the **Cost** section cover in the Business Case document? (**Tip:** Think about what happens after the project also.)

Q23: What kind of information should the **Investment Appraisal** section cover in the Business Case document?

Q24: What kind of information should the **Major Risks** section cover in the Business Case document and where does the information come from?

Q25: What is the Corporate or Program Management responsible for with regard to the Business Case? (**Tip:** Think about before and after the project)

Q26: In the Business Case theme, who is responsible for:

- the Business Case during the duration of the project
- the Benefits Review Plan during the project if not managed by the Corporate or Program Management
- Overseeing the development of a viable Business Case to ensure that the project is aligned with corporate strategies and securing funding for the project.

Q27: Who is responsible for the following in the Business Case theme?

- Specifying the Benefits and then ensuring the benefits are realized by the project
- Ensuring the desired outcome of the project is specified
- Ensuring that the products produced by the project deliver the desired outcomes, in other words, that they can be used as expected

Q28: Who is responsible for the following in the Business Case theme?

- Assisting the Executive in preparing the Business Case
- Doing an Impact Analysis on each new or reviewed risk during the project
- Assessing and updating the Business Case at the end of each Management Stage
- And assessing and reporting on project performance at project closure

Q29: Who is responsible for the following in the Business Case theme?

- Confirming that the products required by the project can be delivered within the expected costs.

Q30: Who is responsible for the following in the Business Case theme?

- Assisting in the development of the Business Case
- Verifying and monitoring the Business Case against external events and project progress
- Ensuring that the project fits within overall Corporate or Program Management strategy

- Verifying and monitoring the Benefits Review Plan for alignment to Corporate or Program Management

Q31: PRINCE2 talks about Output, Outcome and Benefits. What is Output?

Q32: PRINCE2 talks about Output, Outcome and Benefits. What is an Outcome?

Q33: Project Benefits. What are Benefits?

6 Organization

6.1 Introduction to Organization Knowledge

Let us take a look at what will be covered in this Organization Theme.

- The purpose of the knowledge contained in this Organization Theme
- Some Organization definitions, what a project is, what a program is.
- The three stakeholder categories.
- The four levels in a project & three levels in a Project Management Team.
- The duties and roles of the Project Board.
- The Project Manager Role, a description, and the skills required.
- Introduce other project roles such as Change Authority, Team Manager & Project Support.
- Working with the Project Management Team and the stakeholders.
- The Communication Strategy document, the reason for this document and its typical contents.
- And, finally, the responsibilities of the different roles in the Organization Theme.

6.2 What happens in the real world?

In some cases, the tasks of defining the Project Organization and Roles and Responsibilities are rushed and other activities, such as starting to develop the products ASAP, are seen as more important. As a Project Manager, you depend on other people to make decisions, to provide you with information and to carry out activities. Therefore, it is important to get this on paper and agreed; otherwise you might find yourself chasing ghosts during the project.

One of the first tasks a Project Manager should do on a project is to get a good idea of who is who in the organization and of their roles & responsibilities. Start with the Executive, who might even need to be reminded that *they* are responsible for the project, not the Project Manager.

The management might put pressure on the Project Manager to start producing products ASAP, as they want to start using or selling the products that will be produced by the project and they are unaware of the importance of what happens in the SU or IP processes. The Project Manager can use some of the following ideas to help document the project organization:

- Look at Roles & Responsibilities profiles in similar projects in the organization
- Meet with the Executive to discuss their responsibilities and design the Project Board
- Prepare a workshop-type meeting with the Project Board and use the knowledge in this Theme to define the most appropriate questions to ask, e.g., *How should communication be done during the project?* and *Who is responsible for defining the benefits?*
- Confirm that each person has the necessary authority, knowledge and availability, and agree on their written role and responsibilities.

6.3 The Organization Knowledge provided by PRINCE2

The purpose of the knowledge in this Theme is to help define and establish the project's structure of accountability and responsibilities, in other words, identify the “Who” of the project.

A PRINCE2 project is based on a customer/supplier environment. One party is the customer who will specify the results and most likely pay for the project and the other party is the supplier who will provide the resources, do the work and deliver the results.

What do you think makes a successful project team? PRINCE2 states that a successful project team should:

- have Business, User and Supplier representation
- have defined responsibilities for directing, managing, & delivering the project

- have regular reviews of the project to check that all is on track
- have an effective strategy to manage communication flows to and from stakeholders

In summary, each project needs to have direction, management, control and communication.

> The Organization Theme provides the knowledge to help define and establish the project's structure of accountability and responsibilities

6.4 Organization Definitions

Project Definition: What is a Project?

A common definition of a Project is: "a designated set of tasks needed to accomplish a particular goal." PRINCE2 defines a project as a temporary organization that is the created for the purpose of delivering one or more business products according to an agreed Business Case.

Program Definition: What is a Program?

A Program is 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.

For example, a company might create a program to implement Six Sigma in each department and country in an organization. The strategic objective here is to improve quality by x% using Six Sigma. The program may launch many different projects to achieve this, which could be per department or country, and all will be controlled by the program.

Main differences between a Project and a Program

Project	Program
Definite Start & End	End is when Vision is reached
Clear and predetermined outputs	Major changes within an organization
Mostly a clear development path	No clear defined paths
Shorter timescale (months)	Longer timescales (years)
Benefits are mostly at end	Benefits most during & after

Corporate Organization: What is a Corporate Organization?

A Project can be part of a program. If it is outside a program, we say that the project exists in the company organization, as some companies may not have a program environment setup. PRINCE2 uses the term Corporate Organization to refer to the organization leadership.

Some types of organizational structures are traditional (e.g., divided into departments), or project-focused to variations in between.

Roles and Jobs Definition

PRINCE2 places Project responsibilities into roles, not persons. These roles can then be assigned to persons. In this way, one person can have more than one role. For example, in large projects, the Project Support role can be assigned to one or more persons. In small projects, the roles of Project Manager and Project Support can be assigned to the same person.

Care must be taken to assign roles that the person can perform well and that there are no conflicts. For example, the person who has the role of Project Manager cannot have the role as Project Assurance.

6.5 Three Project Interests / 3 Stakeholder Categories

A PRINCE2 project should always have three primary categories of stakeholders and these also have to be represented in the Project Board. These are Business, User and Supplier.

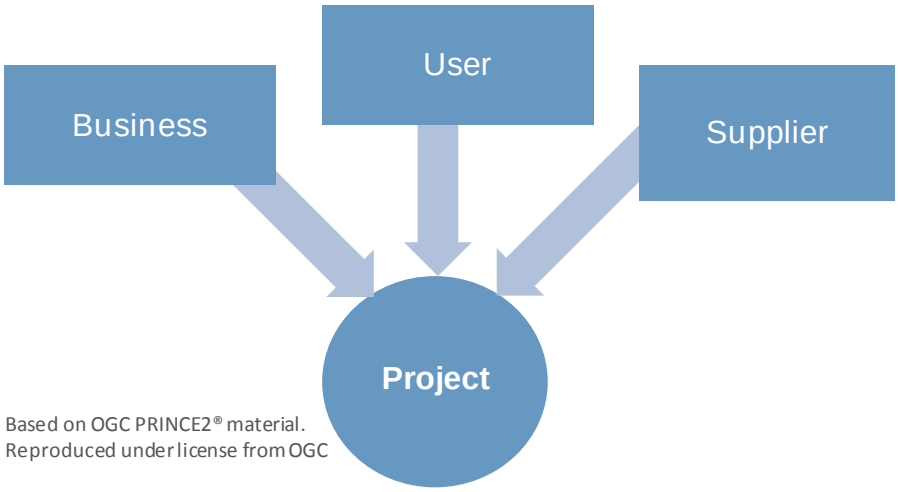


Fig 6.1 The three project interests

Business Interests

The Executive Role on the Project Board looks after the Business interests. There must be a Business Case, otherwise the project cannot start.

User Interests

Users benefit from the delivered products, as they will use the products. Users can also operate, maintain or support the projects outputs. Users need to be represented on the Project Board to make sure that the correct products are produced and to the agreed quality level.

The **Senior User** role will represent the User interests on the Project Board. In a PRINCE2 project, a user is also referred to as the customer and the will most likely pay for the project.

Exercise: Look at this situation: Who do you think should be the Senior User and therefore represent the users on the Project Board?

The company is a technology research company. The project is to develop a product for an outside company, such as a new stereo headphone for a mobile phone manufacturer.

In this case, the Senior User could be someone from the Sales Department or an Account Manager, as they wish to make sure the products will meet the customers' expectations and sell in future. It could also be someone from the Customer themselves.

Supplier Interests

The Supplier provides the resources and the skills to create the products. In an organization, this could be either internal or external. For example, an internal IT department or external IT *company*. The Supplier interests are represented on the Project Board by the Role Senior Supplier. This Senior Supplier role can be assigned to an external or internal person or *persons*.

6.6 The four levels of Organization

It is important that you understand the difference between the Project Management structure and Project Management Team. The Project Management structure has 4 levels and the Project Management Team has 3 levels.

The 4 levels of a Project Management structure are:

- Corporate or Program Management,
- Directing a Project
- Managing
- Delivering

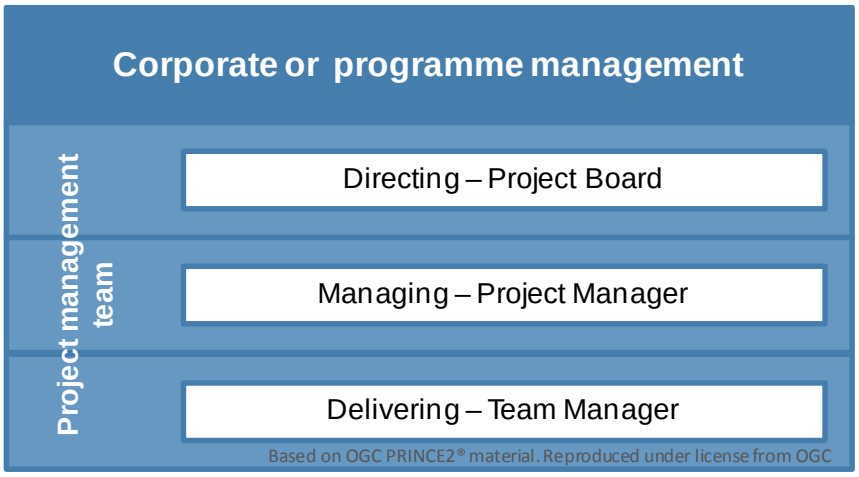


Fig 6.2 Four levels in an organization

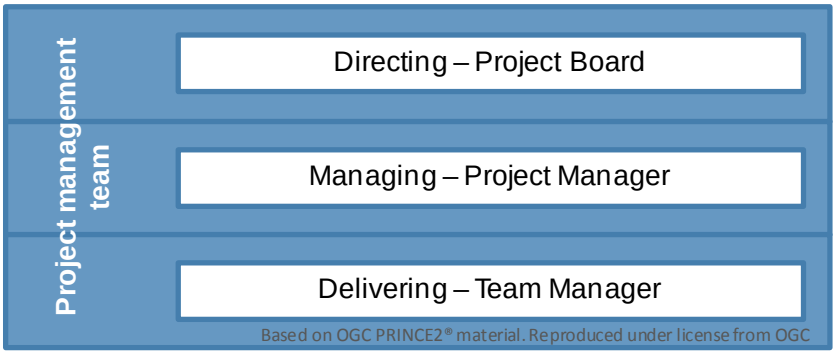


Fig 6.3 Three levels in a project team

The 3 levels in the Project Management Team are:

1) Directing a Project,
2) Managing
3) Delivering

The only difference is that the Project Management structure has the level “Corporate or Program Management.” This is why we say that the Corporate or Program Management sits outside the Project Management Team.

Now let us look at each level, starting with Corporate or Program Management.

Level: Corporate or Program Management

This level is outside the Project Management Team and the top level of the Project Management structure. The Corporate or Project Management is responsible for commissioning the project and identifying the Executive. They decide at the start of the project how the Project Board will keep them updated during the project and will also define the project tolerances that the Project Board will work within.

Level: Directing

The Project Board is responsible for Directing a Project and is accountable for the success of the project and they do the following:

- Approve all resources and major plans, e.g., Project Plan, Stage Plans
- Authorize any deviation if tolerances are forecast to be exceeded or have exceeded
- Approve the completion of each stage and authorize each new stage
- Communicate with other Stakeholders, which include Corporate or Program Management

The process *Directing a Project* describes the work of the Project Board.

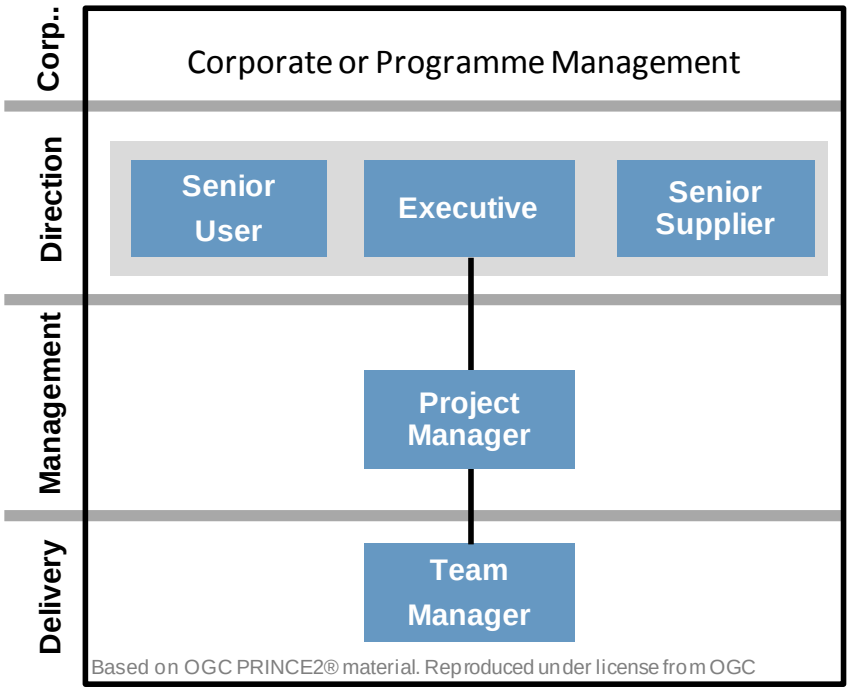


Fig: 6.4 Project Management Team Structure – simple overview

Level: Managing

The Project Manager is responsible for the day-to-day management of the project. The Project Manager's primary responsibility is to ensure that the project produces the required products in accordance with the goals, which are *time, cost, quality, scope, risk* and *benefits*.

Level: Delivery

The Team Members are responsible for delivering the projects products to a certain quality, and within a specific timescale and cost. A Team Manager can have the authority and responsibility of creating plans and managing a team to create and deliver the required products.

The process *Managing Product Delivery* is where the teams produce the products for the project.

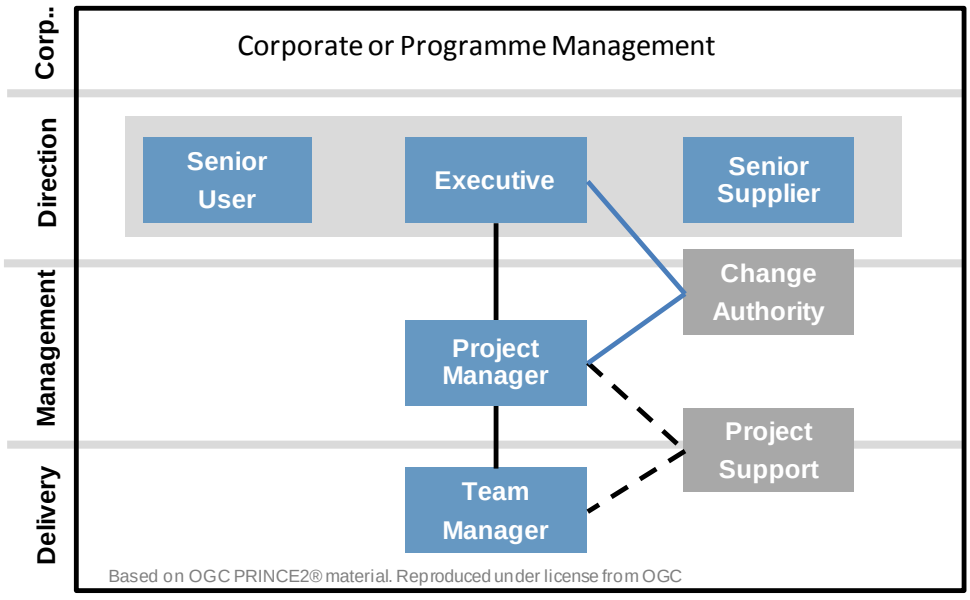


Fig: 6.5 Project Team Structure

6.7 Project Board

The Project Board consists of the Executive, the Senior User and the Senior Supplier. Only one person can be the Executive while both the Senior User's and Senior Supplier's roles may be assigned to one or more persons. The Executive owns the Business Case and has the final word on decisions that are taken, so the Project Board is not a democracy.

The Project Board has the following duties:

- To be accountable for success or failure of the project.
- To provide unified direction to the project and Project Manager.
- To provide the resources and authorize the funds for the project.
- To provide visible and sustained support for the Project Manager.
- To ensure effective communication within the project team and with external stakeholders.

Far too many projects have Project Boards that don't understand their role and don't provide proper support to the Project Manager. PRINCE2 says that a Project Board should have 4 characteristics. These characteristics are:

- Authority so they can get things done
- Credibility
- Ability to delegate
- Availability, especially to support the Project Manager

If the Project Board is lacking one or more of these characteristics, they are not able to support the Project Manager. These are good questions for the Project Manager to ask about the Project Board at the start of the project. The Project Board members are usually busy people, so the concept of Management by Exception allows the Project Manager to keep them regularly informed of the project's progress, and to only get involved to make key decisions. The Project Manager mainly communicates with the Project Board using the Highlight Report, which is a regular report that provides progress updates on the current stage.

How big should the Project Board be?

The Executive supported by the Project Manager usually takes the following points into account when deciding on the size and structure of the Project Board:

- It should be kept as small as possible so it will be easier to make decisions
- It needs to represent all of the stakeholders in the project
- For larger projects, Users and Suppliers can be split into subgroups. These subgroups can discuss Issues and Risks and pass recommendations on to the Project Board. This is done outside the Project Board.
- They also decide whether to include external suppliers on the Project Board. This will depend on the company's culture, e.g., how they work, and if there is a fear of divulging commercial or financial information. For example, a company might not wish for the external IT supplier to know the exact value of the project, as the price might increase.

6.8 The Project Board Roles

The Executive: What does the Executive Role do?

The Executive is appointed by Corporate or Program Management. The Executive is responsible for the project and is supported by the Senior User and Senior Supplier Roles. The Executive's role is to ensure that the project is focused on achieving its objectives and on delivering a product that will achieve the forecasted benefits.

The Executive also gives a single point of accountability for the project. Usually the Executive will be responsible for designing and appointing the Project Management Team, including the rest of the Project Board and the Project Manager.

The Executive is responsible for developing the Business Case at the start of the project. The Executive owns the Business Case, so throughout the project, their main concern is "*Is the project value for money*?" The Project Manager may update the Business Case during the project but, again, it is the Executive who still owns the Business Case.

The Executive is the face of the project to people who are external to the project. They are also responsible for communicating to outside stakeholders and to Corporate or Program Management.

The Senior User: What does the Senior User Role do?

The Senior User has the following responsibilities

- To specify the needs of the Users that will use the Project Products.
- To liaise between the Project Management Team and the Users.
- To make sure the solution will meet the needs of the Users, especially in terms of quality and ease of use and against requirements.

As well as representing the Users, the Senior User normally represents the persons responsible for Maintenance and Operations after the products have been delivered and the project has closed. The Senior User specifies the expected benefits at the start of the project and reports to the Project Board on the benefits that were realized during the project. So we can say that the Senior User is responsible for reporting the realized benefits during the project.

In some cases (e.g., in-house projects & perhaps smaller projects), the Executive Role and the Senior User Role can be assigned to the same person. So this person would represent both the Business and the Users.

The Senior Supplier: What does the Senior Supplier Role do?

The Senior Supplier Role represents the interests of those designing, developing, facilitating and implementing the projects products. They are responsible for the quality of the products and the technical integrity of the project. In cases where the Supplier will continue to maintain the products after the project, the Senior Supplier will also represent the persons who will provide support and maintenance.

The Senior Supplier role provides the resources for the project. This role will ensure the right people, tools, equipment and knowledge are in place, and that the products will meet the expected criteria.

The Senior Suppler can come from the customer organization (e.g., Purchasing Manager) or they can come from a supplier, and as with the Senior User Role, this can be one or more persons.

Finally, more than one person can represent the suppliers and therefore be assigned to this role.

6.9 Project Assurance: User, Business & Supplier

This is known as Project Assurance but it is actually separated into three parts: *User, Business* and *Supplier Assurance*. The Project Board is responsible for Project Assurance and the Project Board members are responsible for their own parts.

First you need to understand why we need Project Assurance. So just imagine the following situations:

- We have a new Project Manager in the company who is not fully aware of the corporate quality standards, so they will most likely deliver a product that cannot be used
- There has been a change in certain recognized standards that must be adopted by all companies that produce products for that market. It is therefore important that all projects reflect these changes
- An external Project Manager may be under pressure to get products signed off so they can invoice the client and they may be cutting corners to get this done.
- A Project Manager might have discovered a big issue but is afraid to report it, as they don't want to be the bearer of bad news. So they keep quiet and hope the issue will go away.

For each of these situations, the Project Manager may be telling the Project Board that everything is fine and the project is going as planned, so it is important that the Project Board get a second opinion and this 2nd opinion is called Assurance or Project Assurance.

- Executive is responsible for Business Assurance
  - They wish to ensure that the business aspects of the project are correct
  - They keep asking: **Is the project value for money?**

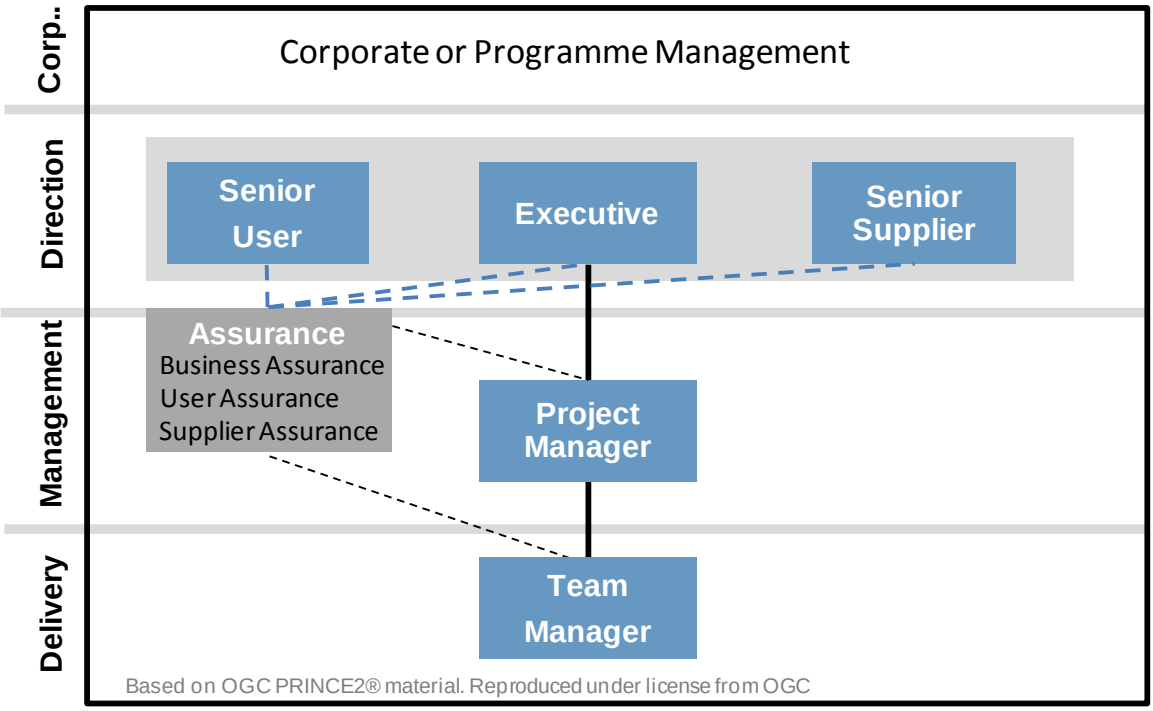


Fig 6.6 Project Assurance

- Senior User is responsible for User Assurance
  - They wish to ensure that the project will deliver the correct products and these products will meet the expected requirements
  - They keep asking: **Will the product work as expected?**
- Senior Supplier is responsible for Supplier Assurance
  - They want to ensure that the products will be delivered as expected and that the right materials and people are in place to do the work.
  - They keep asking: **Can it be done within time, cost, and other variables?**

The Project Board can decide to do this work themselves or they can assign these assurance tasks to other people within the organization who have the necessary skills and who will provide an independent view on how things are going with the project. The Project Assurance should not just focus on finding things that the Project Manager may not be doing correctly, but should support the Project Manager and make them aware of standards that they should use in the project. The Project Manager should also feel comfortable to ask for guidance from Project Assurance.

6.10 The Change Authority Role

Change Authority is 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 Authority can also be a mixture, depending on the severity of the change, so you can see that the different roles can have Change Authority responsibilities

Severity - Change Request	Who decides?
Level 5	Corp / Programme
Level 4	Project Board
Level 3	Change Authority
Level 2	Project Manager
Level 1	Project Support / Help Desk

For example a **Level 2** issue (change request)**:** The Project Manager could decide if only one product is effected, the change is less than €200, and of course well within tolerance.

Why doesn't the Project Board do all Change Authority during a project?

If few changes are expected, then the Project Board can do this. If many changes are expected, then it is better to use a separate Change Authority group . This is more efficient for the change process and less time is demanded from the Project Board (as they are busy people).

This is defined in the Configuration Management Strategy document during the Initiation Stage.

6.11 The Project Manager Role

The Project Manager manages a project on a day-to-day basis and is the only one with this day-to-day focus on the project and this role can never be shared. The Project Manager runs the project on behalf of the Project Board within specified constraints, and liaises throughout the project with the Project Board and Project Assurance.

The Project Manager usually comes from the customer. They are responsible for all of the PRINCE2 processes except for the "Directing a Project" process and one activity in the "Starting Up a Project" process, which is the Appointing the Executive and Project Manager.

The Project Manager is responsible for the Project Support and Team Managers. In smaller projects where there are no Team Managers, the Project Manager will manage the Team Members directly, and where there is no Project Support, the support tasks fall on the Project Manager.

What kind of skills do you think a Project Manager should have?

A Project Manager must have a number of skills and should find ways to develop them. They should include good communication, cost management, an ability to understand the quality process, process change requests, document user needs, monitor the project, as well as planning, leadership and team-building qualities, including teamwork, problem-solving, reporting, facilitating meetings and conducting workshops. Another important task is the ability to anticipate problems and to be proactive in solving them. In other words, a good Project Manager does not sit around and wait for things to happen.

6.12 Team Manager & Project Support

Team Manager Role

The role of the Team Manager is optional and is usually used:

- If the project is quite large and there are many team members
- If there is a need for specialized skills or knowledge of the products to be produced (e.g., to run a Java development team, research on a specific product, …)
- For geographic reasons, where some team members are situated at another site, so you work with a team manager at the remote sites.
- If you are using an external company and it easier and more efficient to coordinate with a Team Manager rather than all the team members directly.

The Team Manager has the responsibility to produce the products that were assigned in Work Packages by the Project Manager and to provide regular status reports to the Project Manager.

The Team Manager can then create their own Team Plans to manage the development of the assigned products.

See the process Managing Product Delivery for more information on how the work is assigned and delivered between the Project Manager and the Team Manager.

In some cases the Team Manager may be higher in an organization than the Project Manager, but in the context of a project, the Team Manager reports to and takes direction from the Project Manager.

A common question is: *What happens when the person in the supplier company is also a Project Manager*? Does this mean that the project will have two Project Managers? PRINCE2 says there is one Project Manager so that the Project Manager who works for the supplier can still have the job title of Project Manager on their business card, but as far as this project is concerned, they are a Team Manager.

6.13 Project Support and centre of excellence

The Project Support Role provides the following services to the project:

- Administrative services, advice or guidance on the use of project management tools or Configuration Management.
- Can also supply planning or risk management services.
- The typical responsibility for Project Support is Configuration Management and therefore follows the guidelines in the Configuration Management Strategy document. This is one of four strategy documents created at the start of the project.

The responsibility of Project Support is with the Project Manager. This role is not optional so it needs to be assigned to a person or persons. Bigger Organizations might have a Project Office (also referred to a Project Support Office) that provides these services for a number of projects. If there is no Project Support office, then the Project Manager must assign to another person, share the role with others or take on the role themselves. This could also be a role for a junior Project Manager, as they would learn a lot about project management from doing this role.

Tip: This is a good role for the Project Manager to get assistance with, as this role needs to be done correctly to support the project. If the Project Manager cannot get assistance, then they must not make the common mistake of trying to do this in their spare time but must plan to carry out the required tasks during normal work hours.

Centre of excellence

This is the name given to a group of persons who can provide the follow services to a number of projects in an organization,

- A central filing system for al projects & a configuration management system
- Expertise on project management techniques : E.g. Estimating, Risk Analysis
- Advice on all project areas, Quality, Risk, Planning, …

A centre of excellence could provide both Project Support services and Project Assurance services to a project, just remember that the Project Assurance persons report to the Project Board.

6.14 Project Manager and the Project Organization

Working with the Project Management Team

In most cases Project Managers may not be able to choose most team members. They have to work along with the people provided and should immediately try to build trust and create a functional team.

Different types of people have different characteristics and skills. For example, some people can be very sociable and good at suggesting ideas while others may be much better at working out the

details and making sure that all possibilities are covered. Still others might need some encouragement to open up or participate in the project activities.

The Project Manager should therefore get to know the characteristics of the people, use this knowledge to build a better Project Management Team and understand what people expect to get from the project or how they would like to participate. The Project Manager should also recognize if training is required by team members and get this planned. Training offered might include *how to do reporting*, *how to carry out quality procedures*, and/or *how to define requirements and learn more about the specialist products*.

The Project Manager should also check that part-time team members are not working on too many other projects and get commitment that they can deliver what is agreed. This is especially important for persons working on critical path tasks, as we want to avoid any delay with these.

Working with the Corporate Organization

The Project Manager must understand the organizational environment they are working in and if necessary, get support from the Project Board to ensure that all team members are aware of their responsibilities.

A Center of Excellence can also be provided in a corporate organization to provide support to the projects. This can include such things as:

- Advice on standards, preparing plans, training.
- Central filing system and Configuration Management system for all projects.
- Expertise on estimating techniques.
- Any other advice on PRINCE2.

This Center of Excellence can also be referred to as project coaching or Project Support.

Working with Stakeholders

- It is important to recognize who the stakeholders are in a project and how to engage them during the project. Some stakeholders will be very valuable to the project, providing lots of information, suggestions and support to it. For example, let us say that the project was to build a new incinerator on the outskirts of a city. The stakeholders could be an environment group, city planning commission, contractors, equipment suppliers, unions representing future workers, local resident groups and possibly others.
- As you can imagine, some of these stakeholders could oppose the project and some might support it, as they would benefit from the project.
- The Project Manager, with guidance from the Executive, will decide how best to communicate and engage with these stakeholders.

6.15 Stakeholder Engagement

First let us answer the question: *What is Stakeholder Engagement?* Stakeholder Engagement is the process of identifying and communicating effectively with those people or groups who have an interest in the project's outcome. It's also: Managing relationships as a way of achieving influence and positive outcomes. Just think about all the stakeholders in the above example of building a new incinerator.

PRINCE2 states that communication with stakeholders is the key to the project's success.

The Managing Successful Programs method lists a 6-step approach for Stakeholder Engagement. Let us look at this 6-step approach using the incinerator project as an example.

1. Identify the persons & groups, so Environment Group, Local Groups, Unions, and other stakeholders.
2. Create a profile for each stakeholder.
    1. Example 1: Local Residents would be very concerned about things like air quality, noise.

2. Example 2: City Planning would be concerned about dealing with the city waste and the benefits for the city.

3. Define Stakeholder Engagement Strategy.
    3. Define how to engage (invite them to meetings, provide a newsletter and/or Highlight Report with information on noise and air quality).
    4. Who from the Project Team will communicate the type of information and the frequency of communication?
4. Plan when to communicate.
5. Do the Stakeholder Engagement. This means go ahead and communicate.
6. Measure results of the Engagement and check if this has the expected effect and if the stakeholders are pleased that they are getting the correct information.

This is something that the Project Manager will keep in mind during the project and work with the Executive to do this.

6.16 The Communication Management Strategy

What is the Communications Management Strategy document? It is a document that defines in detail how communication will be done during the project, e.g. what is being communicated, to whom is it being communicated, and how often. The Project Manager will refer to this document during the project.

The Communication Management Strategy defines the rules of engagement for how communications should be done during the project.

What does the Communication Management Strategy document contain? It contains a description of the means and frequency of communication to internal & external parties. This can also include the Program Management if the project is part of a program.

The Project Manager is responsible for creating the Communication Management Strategy during the Initiation Phase of the project. This should be reviewed during the Managing a Stage Boundary Process to ensure that key stakeholders are receiving the required communication

The Communication Management Strategy document contains the following information:

- An introduction to remind the reader on the purpose of the document for this project.
- Communication Procedure: A description of the communications methods that will be used, such as electronic mail, meetings, and presentations.
- Tools & techniques, such as e-mail, intranet, newsletter.
- Reporting: Types of reports and the information they should contain.
- Timing states when communication activities will be done.
- Roles & Responsibilities: Who will handle the communication?
- Stakeholder Analysis: Type of Stakeholder and the relationship desired with Stakeholder.
- Information Needed: Information required from project, including the frequency of the communication and the format of it.

You may be thinking, “Another management document to create. Well, if you work in a program environment or have worked on a similar project, then you would already have a template to work from; this can be customized to suit your project.

6.17 Responsibilities for Organization Theme

What are Corporate and Program Management?

- They appoint the Executive and possibly the Project Manager.
- They can also provide some information for the project as will be defined in the Communication Management Strategy document.

What is the Executive responsible for with regard to the Organization?

- Appointing the Project Manager if not done by Corporate or Program Management.
- Confirm appointments to the Project Management Team.
- Approving the Communication Management Strategy Document.

What is the Senior User responsible for with regard to the Organization?

- Providing User Resources
- Defining & verifying user requirements & expectations

What is the Senior Supplier responsible for with regard to the Organization?

- Providing supplier resources

What is the Project Manager responsible for with regard to the Organization?

- Preparing the Communication Management Strategy
- Reviewing and updating the Project Management structure
- Preparing Role Descriptions

What is the Team Manager responsible for with regard to the Organization?

- Managing Project Team Members
- They can advise on the selection of project team members

What is Project Assurance responsible for with regard to the Organization?

- Advising on the selection of project management team members
- Advising on Stakeholder Engagement
- Ensuring the Communication Management Strategy is appropriate and the planned communication activities actually take place.

6.18 Foundation and Practitioner Exam

Foundation Course & Exam

- Get an understanding of this chapter, especially the team structure. Who is responsible for the project, the Communications Management Strategy, and Roles & Responsibilities
- You need to be able to answer 66% of the Learn Thru Questions

Practitioner Course & Exam

- You need to know all areas of this chapter, with special attention given to the Project Organization, Project Assurance, Roles & Responsibilities and Stakeholder Engagement
- Suggest that you create a sample two-page Communication Management Strategy document for a project that you have worked on. This will help you remember this in the future.
- You need to able to answer 90% of the Learn Thru Questions

6.19 Learn Thru Questions

Try and answer the following, these are taken from the Learn Thru Questions audio course. Check the answers in the Learn Thru Questions document available on our site: You can also listen to these questions and answers (use the **LTQ audio course**)

Q01: What is the purpose of the Organization Theme and what information does it provide? (**Tip:** Use Accountability and Responsibilities)

Q02: Fill in the blank: A PRINCE2 project is based on a Customer / <blank> environment.

Q03: What is meant by the term “Corporate or Program Management”? Why do we use this term?

Q04: How many levels of management are seen in a Project Management structure and a Project Management Team?

Q05: Finish this sentence: “PRINCE2 places projects responsibilities into _____.”

Q06: Name two Roles that can be shared with more than one person.

Q07: Give an example of 2 Roles that can be assigned to only one person.

Q08: Name the 3 primary categories of stakeholders that must be represented in a project if the project is to be successful.

Q09: Which level of the Organization is outside the Project Management Team?

Q10: What 2 things are the Corporate or Program Management responsible for in relation to the project? (**Tip:** One of them is done before the project starts and the other is the very first activity in the Starting Up a Project Process.)

Q11: Name the 3 Levels of management in a Project Management Team and the Role that is responsible for that level.

Q12: Which role is responsible for the Project on a day-to-day basis?

Q13: Which roles are responsible for delivering the projects products to a certain quality, and within a specific timescale and cost?

Q14: Name the 3 Roles in the Project Board. Which roles can be assigned to more than 1 person?

Q15: Who or what has the following duties?

- accountability for success or failure of the project
- providing unified direction to the project and Project Manager
- providing the resources and authorizing the funds for the project
- providing visible and sustained support for the Project Manager

Q16: Which Role is to ensure that the project is focused on achieving its objectives and to deliver a product that will achieve the forecasted benefits? This role also gives a single point of accountability for the project.

Q17: Which Role is normally responsible for designing and appointing the Project Management Team, including the Senior User and Senior Supplier Roles? (**Tip:** This is does not include the Team Leaders or the person who will create the products, but the management roles in the project.)

Q18: Which Role has the following responsibilities?

- Specifying the needs of the Users that will use the Project Products
- Liaising between the Project Manager and the Users
- Monitoring that the solution will meet the needs of the Users, especially in terms of quality and ease of use and against requirements

Q19: What is the Senior User responsible for with regard to benefits?

Q20: Which role represents the interests of those designing, developing, facilitating and implementing the project’s products, and also responsible for the quality of the products?

Q21: After a PRINCE2 project ends, can the Supplier be asked to provide support and maintenance for the products created during the project, or can this only be done by the customer?

Q22: What is the name of the Role that considers requests for change during the project and who decides who this role should be assigned to?

Q23: When would a Project Board decide to take on the role of Change Authority or assign it to a group?

Q24: In which document is the change requests and Change Authority process documented? This also includes information on who can act at the Change Authority, the change budget, and severity level of change that they can decide on.

Q25: Why should the Project Board be kept as small as possible? What is the advantage?

Q26: Give an example to explain why it might be necessary to exclude a person from an external supplier company from the Project Board and replace them with an internal person who will represent the supplier.

Q27: Which role runs the project on behalf of the Project Board? This role can never be shared.

Q28: The Project Manager is involved in all processes except for which one?

Q29: Which two roles does the Project Manager manage? (**Tip:** One of these roles may not be required in small projects and the other role can be taken on by the Project Manager or assigned to another person or group.)

Q30: List some reasons why the Project Manager may consider using Team Managers rather that managing the Team Members directly.

Q31: Can a Team Manager be higher in the organization than a Project Manager?

Q32: Which role provides the following services to the project?

- Administrative services, advice or guidance on the use of Project Management tools.
- Responsibility for Configuration Management and following the guidelines in the Configuration Management Strategy document.
- Supply Planning and or Risk Management services.

Q33: True or False: “Stakeholder Engagement is the process of identifying and communicating effectively with those people or groups who have an interest in the project’s outcome.”

Q34: Which document contains a description of each stakeholder type and defines how best to communicate with them, including frequency and the type of information they are most interested in?

Q35: Suppose that there was a project to build a large incinerator on the outskirts of a town. Can you name some stakeholders who would be interested in this project and which of these might not support the project?

Q36: Who is responsible for the following in the Organization theme?

- Preparing the Communication Management Strategy
- Reviewing and updating the Project Management structure
- Preparing Role Descriptions

Q37: Who is responsible for the following in the Organization theme?

- Providing administrative support for the Project Management Team

Q38: Who is responsible for the following in the Organization theme?

- Providing User Resources
- Defining & verifying User requirements & expectations

Q39: Who is responsible for the following in the Organization theme?

- Appointing the Project Manager if not done by Corporate or Program Management
- Confirming the appointments to the Project Management Team
- Approving the Communication Management Strategy document

Q40: Who is responsible for the following in the Organization theme?

- Managing Project Team Members
- They also advise on the selection of Project Team members

7 Quality

7.1 Introduction to Quality Knowledge

Let us take a look at what will be covered in this Quality Theme.

- The purpose of the knowledge in the Quality Theme e.g., what this chapter on Quality holds for you and your project.
- Definitions for terms such as *Quality*, *Scope*, *Quality Management System*, *Quality Planning*, *Quality Control* and *Quality Assurance*. This will enable you to understand and explain all of these terms.
- The PRINCE2 Approach to Quality, which is split into two parts: Quality Planning and Quality Control.
- Customers Quality Expectations and some good questions to ask to extract this information.
- How Acceptance Criteria is used & why you should think of a checklist when you think of Acceptance Criteria.
- Adding Quality information to the Product Descriptions.
- The Quality Management Strategy document, which defines how Quality will be carried out in the project. You will learn the type of information contained in this document.
- The Quality Register which is a diary of quality events that is kept up to date during the project. This is very important to learn, as it will help your overall understating of Quality.
- Introduction to Quality Control
- The PRINCE2 Quality Review technique, which is a Quality Inspection technique and includes the roles of Chair, Reviewer, Presenter and Administrator.
- And finally, the responsibilities of the different roles in the Quality Theme.

7.2 What happens in the real world?

Quality is something that project methods talk a lot about and it sounds great, but in reality, this is something that many Project Managers don't understand. Some companies have a Quality Management System in place that describes how Quality should be done in that organization, but most often, this can be for specific departments in the company and may be only suited to specific types of products. Therefore, other projects cannot make use of this Quality Management System.

Quality is difficult to define and many people do not know how to explain it in a simple way. For example, let's suppose the Sales Manager was asking for a CRM system and you asked him to define the requirements. You will normally receive a list of requirements, but then if you ask them *"What about quality?"* or *"What are your Quality Requirements?"* you would leave them speechless, which may not be a normal state for a sales manager.

Another point to note is that if you don't consider Quality at the start of your project, it is very difficult to end up with quality (a useable product). So Quality must be addressed at the very start of the project

The good news is that the Quality Theme in PRINCE2:2009 provides a solution for this. It describes how Quality can be defined, measured and controlled during the project.

7.3 The Quality Knowledge provided by PRINCE2

The purpose of the knowledge in the Quality Theme is to define and implement a system that will create and verify that products are fit for use. So the Quality Theme defines the PRINCE2 approach to ensure that products created during the project meet the expectations, and that the end-product can be used as intended.

If the quality of the products is not as expected, then the expected benefits that should be realized as a result of the project will not be achieved. The products must work as expected for the project to deliver the expected benefits.

You might remember that product focus is one of the principles of PRINCE2, which means that a project's products should be clearly defined at the start of the project. This includes the Quality criteria information, so that all project stakeholders have a common understanding of the products that will be created. For example, if you are creating a new can opener, some of the quality criteria might be:

- Stainless steel & plastic handle should keep their color for 20 years
- Dishwasher-proof
- Mechanical parts must open 35,000 of cans
- Easy to use

As you can see, the Quality criteria gives a lot more detail about the product. The planning would include the time and costs to ensure that the required Quality testing is done.

So the Quality Theme **provides a method to help specify the Quality, tests, how to get approved, and to facilitate the management of Quality during the project.**

The Quality Theme also covers the implementation of continuous improvements during the project; for example, looking for ways to improve efficiency in the management of the project, and how to create better products. As you can imagine, capturing and acting on lessons will have a big impact on improving quality.

7.4 Quality Lingo

Quality has its own terms and these terms can mean different things to different people. The terminology used by PRINCE2 comes mainly from ISO 9000 standard. So this topic will provide a definition for *Quality*, Scope, *Quality Management Systems*, *Quality Planning*, *Quality Assurance* and *Quality Control*.

Quality
Quality is generally defined as the total amount of features or characteristics of a product, such that it meets expectations and satisfies the stated needs. This might seem a little strange, but think about it for a moment. It is the same as saying that all features of the product have to work as expected for a given amount of time. Let me use the example of the can opener project. Think of the total amount of features or characteristics of the can opener, what a user might expect from the product, and how long they would likely expect it to last.

Scope
Scope is related to the scope of the plan, which is the sum of its products. It is defined using the product breakdown structure and the Product Descriptions. It can be clearly seen that Scope & Quality are tied together.

Quality Management
Quality Management is defined as the activities to direct and control an organization with regard to quality. Some of these activities are: (a) defining quality, (b) quality control, (c) quality assurance and (d) quality improvement.

So the key words are "organization and Quality Management," as Quality Management is focused on improving the Quality in an organization.

Quality Management Systems (QMS)
A Quality Management System is the complete set of quality standards, procedures and responsibilities for a site or organization. Most bigger companies have a QMS in place, so a good first question to ask is *"Do you have a Quality Management System?"* and *"Can this be used on this project?"*

What do you think happens in the following case? The supplier is an external company and the customer has their own Quality Management system. Which Quality Management system would be used from the supplier to customer?

Normally, the project would most likely use the Quality Management system from the customer, but of course, there are cases where the Quality Management system from a supplier may be used.

Quality Planning
To control Quality, there must be a plan to show how it will be controlled. Let us take the example of the can opener again. The Quality plan will include defining the products that make up the main product, their Quality criteria, methods used to check Quality (e.g. a machine that can age the product so as to check how the product will work after 25 years), **acceptance criteria** and responsibilities, such as personnel responsible for checking and approving.

Quality Control
Quality Control focuses on the techniques and activities to inspect & test products. This would also include looking for ways to constantly improve Quality and remove less-satisfactory performance.

Quality Assurance
This is like Project Assurance but the focus is on Quality in the *organization* and not just quality related to the *project*. It is to make sure that the planned Quality activities are done.

Quality Assurance
- provides a way to get an independent review of the Quality process,
- checks to see that it complies with company Quality standards, and
- ensures that Quality processes are in place.

Quality Assurance activities are outside the scope of PRINCE2, as it is the responsibility of the Corporate or Program Management organization. Quality Assurance provides the project's stakeholders with confidence that the requirements can be fulfilled.

7.5 Introduction to the PRINCE2 Approach to Quality:

The PRINCE2 approach to quality has two parts: **Quality Planning** & **Quality Control**

Quality Planning
- Quality starts with identifying all the products of a project that the project wants to control. Remember that PRINCE2 is focused on the products from the start of the project.
- The next step is to write a Product Description for each product, which includes Quality criteria, how the products will be assessed, Quality methods to be used to design, develop & accept the products, and the responsibilities of the people involved.

Quality Control
- Quality Control implements & tracks the Quality methods used during the project

This PRINCE2 approach to Quality is represented in the diagram **"the quality audit trail**"

So just remember that the PRINCE2 approach to Quality is in two parts: Quality Planning and Quality Control

Some people think that Quality is just something that you check during the project, but this approach shows that Quality is *planned* from the beginning of the project.

7.6 Part 1: Quality Planning Introduction

Imagine a project that deals with building an apartment block. The customer is a mid-size property developer. You as the Project Manager would need to be in agreement with the people who represent the customer, the supplier and other stakeholders (e.g., architects) and have an idea of the quality of the finished apartment block, as well as how Quality will be controlled during the project.

The purpose of Quality Planning is to:

- Agree on the overall Quality Expectations with the Project Board:
  - o Document the Quality criteria (e.g., type of insulation, quality of material used in the building, and type of lighting fixtures).

- o Document how the Quality Criteria will be checked (e.g., using independent building inspectors, etc).
- o **Note:** The Project Board will judge the project's product -- which in this example is the apartment block – on satisfying all agreed criteria.

- Communicate these agreements with all stakeholders:
  - o Everyone in the project must have a common understanding of what the project will achieve and the products the project will produce.
- Establish how Quality can be controlled during the project:
  - o Set baselines and tolerances for each product (e.g. wall insulation should be grade 5 with +- 10% tolerance; kitchen fittings should last 18 years +- 5% tolerance, etc.)

As you can imagine, if these topics are not discussed up front, it can make for a very exciting project with everybody having their own idea on the finished product.

The following questions should be asked in Quality Planning (think about the apartment block project for each of these questions):

What are the customer's Quality Expectations?

What is the Acceptance Criteria that the Project Board will check at the end of the project to make sure the project has delivered the expected quality?

7.6.1 Quality Plan Steps – Quality Audit Trail

The first Quality Planning steps as shown in the diagram below are:

1. **Gather the customers Quality Expectations**: this is very general, high level
   - Key Requirements for the main product (Project Product) to be produced
   - Identify standards that must be meet and the Quality Management System to use.
   - Measurements than can be used assess quality (speed, size, noise, etc,,)
   - E.g. Think of a Laptop PC description a web site
2. **List the Acceptance Criteria**: Adding the customer's Quality Expectations and Acceptance Criteria to the Project Product Description (this criteria is measurable and prioritized)
   - Total building insulation must be grade 4 (Yes/No)
   - Yearly maintenance per apartment must be under €1,200 (Yes/No)
3. **Write the Project Product Description**: The following Quality-related data is also added to the Project Product Description:
   1. The Project level tolerances – tolerance for the main product: e.g., outside noise-level has to be lower than a certain value plus/minus x%
   2. Acceptance method: stating how Project Product will be accepted
   3. And acceptance responsibilities – defining who will be responsible for accepting
4. **Create the Quality Management Strategy** document can be created. These documents define the agreed strategy for Quality in this project or, in other words, the rules of engagement for Quality during the project. More about this later.
5. **Write Product Descriptions** and include the Quality information such as;
   - Quality criteria for each product & quality tolerances,
   - Quality method, (i.e., how to carry out quality checks after product is created)
   - Quality responsibilities for creating, quality-checking, and approving the product

   So this will be done for all the products that make up the main Project Product:
   - Doors, walls, windows and fixtures.

   Product-Based Planning will provide a list of all products, and then you add the Quality information to each product description.

6. **Lastly, set up the Quality Register**. At first, it will be empty. Just imagine an empty spreadsheet with the following columns: Product ID, Product Name, Producer, Approver, Target Review Date, Target Approve Date, etc.

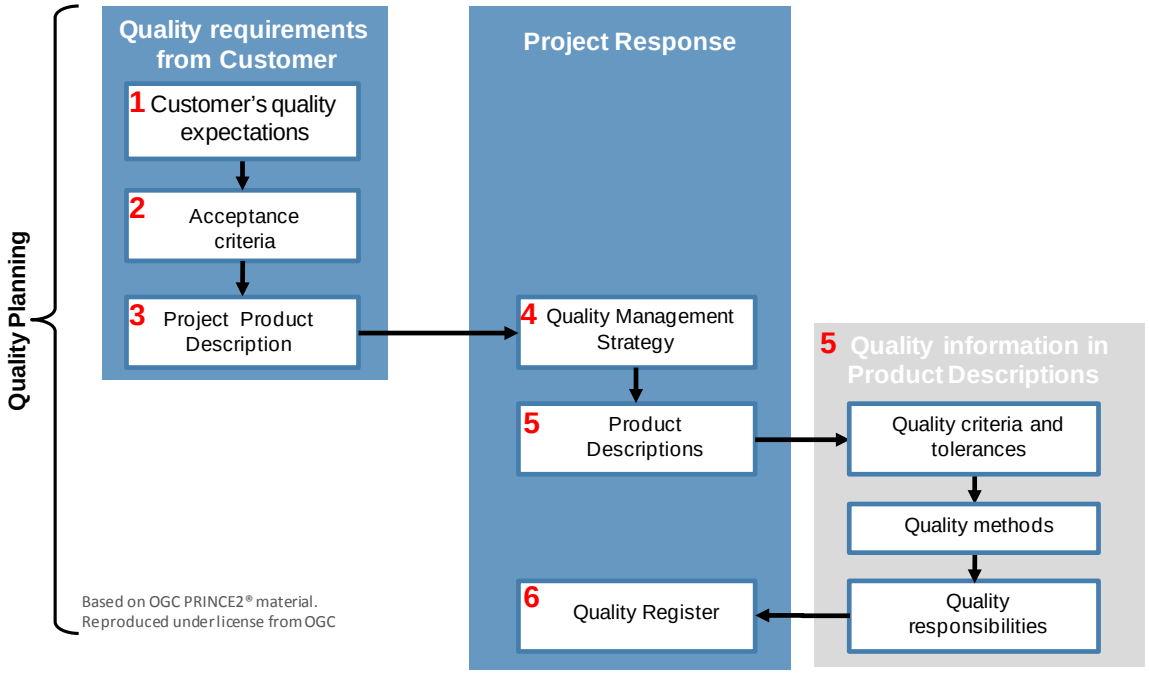


Fig 7.1 Quality Planning – Audit Trail

7.6.2 The Customer's Quality Expectations

It is normally not an easy task to extract the Quality Expectations of a product from a client and the answers you get can be very vague, but this must be done and must be done as early as possible in the project so they can be listed in detail in the Project Product Description.

Some companies may be in a rush to get the product out or they may have budgetary issues so they think they can save on Quality. I have even seen projects where there funds were scarce at the start of the project, but once the product is out and customers are having issues, then lots of funds are available to start fixing. This approach is always a lot more expensive.

Let us look at some good questions to ask to get the customer focused on Quality:

- What % of features should work when product is launched, and what is the budget for critical issues, fixes, recalls etc.?
- What will be the cost to the company if the product cannot be used as expected at the end of the project (e.g., fines, keeping old product in service, etc.)?

As you can imagine, this should help the customer to see the importance of Quality.

Some good questions to ask to uncover the Quality Expectations are:

- What are the key requirements for the Project Product (Project Product refers to the *main* product that will be produced)?
- What standards need to be applied to achieve the Quality requirements? (**Note:** For the building, there could be building code standards.)
- What are the measurements that can be used to assess whether the products meet the Quality requirements? For example, with the apartment block a building surveyor can check the structure, and another specialist can be used to check heat-loss and insulation.

As you can expect, the higher Quality requirements will have an effect on the time and cost of the project. For example, the client may want a high-standard and low-energy apartment block. This will require triple-glazed windows, thicker insulation and all fittings with a guarantee of 20 years.

Important things to remember on Customer's Quality Expectations:

- They must be listed in detail and with tolerance levels.
- They should be prioritized, starting with what the client finds most important.
- It is good Project Management to review the customer's Quality Expectations to make sure the project can meet them.

Prioritize technique: MoSCoW: This will be discussed later.
It stands for 1) **M**ust have, 2) **S**hould have, 3) **C**ould have, 4) **W**on't have for now
You can also use: High, Medium, Low or Not Required but MoSCoW is better

Example of the Customer Quality Expectations for an apartment block project

Customer Quality Expectations	MoSCoW	Measure	Tolerance
Elevator – Safety : Meet EC safety standard	M	EC 34575	None
Elevator – Usable for blind people	M	Check	None
Outside noise in all apartments – Standard : XC22	M	DB meter	None
All light fittings with a guarantee of 25 years	S	Warranty	-+10%
Wall insulation should be R-11	S	Inspection	R11 to R12
All window insulation : R15	S	Inspection	R15 to R17
Building structure meets City code BC4565f	M	Inspection	None
Average maintenance per apartment per year < €1,500	M	Report	-+ 5%
Cost of project €800,000	M	Report	-+ 5%
Finished by 1st October 2012	S	Date	-+ 2 weeks

As you can see from this example, the Customer Quality Expectation "Building Structure" can involve a number of different checks, and you can decide to list them separately or like I have done in this example.

7.6.3 Acceptance Criteria

The Acceptance Criteria is a prioritized list of attributes that the Project Product should have when complete. This is first agreed between the Customer and Supplier in the very first process, the Starting Up a Project process.

Think of a table in Excel or Word when you think about Acceptance Criteria, see below

- Attribute to be accepted
- Prioritize status, such as "must have," "should have" & so on
- Accepted status: Yes / No

Once the Acceptance Criteria list is complete, it will become part of the Project Brief.

The Project Product Description is written around the same time as the Acceptance Criteria and both can be updated during the Initiating a Project process. This Acceptance Criteria will be baselined with the rest of the Project Initiation Documentation and can only be changed with approval from the Project Board.

Here is an example of some of the Acceptance Criteria that could be used for a Web Site project. Notice, there are just three columns.

Acceptance Criteria	MoSCow	Yes / No
Users able to use 90% of functionality without need for help	M	
Support costs lower than €5,000 per year	M	
Appearance to match the approved design layout	M	
Maintenance of all pages can be done by existing support person	S	
Auto-password recovery, without need for any human intervention	M	
Secure data area for registered partners	M	

As mentioned, the Acceptance Criteria should also be prioritized and the MoSCoW technique can be used to do this by separating requirements into 1) Must have, 2) Should have, 3) Could have & 4) Won't have for now.

Towards the end of the project, the customer will check that all the Acceptance Criteria have been met before the project can be closed. It is therefore a good idea to have agreed in advance on the acceptance methods that will be used. For example, with the Web Site project:

- A person from the marketing department can check the design & style & sign off
- Ease of use can be done by monitoring 10 actions for a user
- Security person will check both *secure area* and *forget-password* process

7.6.4 The Project Product Description

Don't confuse the Project Product Description with the normal Product Descriptions, the Project Product Description is a description of the main product that will be produced by the project. The Project Product Description is created in the Starting Up a Project process. It becomes part of the Project Brief and may be refined in the Initiation Stage when creating the Project Plan. After this, the Project Product Description is subject to change control, as it is baselined at the end of the Initiation Stage. The Product Descriptions are created in the IP stage as part of the planning activity.

The Project Product Description is used by the Closing a Project Process to help verify that the project has delivered what was expected and that the acceptance criteria have been met. A good example of a Project Product Description that I like to use is the information that is provided for a laptop computer on a computer web site. There will be an overview description, features, specifications and guarantee information. See the websites of Dell, HP or Asus for an example. As you can see it does not have to be 100 pages.

According to the PRINCE2 manual a Project Product Description should include

- The purpose of the main product, i.e., what the project must deliver to gain acceptance.
- Its composition, i.e., the set of products that will be delivered during the project that make up the main product.
- Customer's Quality Expectations
- Acceptance Criteria, Acceptance Methods and Acceptance Responsibilities
- Project-level quality tolerances

7.6.5 Project Product Description Example

The best way to explain this is with an example of a product that most people are familiar, so I will choose a MP3 player: So a UK technology company wants to bring out a new killer small simple MP3 player that they hope will compete very well with the current best-known brand.

Item: MP3-01
Title: Kick-Ass Device (KAD)

Purpose
The purpose to create a high-end, stylish, light, thin and easy-to-use MP3 player for young people. It will include all normal features that are expected from an MP3, plus a number of unique features like Android-based, 2.5" touchscreen, expandable, Bluetooth headphones, and with a 2-year warranty. The RRP should be €120, which is about 25% more than current best-selling model on the market with a manufacturing cost of €60

Composition
There are two main products, the MP3 player and the Bluetooth headphones

MP3 Player Composition:

- Android based MP3 Bluetooth player with support for Android Applications
- 8GB to 16GB with SD slot to support further expansion

- 2.5 touchscreen / scratch-proof
- Lithium-Ion battery
- Standard USB connection for data transfer and charging
- Processes ARM11 620 MHz
- Language Support: 23 languages

Bluetooth Stereo Headphone

- Stereo Bluetooth headphones with microphone
- Bluetooth version: 2.1

Derivation / Source From

(List of all items and products that will be used to create the final product but will not be part of the final product.)

- MP3 requirements (dimensions, speed, battery performance, Bluetooth specs)
- Headphone requirements

Development Skills Required

- Design: Experience in designing electronic devices (in-house)
- User Interface: Experience in designing UI's for media players (outsource)
- Technical Design: Experience in building portable electron devices (outsource)
- Testing: Experience in testing electron devices (in-house)
- Etc.

Customer's Quality Expectations

Customer Quality Expectations	MoSCoW	Measure
Average Use – All Parts - 5 Years (Accelerate & Aging Equipment will be use) - External Company	M	Inspection
Easy to use for first-time users (Survey 1000 persons)	M	Survey
Support Android-based apps (no GSM or GPS support)	M	Inspection
Support integration with PC, Linux & Apple PCs	M	Inspection
Expandable SD Slot to support 8-, 16- & 32-GB cards	M	Inspection
2.5 " Screen	M	Inspection
Battery Life – Normal user - 36 hrs	M	Machine
Battery Quick-Charge - 80% in 30 minutes	S	Machine
USB Connection for both PC connection & charging	M	Inspection
Scratch-proof Screen – Class 4	M	Inspection
Bluetooth distance -13 meters	M	Inspection
Bluetooth v2.1 stereo	M	EC4563
Dimensions 60mm x 60mm x 4 mm (H*W*D)	S	Inspection
Headphones: Battery life - 12 hrs play	S	Inspection
Headphones: with Microphone (use with phone)	M	Inspection
Headphones: Bluetooth range - 13 meters	M	Inspection
Etc.		

Acceptance Criteria

Acceptance Criteria	MoSCow	Yes / No
Unit manufacturing costs – < €50	M	
Project Cost to develop and test product : < €500k	M	
5 Years – Average Test – Certificate from Test Company	M	
Easy to use – with 90% of users	M	

Support Android Applications (no GSM or GPS support)	M	
Support for Windows, Apple and Linux PCs	M	
Expandable SD Card Slot – support 8-, 16-, 32-GB cards	M	
2.5" touchscreen display	M	
Battery Quick-Charge 80% in 30 minutes	S	
Etc.		

Project Level Tolerances

Project Level Tolerances	Measure	Tolerance
Project Time - 10 months	Inspection	+-4 weeks
Average Use – All Parts - 5 Years (Accelerate & Aging Equipment will be used) - External Company	Inspection	+-6 months
Unit manufacturing costs – < €50	Inspection	+-5%
Ease of use – 9 of out 10 persons	Inspection	90%
Project Cost to develop and test product : < €500k	Measure	+-10%
Weight : 28.3 grams	Measure	+-10%
Language Support : 23 languages	Check	None
Dimensions 60mm x 60mm x 4 mm (H*W*D)		+-7.5%
Etc.		

Acceptance Method

- All Acceptance Criteria have to be measured, inspected and approved, and this proof will have to be given for each of Acceptance Criteria
- All documents will be made available to Product Development Manager, S. Jones during the project by the Project Manager

Acceptance Responsibilities

- Project Manager will collect all inspection, survey and other documents and hand them to the appropriate person(s)
- The Executive will confirm Project Costs and Manufacturing unit costs
- Senior User will be responsible for all other Acceptance Criteria

7.6.6 The Quality Management Strategy Document

A Quality Management Strategy is a document and a plan of action that defines the Quality requirements and the Quality Control method for all the products in the project. This document also confirms how the Quality systems & standards from the customer and supplier are going to be applied in the project. In other words, the Quality Management Strategy document defines how Quality will be done in the project.

This document is created at the Initiation Stage with the other strategy documents and becomes part of the Project Initiation Documentation

The Quality Management Strategy answers the following questions:

- Which Quality Management System will be used, i.e., from customer, supplier or a mixture?
- What standards will be used?
- What tools and techniques will be used?
- How will Quality Assurance be done?
- Who is responsible for documenting the customer's Quality Expectations and Acceptance Criteria?

- Who is responsible for Quality Assurance, Approving the Quality Management Strategy, Confirming Acceptance of the Project Product?
- What records will be required and where will they be stored?
- How will the timing of Quality activities be done?

7.6.7 Product Descriptions

The Product Descriptions should be created for all the products as part of the planning activities and before the Project Plan can be completed. **Note:** This is not optional.

How detailed should these Product Descriptions be?

There is no need to go into lots of detail, and existing standards should be referred to where possible. For example, in a new laptop computer project, you could say that the network adapter will support the Wi-Fi 802.11 N without having to document this standard in detail.

The typical content of a Product Description is well-documented in Appendix A of the manual. It has such headings as:

- Identifier: Unique name
- Title: Name by which the product will be known
- Purpose: This states who needs the product, why they need it, and what it will do.
- Composition: List of parts that the product will be made up of.

There are more headings and then there are five quality-related headings, which are listed below. I will explain each of them and give an example to help explain.

- Quality Criteria
- Quality Tolerance
- Quality Method
- Quality Skills required
- Quality Responsibilities

Quality Criteria

- Quality criteria are a description of the product specifications that the product must meet. This includes all the quality measurements that will be used to check the product when created. Let's use for an example the keyboard of a laptop computer. Think of the quality measurements that will be used to check the keyboard, such as stress test, color-fading, letter-fading, key-pressing noise, layout, power usage. You would need to have measurements for all of these. These are Quality Criteria.

Quality Tolerance

- Quality Tolerance is similar to Quality Criteria, except here you define an acceptable range of values. For example, the letters on the keys cannot lose their color appearance under normal use for 10 years ±5%.

Quality Methods

- These are the activities that will be used to check and approve Quality for the products – in other words, the methods used to check Quality. For example, with the laptop keyboard, you could use a test machine that could simulate normal use of 20 years in a lesser number of days.
- Perhaps you have been to an IKEA shop and seen the machines that test the furniture.

Quality Skills Required

- Provide an indication of the Quality skills required to carry out the Quality tests.

Quality Responsibilities

- Here we define who does what, i.e., who will produce the product, who will review it and who will approve it. These Roles are known as: Producer, Reviewer and Approver.

7.6.8 Quality Register

The Quality Register is a diary of the Quality events that take place during the project, such as workshops, reviews, testing and acceptance. At first, the Quality Register will be empty and the Project Manager can start to add the data towards the end of Quality Planning. Most Project Managers will use a spreadsheet for a Quality Register.

It is easy to remember the structure of the Quality Register if you remember the three roles of Producer, Reviewer and Approver.

Fig 7.2 Product Roles listed in the Issue Register

Here is an example of a Quality Register and, as you can see, you have columns for Producer, Quality Reviewer, and Approver. There are also Target & Actual columns for both Review and Approval dates.

Quality ID	Product ID	Product Name	Quality Method	Producer	Reviewers	Approver	Target Review Date	Actual Review Date	Target Approval Date	Actual Approval Date	Result
1	11	Wall Insulation	Inspection	JV	WP	RT	2/10	10/10	10/10	11/10	Pass
2	12	Heating Furnace	Inspection	TM	TL	RT	21/10	21/10	27/10	30/10	Fail
3	12	Heating Furnace	Performance test	MP	TL	RT	21/10	21/10	27/10	30/10	Pass
4	13	Kitchen Fittings	Inspection	AM	OH	BD	5/11	7/11	14/11	18/11	Pass
Based on OGC PRINCE2® material. Reproduced under license from OGC											

Fig 7.3 The Quality Register

I will list all the columns in the Quality Register and give an example using the Elevator product in the apartment block project.

- Product ID: Just a product tracking number in the project (ex: 124).
- Product Name: A common name to refer to the product (ex: “Elevator”).

  Quality Method: Describes how testing will be done. This will be Inspection for the Elevator.
- Producer: Who produces or installs the product, such as Otis (an Elevator Co.).
- Approver: Who Quality-approves the product (ex: “John from Safety Company”).
- Target Review Date: When the product should be reviewed (ex: “June 20.”).
- Actual Review date: Actual date that Review happened.
- Target Approve date: When Project Manager will get Approval (ex: 1 week later).
- Actual Approve date: Actual date when Project Manager received Approval.
- Result: This can be *Pass* or *Fail*.

As you can imagine, the Quality Register makes it easier for the Project Manager to follow up on Quality during the project, as they can check whether the Actual Target Review date and Actual Approve date columns are filled in or not. This allows the Project Manager to control Quality.

Q: When do you think the Quality Register is created?

The Quality Register is first created during the Initiation Stage, as this is when planning is done, which includes the product breakdown structure, for example, and when the Quality Control activities are defined.

Full Quality Audit Trail

As the Quality Register contains all the Quality activities and is continually updated during the project to confirm that Quality activities have taken place, it provides a full audit trail for Quality.

7.7 Part 2: Quality Control Introduction & Quality Methods

What is Quality Control? Quality Control is carrying out the activities to control Quality as defined in the Quality Management Strategy. There are there parts to Quality Control, and I will explain each of them:

- Carrying out the Quality methods: Quality Review Techniques will be used
- Maintaining Quality and Approval records
- Gaining acceptance & pass Acceptance Record to the customer

Think about the columns in the Quality Register; it's the same information.

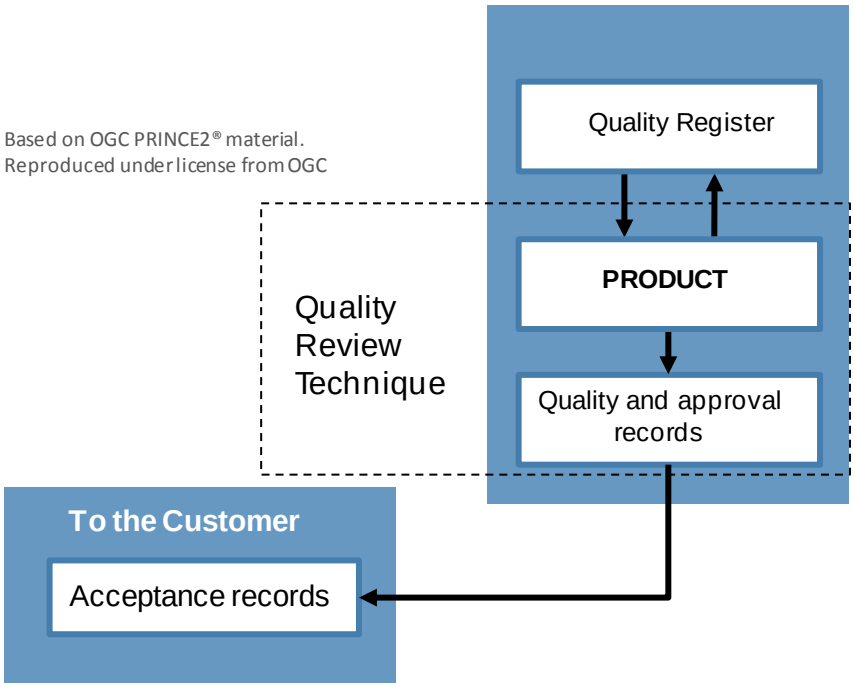


Fig 7.4 Quality Control

Quality Methods

There are two types of Quality methods: (1) In-Process & (2) Appraisal method.

The In-Process method allows you to detect flaws earlier, as the products are tested while they are being developed. Examples include unit testing in software, integration testing, checklists and quality inspections. In the new laptop project, integration tests will be done to make sure the different products work together.

Appraisal Method: This involves testing the finished product and will depend on the type of product you are creating. In the new laptop project, some tests can be done on the finished product, which could include a full software diagnostic, shaking the device, and so on.

Now let us look at the Elevator product:

- The Technician who installs the elevator could do an In-Process test to check different parts of the elevator as it is being installed.
- The Safety persons will use the Appraisal Method, as they will look at the finished product.

To help with the inspection process, PRINCE2 provides a technique known as “The Quality Review Technique,” and this uses the Quality information from the Product Descriptions.

7.7.1 Quality records, approval records and acceptance records

I will introduce you to three types of records: The Quality records, Approval records and Acceptance records. The names of these records tell you the kind of information that is recorded.

Quality Records

Quality Records provide evidence that each product has met its requirements as specified in its Product Description. These records support the entries made in the Quality Register, as the Quality Register just provides a very high-level overview of the activities. For example, these Quality Records provide evidence or proof of (1) who approved what, (2) the reports and audits that have taken place and (3) audit reports to show that products have met specific Quality criteria.

Approval Records

These records show that products have been approved. A good example is a Quality certificate document. Approval records can also be minutes of a meeting, email, a memo, a signed document or an external Quality certificate.

Acceptance Records

Products that are approved during the project can have their ownership transferred to the customer so that the customer accepts the products. The Acceptance Record is proof that this has taken place

At the end of the project in the Closing a Project process the Project Manager must confirm to the Project Board that all products have been accepted and would therefore use these acceptance records.

7.8 The PRINCE2 Quality Review Technique

The PRINCE2 Quality Review technique is a Quality Inspection technique. It has defined roles and a specific structure to follow. The purpose is to inspect and ensure that a product is complete, that it respects the customer’s Quality standards and meets the Quality criteria listed in the Product Description.

Note: This technique checks if the product is complete and meets all quality criteria.

It does not include Product Approval, as the person listed in the Quality Register will not sign off until they see the product has been complete. After this, you can say the product is complete and is therefore baselined.

The Quality Review technique has four specific roles. The roles are:

- Chairperson
- Presenter
- Reviewer
- Administrator

I will explain each so that it is easy to remember.

- Chair: This role is responsible for chairing the review meeting.

- Presenter: This role presents the products and represents the producers of the product.
- Reviewer: This role reviews the products, submits questions and confirms corrections or improvements.
- Administrator: This person provides admin support for the chairperson (e.g., taking minutes and recording results and next actions).

As these are roles, the minimum number of people involved in a Quality Review technique can be two: one person taking the chair & reviewer roles and another taking the presenter and administrator role.

How to prepare for a Quality Review meeting?

The followings tasks can be done to get ready for a Quality Review meeting:

- The chairperson will make arrangements for the review (invite, book room, etc.). They will also ensure that the product is ready for review.
- The presenter will distribute copies of the product to the review team with the Product Description.
- The reviewers can review the product against the Quality criteria in the Product Description and can also submit a question list to the chair ahead of the Quality review.
- The chair will send this question list to the presenter before the review meeting.

I would like to point out the following: The product can be reviewed and the reviewers can already give feedback before the Quality Review meeting. This can give time for the producer or presenter to address this feedback and prepare a response. This makes for a smoother & efficient Quality Review meeting.

How the Quality Review meeting is run?

Here is an overview of how a Quality Review meeting might be run

- Chair would coordinate the introductions.
- The presenter would provide a brief product introduction.
- Chair will invite each reviewer to ask questions about the product and if any further actions are needed. These are agreed and noted by the administrator.
- The presenter can provide a product walk-through. Again, any required actions are agreed and noted.
- Towards the end of the meeting, the reviewer will read back the actions and responsibilities.
- Lastly, the chair will decide if the product is complete, conditionally complete (means a few actions are yet required) or incomplete (another Quality Review meeting is required).

There are also some follow-up actions after the review such as:

- Carry out the actions that were agreed at the meeting and get these signed off.
- The Chair can then note the product as complete.
- The next step after the product is completed is to request approval for the product. This is usually a signature from the person listed as approver in the Quality Register.

To summarize, the purpose of the Quality Review technique is to inspect that a product is complete**,** that the product respects the customer's quality standards and meets the quality criteria listed in the Product Description, and to identify any actions that are still required.

7.9 Responsibilities

Here are some of the responsibilities relevant to the Quality Theme.

What is the Corporate or Program Management responsible for with regard to Quality?

- Provide details of the Corporate or Program Quality Management System. (They inform the project about the existing Quality systems in place.)
- Provide Quality Assurance to the project.

What is the Senior User responsible for?

- Provide the companies' Quality Expectations and Acceptance Criteria for the Project Product. This makes sense, as the Senior User is also responsible for the product specifications.
- Approve the Project Product Description and Quality Management Strategy. This could also be done by the Executive.
- They can also approve the Product Descriptions for key products.
- Provide acceptance of the Project Product.

What is the Executive Responsible for?

- They can also approve the Project Product Description & Quality Management Strategy with the Senior User.

What is the Senior Supplier responsible for?

- Provide resources to undertake supplier Quality activities.

What is the Project Manager responsible for?

- Document the customer's Quality Expectations and Acceptance Criteria. They will work with the Senior User on this.
- Prepare the Project Product Description with other persons involved in the project.
- Prepare the Quality Management Strategy document, which defines how Quality will be done in the project.
- Ensure that the Team Managers implement the Quality Control measures agreed in the Product Descriptions and Work Packages.

What is the Team Manager responsible for?

- Produce products consistent with Product Descriptions.
- Advise the Project Manager of the product Quality status.

What is Project Assurance responsible for?

- Advise the Project Manager on the Quality Management Strategy and on suitable reviewers and approvers.
- Assure the Project Board members on the implementation of the Quality Management System.

What is Project Support responsible for?

- Provide administrator support for Quality Control.
- Maintain Quality Register and the Quality Records.

7.10 Quality Summary

This is the summary of the Quality Theme. I hope you have enjoyed and understood this chapter. As you can see, I try to use examples when necessary and more accessible language than in the PRINCE2 manual.

You should now have a much better idea of the following Quality topics:

- The purpose of the information in the Quality Theme and how it helps you.
- Definitions for Quality terms such as Quality, Scope, Quality Management System, Quality Planning, Quality Control, and Quality Assurance so that you are able to explain these.
- The PRINCE2 Approach to Quality, which is split into two parts, Quality Planning and Quality Control.
- The Steps for Quality Planning, starting with agreeing on the quality expectations with the Project Board.

- Customer's Quality Expectations and good questions to ask to extract this information.
- How Acceptance Criteria are used.
- Adding Quality information to the Product Descriptions.
- The Quality Management Strategy document, which defines how Quality will be carried out in the project.
- The Quality Register, which is a diary of Quality events that is kept up to date during the project.
- Introduction to Quality Control.
- The PRINCE2 Quality Review technique, which is a Quality Inspection technique and includes the roles of Chair, Reviewer, Presenter and Administrator.
- And finally, the responsibilities of the different roles in the Quality Theme. This is a good summary that helps to understand the Quality Theme.

7.11 Foundation and Practitioner Exam

Foundation Course & Exam

- You will need a good understanding of this chapter, especially the Quality Planning and Quality Control steps. The Quality Register is central to all Quality activities, so I would suggest creating a sample Quality Register for an existing project.
- Also pay attention to the Quality Review Techniques and understand the different roles
- You need to be able to answer 66% of the Learn Thru Questions

Practitioner Course & Exam

You need to know all areas of this chapter and I would advise you to do the following exercises:

- Create a sample Project Product Description and add the Quality information
- Create a sample Product Description and add the Quality information.
- Create a sample Quality Register
- You need to able to answer 90% of the Learn Thru Questions

7.12 Learn Thru Questions

Try and answer the following, these are taken from the Learn Thru Questions audio course. Check the answers in the Learn Thru Questions document available on our site: You can also listen to these questions and answers (use the **LTQ audio course**)

Q01: In your own words what does the Quality Theme do? (**Tip:** What does the information provided in the Quality chapter help to ensure?)

Q02: If the Quality of a product is not as expected at the end of project, the product is not fit for use. According to PRINCE2, what effect will this have on the Benefits?

Q03: In which document do you find the Quality criteria for each product created in the product?

Q04: What is Quality? Just answer in your own words.

Q05: What is Scope from a Quality point of view? (**Tip:** This is related to the Project Product scope)

Q06: What is a Quality Management System? Answer in your own words.

Q07: Name two of the tasks in Quality Planning. (**Tip:** The objective of Quality Planning is to plan how Quality will be done in the project. Quality is about the products that are produced during the project. So just name one or two of the tasks or steps in Quality Planning)

Q08: What is Quality Control? (**Tip:** Quality Control happens after Quality Planning.)

Q09: What is Quality Assurance?

Q10: The PRINCE2 approach to Quality is divided into two parts. What are they?

Q11: Quality Planning adds certain Quality-related information to the **Project Product Description** document. Name just one of the Quality-related headings in the Project Product description.

Q12: What has Quality Planning got to do with the Quality Management Strategy?

Q13: What are some questions that the Project Manager can use to extract the Customer's Quality Expectations? Let us use the apartment block as an example. **Note:** Any question that gets information about the product from the client is a good one.

Q14: What is Acceptance Criteria from the point of view of the Project Product? (**Tip:** It's closely linked to the Customer Quality Expectations and used at the end of the project)

Q15: When is the Project Product Description created (**Tip:** It becomes part of the Project Brief) and how is the Project Product Description used in the Closing a Project process?

Q16: Which document should include the following points?

- The purpose of the product, i.e., what the project must deliver to gain acceptance
- Its composition, i.e., a list of most of the products that will be delivered during the project)
- Customer's Quality Expectations
- Acceptance Criteria, Quality Method and the Quality-related responsibilities
- Project-level quality tolerances

Q17: Which document answers the following questions?

- Which Quality Management System will be used, from customer, supplier or a mixture?
- What Quality standards will be used?
- What Quality tools and techniques will be used
- How will Quality Assurance be done?
- Who is responsible for documenting the customer's quality expectations and acceptance criteria, approving the Quality Management Strategy, Confirming Acceptance of the Project Product, etc.
- What records will be required and where will they be stored
- Timing of Quality activities

Q18: When are all the Product Descriptions created for the project, and comment on the level of detail they require?

Q19: Which management product has the following Quality headings in PRINCE2?

- Quality Criteria
- Quality Tolerance
- Quality Method
- Quality Skills required
- Quality Responsibilities

Q20: What is Quality Criteria as defined in Product Descriptions? Answer in your own words.

Q21: What is Quality Tolerance as defined in a Product Description? Answer in your own words.

Q22: What are Quality Methods as defined in Product Descriptions? Answer in your own words.

Q23: What are Quality Responsibilities as defined in Product Descriptions?

Q24: What is the Quality Register & list some of the columns that you might expect to find in it?

Q25: The PRINCE2 approach to Quality is divided into two parts: Quality Planning & Quality Control: Which has the following activities

- Carrying out the Quality methods
- Maintaining Quality and Approval records
- Gaining acceptance

Q26: What are Quality Records? (**Tip:** The clue is in the name.)

Q27: What are Approval Records? (**Tip:** The clue is in the name.)

Q28: What are Acceptance Records? (**Tip:** The clue is in the name.)

Q29: What is the Quality Review Technique? What management document is used to compare the product? Answer in your own words.

Q30: Name two of the four roles in a Quality Review Meeting?

Q31: What is the minimum number of persons you can have at a Quality Review meeting?

Q32: Name one thing that the Chair role may do to prepare for a Quality Review meeting.

Q33: Name one thing that the Presenter may do before the Quality Review meeting.

Q34: Name two of the typical steps that might happen at a Quality Review meeting. (**Tip:** Just think of the four roles)

Q35: Who is responsible for the following in the Quality Theme?

- Providing the company's Quality Expectations and Acceptance Criteria for the Project Product
- Providing acceptance for the Project Product
- There is also one of the Approvers for the Product Description and Quality Management Strategy. (**Tip:** This is *not* the Executive.)

Q36: Who is responsible for the following in the Quality Theme?

- Providing details of the Corporate or Program Quality Management System
- Providing Quality Assurance

Q37: Who is responsible for the following in the Quality Theme?

- Documenting the customer's Quality Expectations and Acceptance Criteria
- Preparing the Project Product Description with other persons
- Preparing the Quality Management Strategy
- Ensuring that the Team Managers implement the Quality Control measures agreed upon in the Product Descriptions and Work Packages

Q38: Who is responsible for the following in the Quality Theme?

- Providing resources to undertake **Supplier Quality activities**

Q39: Who is responsible for the following in the Quality Theme?

- Producing products consistent with Product Descriptions
- Advising the Project Manager of the product Quality status

Q40: Who is responsible for the following in the Quality Theme?

- Advising the Project Manager on the Quality Management Strategy and on suitable reviewers and approvers
- Assuring the Project Board members on the implementation of the Quality Management System

Q41: Who is responsible for the following in the Quality Theme?

- Providing administrative support for Quality Control
- Maintaining Quality Register and the Quality Records

Q42: Quality Review Technique: Can the Reviewer see the products before a Quality Review meeting or do they have to wait for the meeting to see the products?

Q43: What are the 3 different statuses a product under review can have after a Quality Review meeting?

8 Plans

8.1 Introduction to Plans Knowledge

Let us take a look at what will be covered in this Plans Theme.

- The purpose of the Plans Theme and how the information in this chapter can help you.
- Introduction to plans and planning. Explanation of what a plan is and what is meant by planning.
- Three levels of a plan and how it compares to the management levels in a Project Team.
- Introduction to the different types of plans: the Project Plan, Stage Plan & Team Plan.
- Introduction to the Exception Plan, why it is used and when it is created.
- The PRINCE2 approach to Plans. It has seven steps; these steps are:
    1. Design the Plan: What the plan will look like and its format.
    2. Define and analyze the products: Using Product-based planning.
    3. Identify activities and dependencies: The activities to create the products.
    4. Prepare estimates: Estimate time and resources.
    5. Prepare the schedule: Put activities into a schedule & show sequence.
    6. Document the plan: Add narrative to the plan to explain it.
    7. Continue to analyze the Risks for each of these steps
- Product-Based Planning includes the following steps
    1. Write the Project Product Description: The description of the main product.
    2. Create the Product breakdown structure: List all products than need to be created.
    3. Write the Product Descriptions for each product.
    4. Create the Product Flow diagram: Show product flow and interdependencies.
- The Product Checklist, its structure and value to the Project Manager.
- And finally, the responsibilities of the different roles in the Plans Theme.

8.2 What happens in the real world?

Most project managers seem to look around to see how other project managers do their planning, and then they follow a similar approach, as they want to fit in with any standards that are used.

Project Managers who work in a Program Environment will be able to take advantage of how projects have been done in the past and get examples of how Project Plans are to be created. These standard plans can be a great help to Project Managers as other people on the Project Management team will be used to reading plans that have a similar format.

PRINCE2 might give the impressions that you need to know everything up front before you create the Project Plan and all Product Descriptions. This is possible with some projects but with many IT projects, a more relaxed approach is required and each stage can be an iteration. So the Stage Boundary process can be used to create the next Product Descriptions, as they cannot all be created at the start of the project.

One good thing to keep in mind is how you will communicate the Project Plan to the Project Board, as they are not interested in reading 20 to 30 page document. You could ask the Executive how they want to receive this status information, and how the data was given to them in previous projects.

My own favorite planning, tracking, reporting tool is the **product checklist**. This is easy to create, maintain, read and most important, it is a good way to communicate with stakeholders that need this information. You will find an example of a product checklist later in this Theme.

Also, one of the first things I do with planning is to try and get an idea of scope. It is very easy for a project to start off as a simple project, but when you start to draw out the requirements in a Product Breakdown Structure, it shows exactly what this so-called **simple project** involves. The Product

Breakdown Structure makes it easy to discuss the scope and requirements with the Senior User. Your opening comment can be *"This is how I see your requirements. Is this what you want?"*

We have seen few Project Managers using the Product-Based Planning technique, especially the Product Breakdown Structure technique, which is a pity, as it is very useful. Perhaps the main reason for this is the Project Managers don't get time to cover this in the training. Therefore, this manual includes a simple example and shows how you can use the indented list to help you get started. We will add more examples in the future on our web site. For both the Foundation & Practitioner exams, you just need to be aware how Product-Based Planning works.

Lastly, in some companies, a few Project Managers are put under pressure to say *Yes* to senior management and to commit to unrealistic deadlines. There are ways to deal with this. You don't have to say *NO*, but you could provide the persons who are requesting this change with a Change Request form (Issue Report). Help them fill in this form, if required, and add such information as the cost, time, etc., and then pass along this Change Request to the Project Board /Change Authority. So it is up to the Project Board/Change Authority to say *Yes* or *No* to this change request and not the Project Manager.

8.3 The Plans Knowledge provided by PRINCE2

The purpose of the information in the Plans Theme is to provide a framework to design, develop and maintain the Project Plans which are the Project Plan, Stage Plan, Exception Plan and Team Plans.

This Theme helps to answer the following questions:

- What is required?
- How it will be achieved and by whom?
- How best to go about creating the products?
- What will the steps be?
- How can Product-Based Planning be done
- What Quality has to be reached?
- How much will it cost?
- What will be the level of detail required for each plan?

Remember, without a Plan there is no control, so a plan is required for the project.

The very act of planning helps the Project Management team to think ahead and avoid duplication, omissions and threats. And remember, failing to plan is planning to fail.

8.4 Plans Lingo

A project plan answers these questions: Why, What, Who, When & How much

What is a plan?

Sometimes people think a plan is a Gantt chart, but it is much more than that. It is a document that describes how, when and by whom a specific target or set of targets is to be achieved. You might think the target is just to create the Project Product, but there will also be targets for time, cost, quality, scope, risk, benefits and, of course, products.

A plan must therefore contain sufficient information to show that these targets are achievable.

As you can imagine, the backbone for any project is the plan. It is created at the start of the project and continually updated during the project to show what has been realized so far and what is still left to do. The original plan could also be compared to the plan *during* the project or the plan *at the end of the project* to see how well the project is doing in relation to the original plan. The original plan can also be known as the first baselined Plan.

What is Planning?

Planning is the act or the process of making and maintaining the plan. The term *planning* is used to describe the actions used to create the plans and associated documents. In all projects, planning is essential. It must be done and is vital to the success of the project.

Without a plan, it will become very difficult to manage the six performance targets which are: Time, Costs, Quality, Scope, Benefits and Risk.

Sometimes the planning stage can be rushed, as there is pressure to get started creating the products. This could result in very poor plans being created. Poor plans will cause frustration, waste and rework. It is therefore essential to give sufficient time to planning at the start of the project.

8.5 Three levels of a Plan

It is often impossible to plan an entire project from the start, as you can only accurately plan in detail a short time in advance. This is called the planning horizon, i.e., as far ahead as you can see. It is therefore a good idea to have different levels of plans; PRINCE2 recommends three levels. Each level of plan is for a one of three different management levels, which are Directing, Managing & Delivering.

The three types of plan are: Project Plan, Stage Plan and Team Plans.

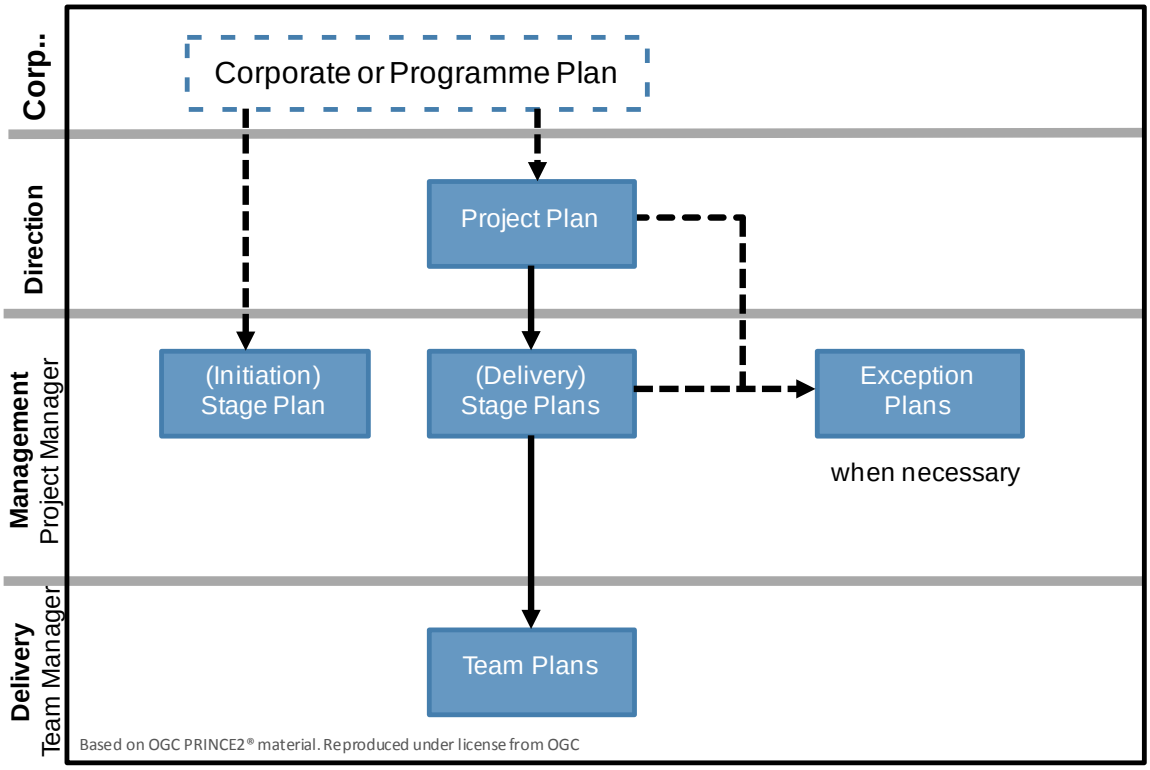


Fig 8.1 PRINCE2 Planning Levels

- The Project Plan is used at the Directing Level and therefore is used by the Project Board. It is created during the Initiating a Project process and is a high-level plan for the whole project. It will show the major products of the project, when they will be delivered and the associated cost. It is a major control document for the Project Board. The Project Plan is kept up to date by the Project Manager during the project.
- The Stage Plan is used at the Management Level. It is created for each stage (e.g., for a period of 2 months), and is used by the Project Manager on a day-to-day basis. It is much more detailed than the Project Plan and just focuses on one stage.
- Team Plans are used at the Delivering Level. They are created and used by the Team Manager in the Managing Product Delivery process. The focus is to plan the work that is assigned to the Team Manager in Work Packages

The other plans created during the project include the Benefits Review Plan, which covers activities during and after the project and, of course, the Exception Plan.

8.6 The Path to Planning

Here is a simple overview of the planning steps in a typical project. This will make it easier to understand when the plans are created and their value to the project. All Plans are explained in the following pages. I would suggest referring back to this diagram after reading each of the next few sections.

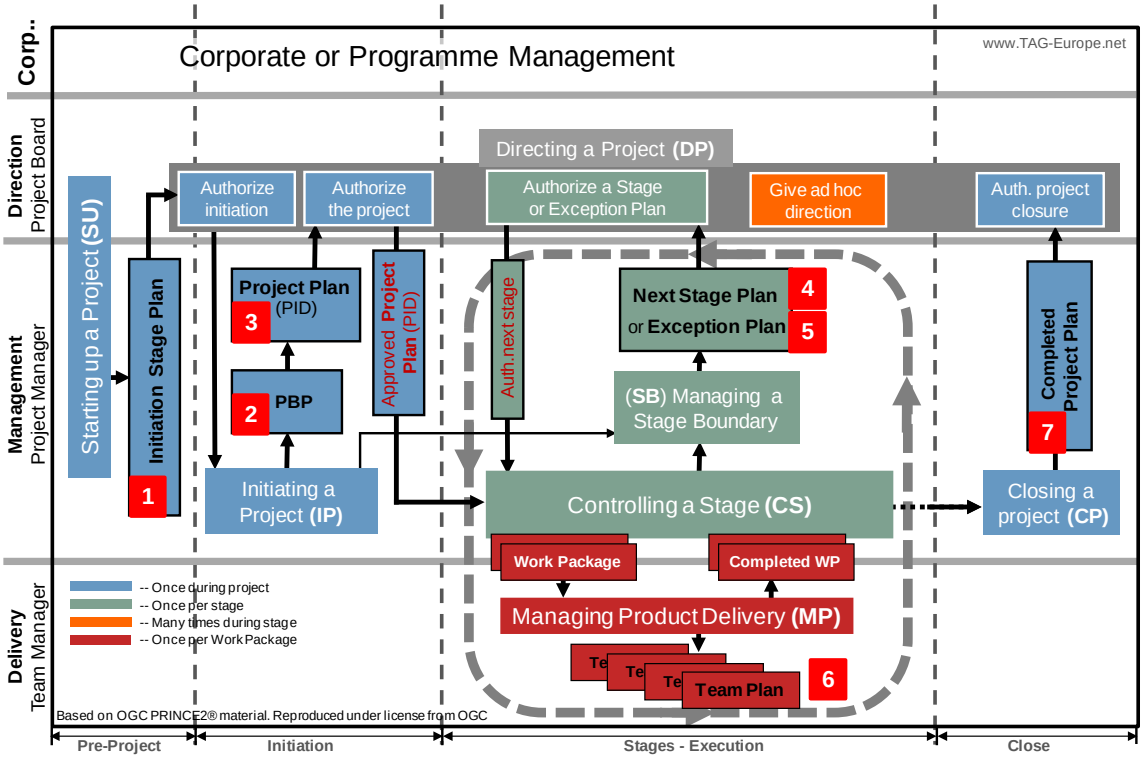


Fig 8.2 The Path to Planning

1 This is the Plan for the Initiation Stage, it is created by the Project Manager

2 This is Product-Based Planning (or Design and Analyze the Products) technique can be used in the SU, IP and SB processes. The following documents are produced by this technique if used in the SU process.

- Project Product Description (becomes part of the Project Brief)
- Product Breakdown Structure
- Product Descriptions
- Product Flow Diagram

The following documents are produced by this technique if used in the IP & SB processes

- Product Breakdown Structure
- Product Descriptions
- Product Flow Diagram

3 This is the Project Plan for the complete project; it is a high-level plan. It provides the Business Case, Cost & Timescale information, and needs to be approved by the Project Board. After approval, it is baselined so it can be used in the future to compare the original intent with the current situation.

4 Stage Plans are created by the Project Manager and are produced near the end of the current stage for the next stage. They plan what should happen on a day-to-day level for the next stage.

5 Exception Plans are plans that can be used to get the project or stage back on track if the project or stage goes out of tolerance. The Exception Plan picks up from where the current plan left off and goes to the end of the plan. The diagram above just shows an Exception Plan for a stage, but there can also be an Exception Plan at the project level.

6 Team Plans are optional and are created by the Team Leader. The objective is to plan the work that is defined in Work Packages and can be created at the same time as the Stage Plans.

7 At the end of the project, the Project Plan is updated by the Project Manager showing the full cost and timescale for the project, and also showing what has been delivered. The Project Board can use this to compare to the original baselined plan to see how well the project went compared to the original plan.

8.7 The Project Plan, Stage Plan and Team Plan

The Project Plan: What is a Project Plan?

The Project Plan is a high-level plan and is mainly used by the Project Board. It provides a statement of how and when a project's time, cost, scope and quality targets are to be achieved. The Project Plan shows the major products, activities and resources required for the project. Therefore the Project Plan provides the Business Case with information such as the projects costs and timescales, and it identifies the major control points, such as management stages.

How is the Project Plan used by the Project Board?

The Project Plan is used by the Project Board as a baseline against which to monitor the progress stage by stage. This means that the Project Board can check the status of the project at the end of each stage to see how well the project is progressing in relation to the original Project Plan.

The Stage Plan: What is a Stage Plan?

A Stage Plan is required for each stage in the project. The Stage Plan is similar to the Project Plan but a lot more detailed, as the Project Manager will use this plan on a day-to-day basis. Remember, the Project Plan is a very high-level plan, as it is for the whole project. Stages are referred to as Management Stages, as there is a Management decision taken by the Project Board at the end of each stage and before the start of the next stage.

Creating the Stage Plan: Each Stage Plan for the next management stage is produced near the end of the current management stage in the Stage Boundary process. (The correct term is the "Managing a Stage Boundary Process.") There are many advantages to using stages; one being that a Stage Plan can learn from previous stages and incorporate these lessons. For example, one resource was only 75% available in the last stage and this deficit would most likely continue, so it should be incorporated into the next Stage Plan.

Another advantage to using stages is that it allows a big project to be broken up into manageable chunks. Other project methods use sub-projects to break up larger projects.

Team Plans: What are Team Plans?

Team Plans are produced by the Team Manager to plan the execution of one or more Work Packages. Team Plans are optional, depending on the project's size, complexity and the number of resources involved in creating the products.

PRINCE2 does not provide a format for a Team Plan and Teams can be from different suppliers who might have their own plan format. The Project Manager can ask to review the Team Plan. The Team Managers may create their Team Plans in parallel with the Project Manager as they create the Stage Plan.

8.8 The Exception Plan – Introduction

An Exception Plan is used to recover from the effect of tolerance deviation. For instance, if during a stage, the Project Manager is forecast to go out of tolerance on cost by 15% -- or does so, then they must warn the Project Board about this deviation (also called "Exception"). The Project Board

will most likely ask for an update plan to complete the stage and replace the current Stage Plan. So the Project Manager will create an Exception Plan and if approved by the Project Board, will replace the current Stage Plan to allow the Project Manager to complete the current stage.

An Exception Plan is created at the same level of detail as the plan it replaces. It picks up from where the current plan stopped until the work is done. Exception Plans can be used to replace Stage Plans and Project Plans, but not Team Plans.

If a Team Manager forecasts that the Work Package will exceed tolerances, they will raise an issue to the Project Manager, who can then take corrective action by updating the Work Package or creating a new Work Package to complete the work.

8.9 The PRINCE2 Planning Steps and Design the Plan

PRINCE2 has a unique approach to planning. It starts with identifying the products required and only then considers the activities, dependencies and resources required to deliver the products. Most other project methods/frameworks start with the activities; perhaps you have heard the term Work Breakdown Structure. The PRINCE2 approach to Plans has the following 7 steps:

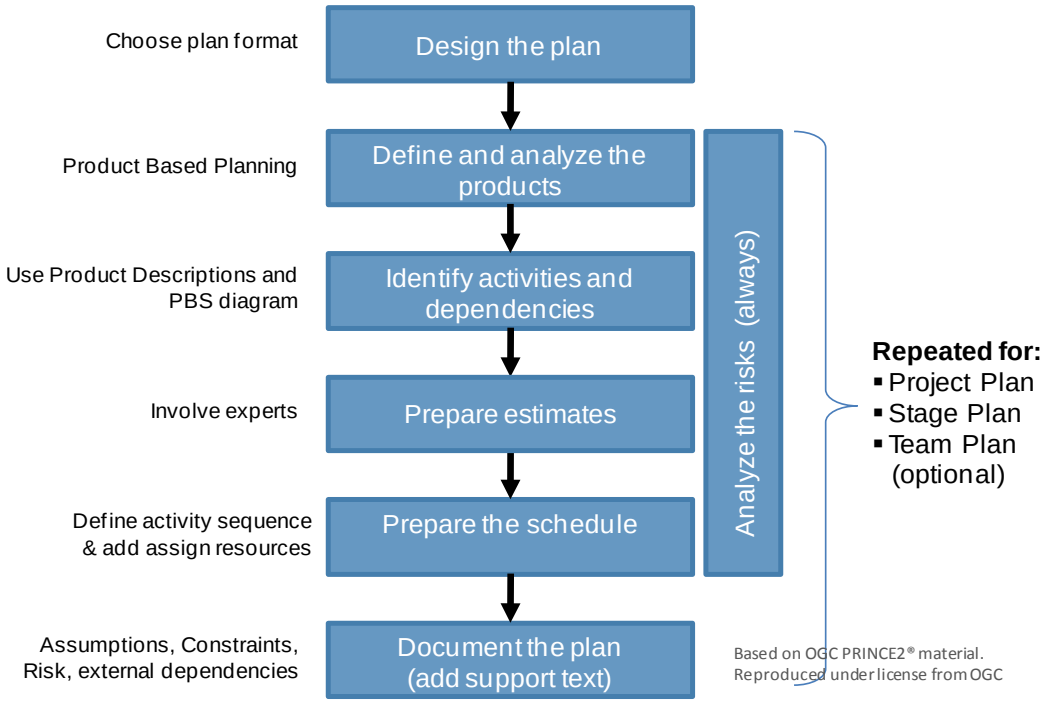


Fig 8.3 Planning Steps

1. Design the Plan: Choose style and format of plan.
2. Define and analyze the products: Using Project-Based Planning to do this, which is unique to PRINCE2.
3. Identify activities and dependencies: The activities to create the products.
4. Prepare estimates: Estimate time and resources.
5. Prepare the schedule: Put activities into a schedule and show sequence.
6. Document the plan: Add narrative to the plan to explain it. (add assumptions, lessons incorporated, prerequisites, plan introduction, monitoring and control, budgets, tolerances)
7. Analyze the risks : For each of the steps mentioned so far, new information on new and existing risks will be uncovered which will be followed up by the Project Manager.

These steps are taken to create the Project Plan, the Stage Plan and optionally, the Team Plan.

8.10 Step 1: Design the Plan – First of the 7 steps:

Design the Plan is the first of the 7 steps in the PRICE2 Approach to Plans

I think this heading should be Choose Plan Design, as that is mostly what Project Managers do in the real world. Each company might have their own style or requirements on how Project Plans should be created. For example, a company might use a mixture of MS Project, Word and Excel to document the plan, using specific templates and providing techniques for estimating, monitoring and reporting.

If the project is part of a program, then the program will most likely have a common approach to planning, which could then be adopted by the project, and there would be little work for the Project Manager. Mostly the Project Manager asks what the standard is and chooses this. So, as you can see, it is not too much work.

Some tips to consider for this step – Design the plan:

- Think of your audience and how they might access the data in a layout that they would be able to easily understand.
- You also need to consider which tools to use for things such as estimating, planning and monitoring.
- The choice of planning tools is not obligatory but it can save a great deal of time and highlight potential issues, such as overuse of resources and dependencies issues.

8.11 Step 2: Product-Based Planning Introduction

PRINCE2 uses the technique Product-Based Planning to identify and analyze the planned products. The four steps in Product-Based Planning are:

1) Writing the Project Product Description: Describing the main product.
2) Creating the product breakdown structure: Listing all products than need to be created.
3) Writing the Product Description for each product.
4) Creating the Product Flow Diagram: Showing product flow and interdependencies.

Product-Based Planning is an iterative process, as data can be continually updated and improved during the Initiation Stage.

Product-Based Planning has a number of benefits such as:

- Clearly identifying and documenting the plan's products and interdependencies.
- Clearly showing what the project involves; this avoids setting the wrong expectations.
- Involving users in supplying product requirements and thus increasing their support.
- Improving communications, as both the Product Breakdown Structure diagram and the Product Flow diagram provide a simple overview of showing what needs to be done and making it much easier to get feedback.

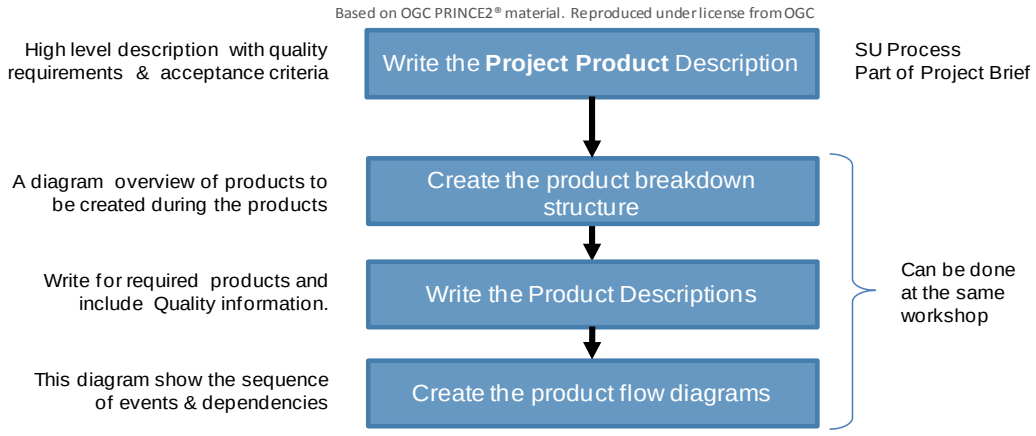


Fig 8.4 The Product Based Planning technique

- Clarifying what is in and out of scope; this helps to avoid “scope creep.” (*Scope creep* is when new requirements are added during the project, thereby increasing the scope of the project and often without an increase in budget to pay for it.)
- And finally, it is easier to gain a clear agreement on what needs to be produced.

8.12 PBP Step 1: Write the Project Product Description

The very first step in Product-Based Planning is to write the Project Product Description. This is a description of the main product that the project will produce (for example, the “Apartment Block”). We already covered this in the Quality Theme and learned that a detailed Project Product Description is very important to understand what needs to be produced by the project and to understand the required quality.

The Senior User is responsible for providing the information on the Project Product Description, but in practice, the Project Manager might do most of the work in preparing this document, as they will be used to it. They will consult with the Senior User and Executive in this regard. The Project Product Description should be as detailed and complete as possible and it can have the following format as described in Appendix A of this PRINCE2 manual:

Project Product Description	
Identifier:	A unique key (used by Configuration Management)
Title:	The Project Name (e.g., Apartment Block).
Purpose:	What is the purpose of the product? (For example: *To build high-quality apartment block with 8 x 2 bedroom apartments to rent out.*
Composition:	A description of the major products to be delivered by the project (such as a description of the apartments).
Source Products:	List of products that are used to create the product but are not seen as part of the final product (for example, architect plan, scaffolding, and building equipment).
Skills Required:	Skills required to create the products
Customer Quality Expectations:	A description of the expected quality and standards that will be used. This will cover all specifications and the functionally of each product.
Acceptance Criteria:	A checklist - a prioritized list of criteria that the product must provide before it can be accepted by the customer. See this as a spreadsheet list of all the Quality Expectations, with an extra column to mark accepted.
Tolerances:	Tolerance for time, costs, quality, scope, benefits and risks.
Acceptance method:	Describe how the Project Product may be accepted.
Acceptance Responsibility:	Who will be responsible for confirming acceptance?

8.13 PBP Step 2: Create the Product Breakdown Structure

Here, a Project Product is broken down into the major products which in turn are then broken down into further products to give a hierarchical overview of them. This is called a Product Breakdown Structure. A “mind map” diagram could also be used to do the same thing. In fact, I would suggest that you start with a mind map if you have not done this before. The most important thing is not to worry about how well you are doing. Just do it and repeat the exercise.

You should consider the following points when creating a Product Breakdown Structure

- It is a good idea to involve a group of people who represent the different interests of the project, such as User, Supplier, and people having specific knowledge (i.e., subject matter experts), and do this like a workshop.
- Do this in a structured format and use Post-Its or a whiteboard so that it is easy to make changes and move things around as you learn more about the Project Product.

- First, be open about the structure to use in the Product Breakdown Structure diagram, but then decide on a breakdown structure by reaching a consensus with the others. Let us use the example of a new laptop project. You could break it down by:

  a) how you source products from different suppliers; or
  b) the amount of power products used; or
  c) electronic & non-electronic items

  There is no right or wrong breakdown structure here. Just decide what you think works best

Identify external products that will be used. For example, the company creating the laptop might source RAM memory, hard disk or power supply from another company.

Products may have different states and you should know whether or not to include these states. For instance, an external power supply that you get from another company could be tuned to optimize battery-charging. So this could appear as two products: power supply and tuned power supply.

Use different shapes and colors to make the product breakdown diagram easier to read. For example, use an ellipse to denote external products and different colors for different suppliers.

You can also use different Product Breakdown Structure diagrams for the stages, as they will require a lower level of detail than the breakdown diagram for the whole project. These stage Product Breakdown Structure diagrams will start with part of the Project Product Breakdown Structure and then break it down further.

That is a lot of information if you are new to product breakdown diagrams. It is a good idea to think of a simple product and try to create a Product Breakdown Structure (e.g., a can opener, bicycle or laptop computer). Use a hierarchical or mind map diagram, or even both, so you can compare. Just give it a go and don't worry about doing it correctly. If you can explain the product to another person using your diagram, then you have a good Product Breakdown Structure.

8.14 Product-Based Planning - Example

As mentioned at the start of this chapter, few project managers use the Product Breakdown Structure, so here is a simple example. Let us first start with a simple Product Description.

Example Project Product Description for Website Project

Title	**Book Web site**
Purpose	Create a web site to promote a new book. The Web site should allow visitors to register, view a sample, buy the book and join a newsletter list
Composition	• Welcome Page • Registration Page • Register Page for Newsletter • Purchase Page • Copy of Book • Hosting provided name
Derivation	• Site Design & Layout Requirements • Web Site Template • Layout for Registration Page • Hosting provided name
Development Skills	• Joomla Knowledge • Knowledge to set up site with hosting company
Etc...	

For those who are not used to creating a Product Breakdown Structure, I suggest you start with an indented list like the following one. This will help you draw the Product Breakdown Structure. The

advantage of an indented list is that you can create it on a standard word processor and it is easy to change.

Example: Indented List for Website Project

1. Configured Site
   - 1.1. Registration Page
     - 1.1.1. Layout for Registration Page (external)
     - 1.1.2. Install Registration Page Extension
     - 1.1.3. Configure Registration Page
   - 1.2. Payment Page
     - 1.2.1. Install Payment Component
     - 1.2.2. Configure Component
   - 1.3. Site Design & Layout
     - 1.3.1. Configured Design & Layout
     - 1.3.2. Design & Layout Requirements (External)
2. Information to Add to Site
   - 2.1. Welcome Text, About Site,
   - 2.2. Add Sample Book (external)
   - 2.3. Add Book (external)
3. Site Up & Running
   - 3.1. URL Configured
     - 3.1.1. URL Name (external)
     - 3.1.2. Registered URL
   - 3.2. Configured Hosting
     - 3.2.1. Hosting Company name (external)
     - 3.2.2. Register with Hosting Company

Example: Product Breakdown Structure for Website Project

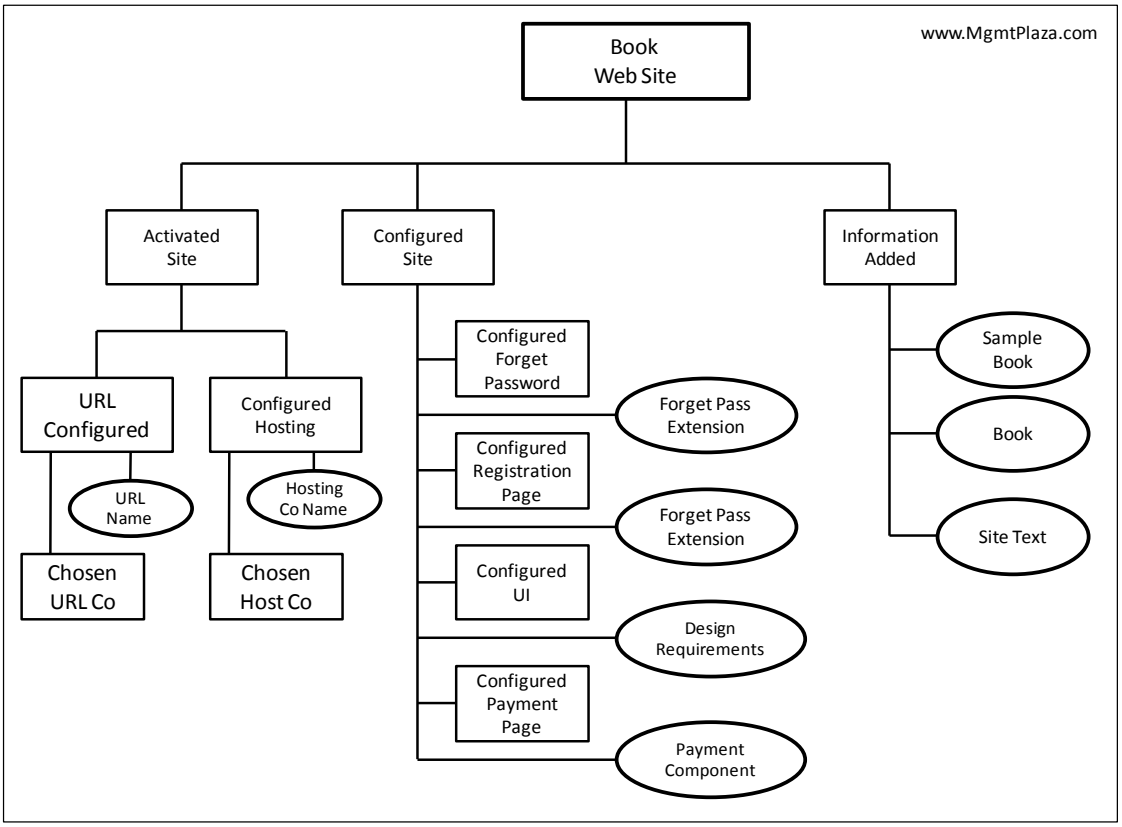


Fig 8.5 Product Breakdown Structure Example Book Website

8.15 PBP Step 3: Write the Product Descriptions

A Product Description is normally written for each of the identified products in the Product Breakdown Structure. Here are some things to consider when creating the Product Descriptions. Remember that Quality information forms a good part of these descriptions.

- Writing Product Descriptions should be started as soon as possible after they have been identified. This may be a gradual process, as more information can be added bit by bit.
- Once the Project Plan is complete, all the Product Descriptions are baselined and have to pass via Change Control if changes need to be made.
- The Project Manager and Team Manager may have responsibility for the Product Descriptions but they should be sure to involve people with the required expertise to write them (e.g., Subject Matter Experts) – those who will use the products to get their input, ideas and support.
- People who represent the Users should be involved in defining the Quality Criteria for the products and other Quality information.
- As projects are often similar in companies, Product Descriptions from previous projects could be used and the Project Manager should search the library to see what Product Descriptions are available.
- Refer to standards whenever possible instead of writing out the specification in detail.
- For small projects, it may only be necessary to write the Project Product Description.
- And the Quality information is very important. It will define the Quality Criteria, Quality Tolerance, and Quality Method used to check Quality and Quality Responsibilities. It is necessary to define the producer, the reviewers and approvers.

Product Description:	
Identifier	A unique key (used by Configuration Management)
Title:	This is the Product Name (ex: “Elevator”)
Purpose:	What is the purpose of the product?
Composition:	A list of all parts of the products (e.g., elevator, elevator shaft, maintenance section, protective doors, etc.)
Source products:	List products used to create the product but are not seen as part of the final product (e.g., architect plan, scaffolding, and building equipment)
Format & presentation	The characteristics of the product – the way it’s presented (e.g., stainless steel doors and a description of inside the elevator)
Development skills required:	Skills required to create or configure the products (e.g., elevator technician provided by elevator company)
Quality Criteria	The Quality Specifications that must be met (e.g., 5-year warranty, meet the required elevator code operation & standards (95/16/EC))
Quality Tolerance	The range of Quality Criteria that would still be acceptable (e.g., operating noise, vibration might have tolerance value (e.g., passing safety checks may have no tolerance, i.e., pass or fail))
Quality Method	The method used to check the product Quality • Inspection: Noise level can be done with a Db meter • Inspection: elevator code safety & operation standards
Quality Skills Required	Skills required to carry out Quality checks • Elevator technician skills • Accredited safety company
Acceptance Responsibilities	Responsible for producing, reviewing and approving • Elevator company for producing • Reviewing: Accredited safety company, elevator technician • Approver: This could be the building architect or Senior User

8.16 PBP Step 4: Product Flow Diagram

A Product Flow diagram defines the sequence in which the products of the plan will be developed, and shows the dependencies between them. The diagram also shows the products that are outside the scope of the plan. Once this diagram is in place, the next steps would be to consider the activities that are required, and estimating and scheduling.

Here are some points to consider when creating a Product Flow diagram:

- The Project Manager should make sure to involve other people, such as those who will help to deliver the products instead of trying to do this on their own.
- You can consider creating the Product Flow diagram at the same workshop meeting as the Product Breakdown Structure. This is a good idea, as you have the people with the knowledge with you.
- Use symbols in the diagram, such as an ellipse to represent outside products and a rectangle to represent a product.

.

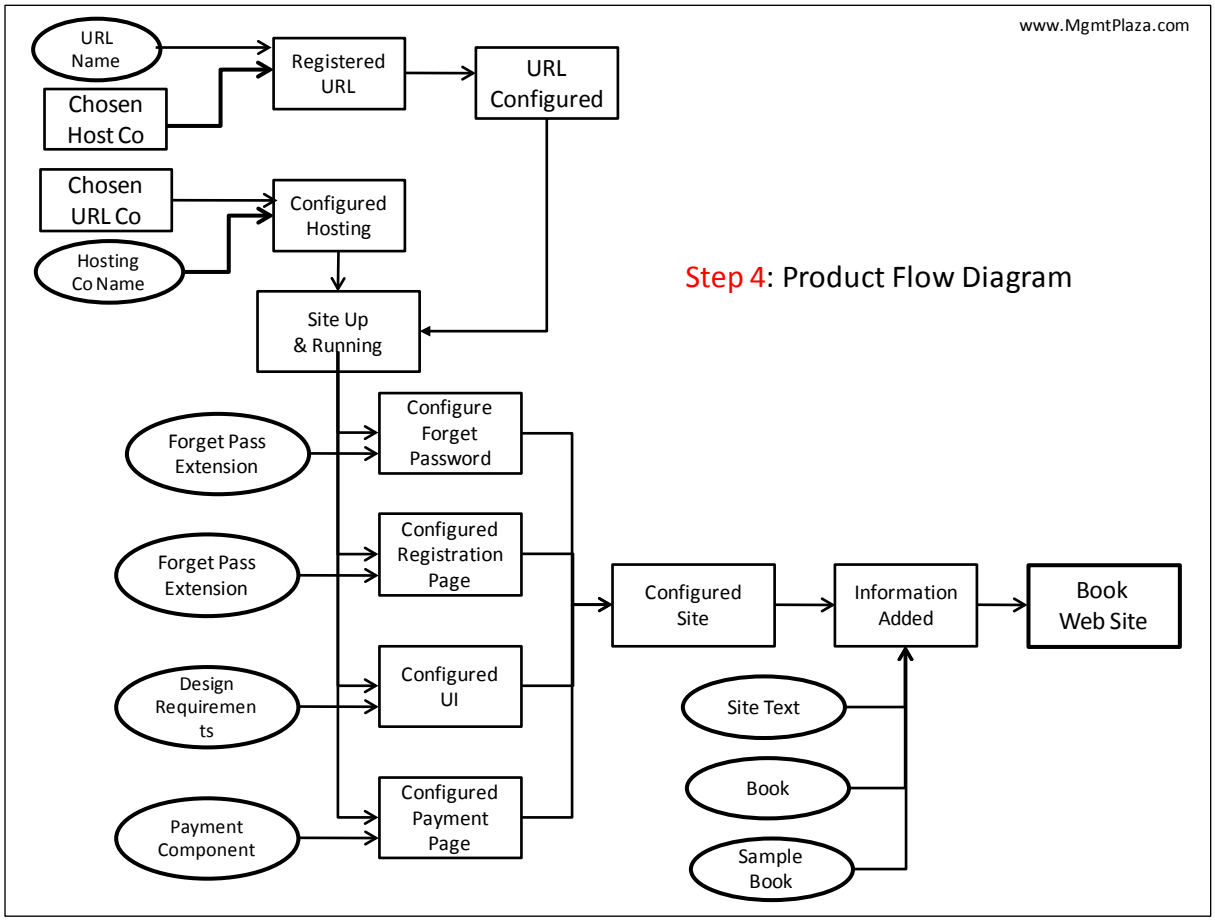


Fig 8.6 Product Flow Diagram – Example Book Web Site

To get some experience, it is a good idea to try to create a Product Flow Diagram for a simple product. For instance, let us go back to the Creating a New Bicycle project. Just draw the Product Flow diagram on how you think you would go about this. You could start with two teams working in parallel, one to create the wheels and the other to create the frame; and then the assembly and testing.

Also think of the assembly diagram that you get when you buy furniture at IKEA. This clearly shows the steps you have to follow. Some of these tasks can be done in parallel and some cannot be attempted until other tasks have been done. There is also a good example of a Product Flow diagram in the PRINCE2 manual

8.17 Step 3: Identify Activities and Dependencies

This is the 3rd step of the PRINCE2 approach to plans

Activities

The objective is to make a list of activities that need to be done, and this is much easier now that you have the information from Product Based Planning documents which includes the Product Breakdown Structure and Product Flow diagrams together with the Product Descriptions.

There are a number of ways to identify activities and these include:

- Making a list of activities for each product in the Product Flow diagram.
- Create a Work Breakdown Structure for each of the products in the product breakdown structure.

It is very important to include the Management and Quality-checking activities, like testing the products and preparing for Quality Review. Also include interacting activities with external parties, such as receiving external product or sending out a product to be independently tested.

Remember to keep it simple. You don't need to list the activities that the teams will do each hour, such as Quality Review Meeting. You don't need to list all the tasks that occur to prepare for and have the meeting.

Dependencies

Look for dependencies between the activities and note these. There are two types of dependencies – internal and external – and there is a clue in the name. Internal dependencies denote it's within the project, while external denotes outside of the project. An example of an internal dependency is that activity C cannot start before activities A and B have been completed.

External dependencies may be:

- The delivery of a product from another project.
- A purchase order will be used to source a product.
- A decision by Program Management which is outside the Project Team.

8.18 Step 4: Prepare Estimates

This is the 4th step of the PRINCE2 approach to plans. Estimating is about deciding how much time and resources are required to carry out a piece of work to an acceptable standard. The Project Manager should do as little estimating as possible as, it's better to ask someone who has more experience.

Estimating involves:

- Identifying the type of resource required, as specific skills are often crucial. Consider non-human resources, such as equipment (e.g., testing equipment), travel and money.
- Estimating the approximate effort required for each activity, as we can never really guarantee an exact time for an activity.

These estimations together provide an overview of the time and costs for the project, and this information is used to build the Project Plan. It is important to challenge each estimate, as different people will give different estimates for the same piece of work.

The PRINCE2 manual lists a number of very useful tips that you should follow when estimating:

- Assume that resources will only be productive for, say, 80% of their time.
- Resources working on multiple projects will take longer to complete tasks, as it will take time to switch between them.
- People are generally optimistic and often underestimate how long a task will take.
- The most important point is to make use of other people's experience when estimating, and to involve the persons responsible for creating the products. In fact, it is a good idea to make them responsible for creating the effort estimates.

- Always build in provision for problem-solving, meetings and other unexpected events, as they will occur.
- Cost each activity rather than try to cost the plan as whole.
- Communicate any assumptions, exclusions or constraints you may have to the Users.

Here a number of estimating techniques that can be used. **Note: You don't need to be aware of them for both exams.** I have included some of the techniques mentioned in the PRINCE2 manual and others.

Estimating Technique	Description
Top-down estimating / Analogous Estimating	Estimate at a high level and use experience to do this
Bottom up estimating	This technique is time-consuming but more accurate. Start with estimating each individual activity and then add together. This is very useful when creating Stage Plans.
Delphi Technique	For instance, provide questionnaires and ask for **multiple** estimates. This could be done via email; no need for face-to-face meeting. Could also be used for ideas.
Published estimating data	"Look around you" to see what information is there. Look in past projects to see if there are any guidelines or other published data.
Expert Judgment / Comparative Estimating	Pick up the phone or walk down the hall and ask an expert. You could ask a number of experts and then compare.
Parametric Estimating	Parametric estimating is based upon historical data for the same type of activities.
Three-point estimates/PERT Estimates	Ask skilled resources for best, most likely and worst-case estimates for an activity, and then take the average of the three. This is a very useful technique, especially when you can't get an agreement on one number.

One last thing to say on this topic of estimating is that you should use a Project Management software tool if your project is complex in any way, as you will needs help with the following:

- Adding estimates together (e.g., for stage)
- Resource availability (include hours available for project and for vacation time)
- Easily identity if more resources are required or if resources are overloaded
- Easy to assign resources to tasks
- Easy to communicate plan to the rest of the team

8.19 Step 5: Prepare the schedule

This is the 5th step of the PRINCE2 approach to plans, there are many different approaches to scheduling and more and more people are using computer-based tools to help. The Project Manager must already have the following information before they can begin this task of scheduling: *The list of all activities, their dependencies, and the duration of effort for activities*. So here are some of the steps that a Project Manager will do. I will comment on each topic

- Define activity sequence
- Assess resource availability
- Assign resources
- Level resource usage
- Agree control points
- Define milestones
- Calculate total resource requirements & costs

- Present the schedule

I just mentioned eight steps for this “Prepare the Schedule” activity, while you may have thought it was just one step. If you have ever done scheduling, you covered most of these steps. It is just that PRINCE2 has given a name to each of them and MS Project allows you to do most of them at one time.

To help explain the following information, I will approach this from an MS Project point of view, as it is the most popular tool for creating Gantt charts and scheduling and allows many of the above-mentioned steps at the same time. Please note that the PRINCE2 manual does not promote any single software product.

I have done my best not to go into too much detail, as there are a lot of steps to preparing the schedule. Just try to get an overview of what happens in this activity. That is what you need to understand for the exam.

Define activity sequence

The Project Manager can begin the task of scheduling, which is to determine the optimal sequence in which these activities can be performed. There is one scheduling term that I would like to explain which is *Float* (also referred to as “Slack”). Float is the amount of time that an activity can be delayed without affecting the completion time of the overall plan. This can also be seen as spare time.

Critical Path and Float: A good way to explain Critical Path is as follows: the critical path is the sequence of activities that have zero float, so that if any of these activities is delayed, the completion of the project will also be delayed. Normally, a Project Manager will identify the critical path of a project and pay more attention to monitoring these activities.

Assess resource availability

They create an overview of who is available to do the work, their experience, and the percentage and confirmation of schedule availability. The Project Manager will also confirm this with the manager of the resource to make sure they get them for the project.

Assign Resources

The Project Manager will assign the list of resources to the activities, starting with the activities that are part of the critical project path. They will confirm again that the resources are willing to do the work. One final tip: when assigning a task to a team, look for one Task owner to be responsible.

Level resource usage

The Project Manager will check that project resources are not overloaded and spread out the work. This is called levelling.

Agree Control Points

Control Points, like that for the Project Board, may now be added to the plan (e.g., Management Stages). The Project Manager will also add the activities to prepare for a stage end to the Plan such as End Stage Report and Next Stage Plan.

Define Milestones

A milestone usually refers to the completion of a key activity. For example, this could be the completion of an important Work Package in a stage. Milestones can help the Project Manager to see how the project is progressing according to the plan, so it is up to the Project Manager to decide how many milestones they will define.

Calculate total resource requirements and cost

This is usually a simple task if you are using a software tool. The following should also be added:

- Costs of Project Management activities
- Costs to verify the specialist products
- Cost tolerances, e.g., allow ±10% costs

- Risk Budget and Change Budget if required

Present the schedule

Most Project Managers present the schedule in a graphic format, such as Gantt chart or Critical Path diagram. They can also use a product checklist. Most planning tools offer a choice of formats.

Analyze the Risks

Actually the Project Manager is doing this constantly. A final Risk Analysis check is essential once the plan is ready (status draft complete) and updating the Risk Register if necessary.

8.20 Document the Plan

Documenting the Plan is the 6th step in the PRINCE2 Approach to Plans, but this is something that should be started while creating the Plan. The objective is to add text to help explain the Plan and to make it easier to understand. For instance, you might add the following text information into a separate document that will support the MS Project file:

- Plan Description: A text description of the Plan to help explain it.
- Plan prerequisites: Aspects that must be in place for the Plan to succeed.
- External dependencies: List of external dependencies that will influence the Plan.
- Planning assumptions: List of assumptions upon which the Plan is based.
- Lessons incorporated: Lessons from similar or previous projects.
- Monitoring & Control: Describe how the Plan will be monitored and controlled.
- Budget Information: Cost & Time of project, and provisions for Risk & Change Budget.
- Tolerances: Overview of tolerances for the 6 project variables.
- Risk: Overview of Risk.

You should also consider the best format to use when giving information to the Project Board, so that you don't overload them with unnecessary details. Most software planning tools are helpful here as they provide a choice of reports.

8.21 Examples of Risks in Planning

The PRINCE2 Manual lists a number of planning risks, which are important to mention as some occur frequently. It is therefore a good idea to consider these when scheduling.

- Many resources joining the project at the same time can slow down progress. It is better to introduce people gradually to the project.
- The Plan may contain a high proportion of external dependencies.
- The Plan may be using untested suppliers or new technologies that may not deliver as expected.
- The Plan may not include sufficient time for management points, such as stage boundaries.
- There may not be too much float in the Plan. Almost any delay in any activity will delay the project as a result.
- The schedule may show other paths which are parallel to the Critical Path. Any delay in these will delay the end of the project as a result.

8.22 The Product Checklist

The Product Checklist is a list of all the major products of a Plan, plus key delivery dates. The Product Checklist may most likely be a spreadsheet that will contain the following information:

- Product ID: Number & Product Title.
- Product Description: Plan Date when this will be ready & Actual Date.

- Product Draft: Plan & Actual dates for draft version of the product.
- Quality Check: Plan & Actual dates for Quality Check.
- Approved date: Plan & Actual dates for Approval.
- Handover date: Plan & Actual dates for handover (if this step is necessary).

ID	Product Title	Product Description Draft		Product Description Approved		Quality Checked		Approved	
		Plan	Actual	Plan	Actual	Plan	Actual	Plan	Actual
101	User Interface	22/2	22/2	14/5	18/5	20/5	20/5	20/5	
102	Navigation Tree	23/2	25/2	14/5		04/7		14/5	
103	User Registration process	24/2	25/2	12/6		20/7		12/6	
104	Auto Password	25/2	25/2	18/6		22/7		18/6	

I know some Project Managers who use the Product Checklist as their main tool to monitor the project. It is also a very simple way to communicate the progress of the project to stakeholders.

8.23 Responsibilities

Here are some of the responsibilities relevant to the Plans Theme.

Corporate & Program Management

- They set Project Tolerances and document them in the project mandate.
- They approve Exception Plans when the project-level tolerances are forecast to be exceeded.

Executive

- They approve the Project Plan.
- They define tolerances for each stage and approve Stage Plans.
- They approve Exception Plans when the stage-level tolerances are forecast to be exceeded.

Senior User

- Ensure that Project Plans and Stage Plans remain consistent from the User perspective.
- Commit User resources to the Stage Plans.

Senior Supplier

- Ensure that Project Plans and Stage Plans remain consistent from the Supplier perspective.
- Commit Supplier resources to Stage Plans.

Project Manager

- Designs the Plans.
- Prepare the Project Plan and Stage Plans.
- Organize corrective action to be taken when Work Package-level tolerances are forecast to be exceeded.
- Prepare Exception Plans when requested by Project Board.

Team Manager

- Prepare Team Plans.
- Prepare schedules for each Work Package.

Project Support

- Assist with the compilation of Project Plans, Stage Plans and Team Plans.
- Assist with planning tools and other tools.
- Take care of the Configuration Management activities.

8.24 Plans Summary

That is it for the Plan Theme and you will have learned the following:

- The purpose of the Plans theme and how the information in this chapter can help you.
- Introduction to plans and planning, you should now be able to explain what a plan is and what is meant by planning.
- The three levels of Plan and how they compare to the management levels on a Project Team.
- The different types of plan: Project Plan, Stage Plan & Team Plan.
- The Exception Plan, why it's used and when it's created.
- The PRINCE2 approach to Plans, which are 7 steps. Here you will learn about the six steps which are:
    1. Design the Plan
    2. Define and analyze the products
    3. Identify activities and dependencies
    4. Prepare estimates
    5. Prepare the schedule
    6. Document the Plan
    7. Analyze the Risks
- The four steps of Product-Based Planning include the following:
    1. The Product Checklist, its structure and its value to the Project Manager
    2. And finally, the responsibilities of the different Roles in the Plans Theme

8.25 Foundation and Practitioner Exam

Foundation Course & Exam:

- You will need a good understanding of all the items mentioned in the Plans summary
- I would suggest that you create a sample Project Product Description and Product Description. This will help you to remember it.
- You need to be aware of how Product-Based Planning works and understand the responsibilities.
- You need to be able to answer 66% of the Learn Thru Questions.

Practitioner Course & Exam:

- You need to know all areas of this chapter and I would advise you to do the following exercises:
    - Create a sample Project Product Description
    - Create a sample Product Description
    - Create an indented list to show the products that make up your sample Project Product Description and then create a Product-Based Down Structure
    - Create a flow diagram of how you would go about creating this. (Don't worry about how you'll do this, just do it.)
- You need to able to answer 90% of the Learn Thru Questions

8.26 Learn Thru Questions

Try and answer the following, these are taken from the Learn Thru Questions audio course. Check the answers in the Learn Thru Questions document available on our site: You can also listen to these questions and answers (use the **LTQ audio course**)

Q01: The Plans Theme provides a framework to design, develop and maintain the Project Plans. Name 3 types of plan.

Q02: The Plans Theme provides a framework to design, develop and maintain what?

Q03: What is a Plan? Answer in your own words.
Q04: What is considered to be the backbone of the project? It is created at the start of the project and continually updated during the project to show what has been done and what still needs to be done. It can be compared with the original document to see how well the project is progressing.

Q05: Fill in the blanks: Planning is the act or the process of _____ and _____ the plan.

Q06: Name the six project variables (six performance targets) that planning helps to manage. (**Tip:** Think TeCQula SoBeR)

Q07: Why can't all plans be created at the start of the project? What does PRINCE2 recommend as a solution? Answer in your own words.

Q08: Name the three levels of management in a Project Team. **Note:** There is a Plan type for each level.

Q09: Name the type of Plan in each of the management levels of Directing, Managing and Delivering, and mention when this Plan is created.

Q10: Name one of the other plans that are created in the project besides the Project Plan, the Stage Plan and the Team Plan.

Q11: Which Plan is mainly used by the Project Board?

Q12: What does the Project Board use to check how the project is progressing?

Q13: How does the Stage Plan differ from the Project Plan?

Q14: Who creates the Team Plan? Are they necessary?

Q15: How can a Project Manager be involved in the development of a Team Plan?

Q16: Which Plan is used to recover from the effect of Tolerance Deviation and if approved, replaces the current plan? (In other words, it picks up from where the current plan had stopped.)

Q17: Is an Exception Plan created to replace a Work Package that goes out of tolerance?

Q18: PRINCE2 has a specific approach to plans with 7 steps. Name 2 to 3 of the steps. (**Tip:** Think of where planning starts, a PRINCE2 technique, and so on, until the plan is created)

Q19: What happens in Design a Plan? What questions would the Project Manager consider and how might this activity be different if working a Program environment?

Q20: PRINCE2 uses the technique of Product Based Planning to identify and analyze the Plan's products. What are the four steps in Product Based Planning?

Q21: Product-Based Planning has a number of benefits. List one or two of them. Answer in your own words.

Q22: The first step in Product-Based Planning is to write the Project Product Description. Who is responsible for this and usually creates the Project Product Description?

Q23: What kind of information would you expect to find in a Project Product Description? Name 2 or 3 parts. (**Tip:** Think about the Products and Quality.)

Q24: What kind of data would come under the Customer Quality Expectations heading?

Q25: What is Acceptance Criteria? Give an example of the format of the Acceptance Criteria that is included in the Project Product Description. (**Tip:** Acceptance uses information from Quality Expectations.)

Q26: Which activity in Planning am I referring to with the following text? *"This is where the Project Product is broken down into the major products which are in turn broken down into further products to give a hierarchical overview of the products."*

Q27: Who should be involved in a Product Breakdown Structure?

Q28: What advice would you give to people in a workshop when they are starting to draw a Product Breakdown Structure? This concerns the drawing of the Product Breakdown Structure.

Q29: How do you know the correct structure to use from the beginning when creating a Product Breakdown Structure, such as the number of branches and the method to organize the products?

Q30: Product State question in a Product Breakdown Structure: How do you handle external products in a Product Breakdown Structure that may need some action to be taken on them? For example, in the "Create a New Laptop" project, you will source a power supply externally but this needs to be tuned/optimized for best performance. How would you represent this in the Product Breakdown Structure?

Q31: Should you use different Breakdown Structure diagrams at the start of a project than you would use for each stage, or would you keep using the same Breakdown Structure Diagram and just add just keep adding information to the original one?

Q32: How can color be used in the product Breakdown Structure Diagram?

Q33: What format of diagrams can be used to create a Product Breakdown Structure? Name any two.

Q34: What document has to be written for each of the products that are identified in the Product Breakdown Structure?

Q35: When should you start to create the Product descriptions? (**Tip:** I asked when to *start* – not complete)

Q36: Who has the responsibility to create the Product Descriptions and who can they involve?

Q37: What kind of Quality information is added to the Product Descriptions and who should provide this information?

Q38: Is it always necessary to write Product Descriptions even for very small projects?

Q39: Which diagram defines the sequence in which the products of the Plan will be developed and shows the dependencies between them?

Q40: Should the Project Manager create the Product Flow diagram on their own?

Q41: Can or should the Product Flow Diagram be created at the same time as the Product Breakdown Structure (e.g., during the same workshop)?

Q42: Name two drawing symbols that you can use in a Product Flow Diagram and Product Breakdown Structure Diagram. (**Tip:** External product and normal product)

Q43: Which Planning activity am I referring to here? *"The objective is to make a list of activities and see how these activities depend on each other."* (**Tip:** The name of this activity begins with **Identify** and it is the first activity after all 4 steps in Product-Based Planning have been done)

Q44: Should activities for testing, Quality-checking, preparing for Quality Review meetings, etc., be included when **identifying activities and dependencies?**

Q45: Identifying activities and dependencies: Do you need to go into a lot of detail when listing the activities or should you just list the name of the activity? For example, if the activity is to prepare for a Quality Review meeting, would you mention just *Prepare for Quality Review Meeting* or mention all the tasks that have to be done during this activity?

Q46: Which Planning activity am I referring to here? This activity is about deciding how much time and resources are required to carry out a piece of work to an acceptable standard. This activity involves identifying the type of resources required to do the work and the approximate effort required for each activity.

Q47: Question Estimating: Should the Project Manager focus on getting the exact time for an activity before continuing to review the next activity?

Q48: Question Estimating: When estimating, what is a good rule to follow when considering the amount of time that a full time resource could produce on the project?

Q49: Question Estimating: Should you involve the persons who will create the products when estimating, or avoid this, as they may increase the time and costs?

Q50: Question Estimating: What about time for meetings, problem-solving and other unexpected things that will happen when estimating? What should you do about this?

Q51: Question Estimating: What is the relationship between the time and costs of the activities and the time and cost information included in the Project Plan?

Q52: Which planning activity am I referring to here? The Project Manager will do following and will most likely use a computer-based tool to do this. They will:

1. Define activity sequence (i.e., the order that products will be created)
2. Assess resource availability (i.e., who is available)
3. Assign Resources
4. Level resource usage and allow some provision for meetings
5. Agree Control Points
6. Define Milestones
7. Calculate total Resource Requirements & Costs. This can be automatic in some tools
8. Present the schedule: Your tool can provide a choice of reports

Q53: What is meant by the task *Agree Control Points in Preparing the Schedule* activity? (**Tip:** Stages)

Q54: The PRINCE2 manual lists a number of Planning risks that frequently occur. You should consider these when **preparing the scheduling** (e.g., in MS Project). Can you list one or two common risks that you should take into account and allow extra time in the Plan? In the answer, I will also list examples that are provided by PRINCE2, and you can compare.

Q55: Who is responsible for the following in the Plans Theme?

- Set Project Tolerances and Document Theme in the project mandate
- Approve Exceptions Plan when the **project-level** tolerances are forecast to be exceeded

Q56: Who is responsible for the following in the Plans Theme?

- Design the Plans

- Prepare the Project Plans and Stage Plans
- Organize corrective action to be taken when Work Package-level tolerances are forecast to be exceeded
- Prepare Exceptions Plan when requested by Project Board

Q57: Who is responsible for the following in the Plans Theme?
- Ensure that Project Plans and Stage Plans remain consistent from the Supplier perspective
- Commit Supplier resources to Stage Plans

Q58: Who is responsible for the following in the Plans Theme?
- Prepare Team Plans
- Prepare schedules for each Work Package

Q59: Who is responsible for the following in the Plans Theme?
- Assist with the compilation of Project Plans, Stage Plans and Team Plans
- Assist with Planning tools and other tools
- Take care of the Configuration Management activities

Q60: Who is responsible for the following in the Plans Theme?
- Approve the Project Plan
- Defines tolerances for each stage and approve Stage Plans
- Approve Exceptions Plans when the **stage-level** tolerances are forecast to be exceeded

Q61: Who is responsible for the following in the Plans Theme?
- Ensure that Project Plans and Stage Plans remain consistent from the User perspective
- Commit **User resources** to the Stage Plans (**Tip:** User Resources)

9 Risk Theme

9.1 Introduction to the Risk Knowledge

Let us take a look at what will be covered in this Risk theme.

- You will be able to answer (a) what is Risk, (b) what is at risk in the Project and (c) what is Risk Management. Also, you will learn the 3 steps to Risk Management which are *Identify*, *Assess* and *Control* and *What Risk attitude is*.
- Learn about the relationship between the Risk Theme and the Management of Risk method from OGC.
- You will learn about the Risk Register, how it is used, and its contents.
- You will learn the 5 steps in the Risk Management Procedure, which are *Identify*, *Assess*, *Plan*, *Implement* and *Communicate* (**I** **A**te **P**eaches **I**n **C**hina).

  Step 1 **Identify**: You will learn how to express Risk in the syntax of *cause*, *threat* & *effect*.

  Step 2 **Assess**: Assessing risk is done in two steps. Estimate each risk one at a time and Evaluate all the risks together to get the Project Risk.

  Step 3 **Plan**: Plan how to respond to each risk – they can be threats or opportunities. The responses to threats are *Avoid*, *Reduce*, *Fallback*, *Transfer*, *Accept* and *Share*. The responses to opportunities are Exploit, Enhance, Share and Reject

  Step 4 **Implement**: Learn how to implement the responses to Risk.

  Step 5 **Communicate**: You will learn what is meant by communicate.

  These 5 steps will be discussed in detail.
- Risk Budget.
- Roles & Responsibilities.

9.2 What happens in the real world?

Most Project Managers don't really get a chance to practice Risk Management. This is something that is covered very well in all the Project Management methods, but it seems to get forgotten about as soon as the project starts up. Even if Project Managers spend an appropriate amount of time on Risk Management, they may stop once they realize that nobody is interested in the Risk information, as there may be very little awareness of Risk Management in the organization.

Project Managers are not to blame. They first need a Risk Management approach to follow and the rest of the organization also has to be aware of the importance of Risk Management. If you are working in a program environment, there will most likely be a standard approach to Risk Management and hopefully you will have received training.

If you are not working in a program environment, then you should check if there are standard procedures available for Risk Management in the company or in use by other Project Managers.

The knowledge provided in this Risk Theme provides an excellent approach to Risk Management that you will be able to understand and use. I believe that the most important thing to understand in this theme is the structure of the Risk Register and how to use it to enter Risk information and how to track risks during the project.

A good tip to remember is to ask your Executive *"How should risk be assessed, tracked and communicated during the project?* This will give you a very good idea on Risk awareness for the project and perhaps for the organization.

9.3 Purpose of the knowledge in the Risk Theme

What you will learn in this topic?

You will learn (1) the purpose of the information in the Risk Theme, (2) why there is risk in a project, (3) when Risk Management is done during the project, (4) who is responsible for Risk, and (5) who continually identifies, assesses and controls Risk in the project.

The purpose of the Risk Theme is to provide an approach to identify, assess and control uncertainty during a project and as a result, improve the ability of the project to succeed.

Why is there Risk in a project?

As projects are about doing something new, they are about change. Change introduces uncertainty and uncertainty is risk. The project needs to know how to identify risk, how to assess this risk, and how to control this risk, as it might affect the project objectives.

A good Risk Management procedure will support better decision-making concerning Risk, as there will be a better understanding of the risks, how these risks will affect the project, and the responses to these risks if they should occur.

When is Risk Management done in the project?

Risk Management is not just done at the start of the project but must be a continual activity during the full life of the project; it therefore is one of the main tasks for the Project Manager. It is the Executive that is responsible for Risk in a project, and they rely on the Project Manager to continually identify, assess and control risks throughout the project.

To summarize the purpose of the Risk Theme, it looks at identifying, assessing and controlling the uncertainty & improving the changes so that the Project has to succeed.

9.4 Risk Lingo

What is Risk and what is at risk?

PRINCE2 has a specific definition for Risk, which is taken from the MOR method.

> *Risk is a set of events that, should they occur, will have an effect on achieving the project objectives.*

Another definition is:

> *Risk is an uncertain event that if it occurs, will have a positive or negative effect on a project objective.*

In short, Risk is about uncertainty, this is easy enough to imagine. For example, in a project to customize a CRM application, you learn one of the risks is that the supplier team might not keep to their schedule and if this event happens, it would have an effect on one or more of the project objectives.

Risk can be seen as positive or negative. The cool way to say this is: *Risk can be seen as a Threat* or an *Opportunity*. Describing Risk as a positive – or should I say an opportunity – might be new for you, so I will go back to the example of the CRM application. The Risk that the Supplier might not deliver on time is a Threat, as it will have a negative impact on the Project. Now, another Risk might be that we learn at the start of the Project that connection to the Internet might be updated during the Project and thus, it would increase the speed by a factor of five. This type of Risk is an *opportunity*, as it will have a positive impact on the project; the response time will be faster for most of the users.

What is at risk?

If I were to ask you the question, “What is at risk in the project?,” you might say that the project was at risk, or perhaps User satisfaction with using the product was at risk. PRINCE2 takes another view on this. It states the Project’s objectives are at risk. Remember, the Project will have objectives for the six performance targets, also referred to as the six Project Constraints, which are *time*, *cost*, *quality*, *scope*, *benefits* and *risk*.

9.5 Risk Lingo - What is Risk Management

What is Risk Management?

Risk Management is about the steps you take in a systematic way that will enable you to identify risk, assess risk and control risk. This Risk Theme provides an approach to manage Risk in a project.

There are three steps to Risk Management which are Identification, Assessment and Control:

- Identification: How to identify and describe the risk.
- Assess the Risk: Ask what the likelihood of the risk is, its impact on objectives and when it is expected.
- Control the Risk: How best to respond to a risk; assign a risk owner, execute responses and monitoring.

Just remember that Risk Management is actively done throughout the project. A new risk can arise at any time in the project. The Project Manager should ask questions, such as *"How will this affect the Business Case?"* and *"How does this risk affect any of the current risks already registered?"* The status of existing Risks can also change at any time.

9.6 The Management of Risk Method & Risk Context

PRINCE2 makes use of the other OGC method, which is Management of Risk (MOR). So PRINCE2 takes advantage of all these procedures and principles that have already been defined instead of trying to re-invent the wheel. The MOR method is a generic approach to Risk and has the following approach:

- First, understand the project context;
- Involve Stakeholders, Users, Suppliers, and Teams, as team members are usually good at identifying Risk
- Establish an approach for the Project and document this approach
- Provide regular reports on Risk
- Define risk Roles and Responsibilities

Risk Context

Let me explain what I mean when I say: *"Understand the project's context."*

- If someone asks you what a certain word means, you may ask in what context. Here you are asking what the context is from a Risk point of view.
    1. Example 1: If the project is a NASA space project and a device has to work for 10 years in orbit, this is a good example of a very low-risk tolerance project.
    2. Example 2: We are developing a simple prototype for in-house use only and this product will have a lifetime of less than 4 months, so not everything has to work with this product. This is an example of a high-risk tolerance project.
- Note: A project that has a high-risk tolerance is said to have a big-risk appetite.

When first considering Risk, the first question should be: *What risk policies already exist in the company or in the program environment today that can be used so that there is no need to re-create them*?" If a policy does exist, then this will save a lot of work and will provide the following information:

- The organization's attitude towards Risk (also called Risk Appetite).
- Risk Tolerances
- Procedures for escalation
- Typical Roles and Responsibilities
- Example of a Risk Management Strategy document.

Using a common approach to Risk Management also means that project stakeholders who are already familiar with this approach will be able to understand how Risk Management is done in your project.

You also need to take into account the Risk Attitude of your Project Board. Just imagine that you have three Risk seekers. It is good to have an approach to define and measure Risk and get their input.

PRINCE2 recommends that each project have its own Risk Management Strategy document. This document defines the project procedures for Risk Management, in terms of how Risk will be identified, assessed, controlled and communicated in the project. This might seem like a big task, but if your project is part of a program, then most of the Risk Management Strategy will be already provided to you in a detailed template that you can update to suit the project you are working on. Otherwise a Project Manager might use a Risk Management Strategy document from a previous project that they have done in the company and update it to suit the current project.

9.7 The Risk Register - Risk History

The Risk Register captures and maintains the Risk information (both threats and opportunities) of all the risks that were identified and relate to the project. So it provides a record of all risks including their status and history.

See the Risk Register as a spreadsheet with the following columns: I got the next information from the Product Description of the Risk Register in Appendix A of the PRINCE2 manual

Project Name:	Village Concert		Risk	
Project No:	005		High Risk	€4,000
Project Manager	C. Turley		Medium	€2,500
Project Exective:	G. Johnson		Low Risk	€1,000

Risk Register

Risk ID	Risk Author	Date Registered	Risk Category	Risk Description	Probality X Impact	Proximity	Response Category	Risk Response	Risk Status	Risk Owner	Risk Actionee
56	G. Patrick	20/10/2009	Legal	Due to safety, there is a risk that we do not permit	€1,400	Medium Term	Reduce	Work with city officer, create plan	Active	K.Jones	W. Maths
57	P. Smith	21/10/2009	Organization	Due to summer, risk to get the required stewards	€4,500	Long Term	Reduce	Try to work with volenteers	Active	T. Jarvis	T. Jarvis
58	K. Jackson	25/10/2009	Financial	UK weather, rain will reduce beer consumption	€2,500	Long Term	Reduce	Look at other drinks to sell	Active	Y. Young	O. Stella

Fig 9.1 Risk Register Example

- Risk Identifier: This is just a unique number (ex: 042)
- Risk Author: Person who raised the Risk
- Date Registered: Date the Risk was registered
- Risk Category: A project can have it own categories. One of these will be selected, such as quality, network, legal and supplier.
- Risk Description: This is written is a specific way (e.g., *cause*, *event* and *effect*)
- Probability Impact: Choose value from an agree scale (*very low*, *low*, *normal*, etc.).
- Proximity: How soon the risk is likely to happen.
- Risk Response Category:
  - If a threat, decide to avoid, reduce, fallback, transfer, accept or share.
  - If an opportunity, decide to enhance, exploit, reject or share.
- Risk Response: List of actions to resolve the Risk.
- Risk Status: Current status of the Risk: *active* or *closed*.
- Risk Owner: Mention one person who is responsible for managing the Risk.
- Risk Actionee: Person who will carry out the actions described in the response **(Note:** Can also be same person as the Risk owner).

The last point I would like to make about the Risk Register is that the Project Manager is responsible for it but it is the Project Support role that will maintain it. The Risk Management Strategy document will describe how the Risk Register should be configured and used.

9.8 The Risk Management Procedure Introduction

We have already learned that there are three steps to Risk Management: *Identification*, *Assessment* and *Control*. Now we will learn about the Risk Management Procedure.

The Risk Management Procedure is a set of five steps which are recommended by PRINCE2. To help remember this think of the following sentence when you think of Risk: **I** **A**te **P**eaches **I**n **C**hina so you have the first letters of the five steps: *Identify*, *Assess*, *Plan*, *Implement* and *Communicate*. The first 4 steps are sequential, while *Communicate* will always be done to let stakeholders know what is going on and to get continual feedback during this process.

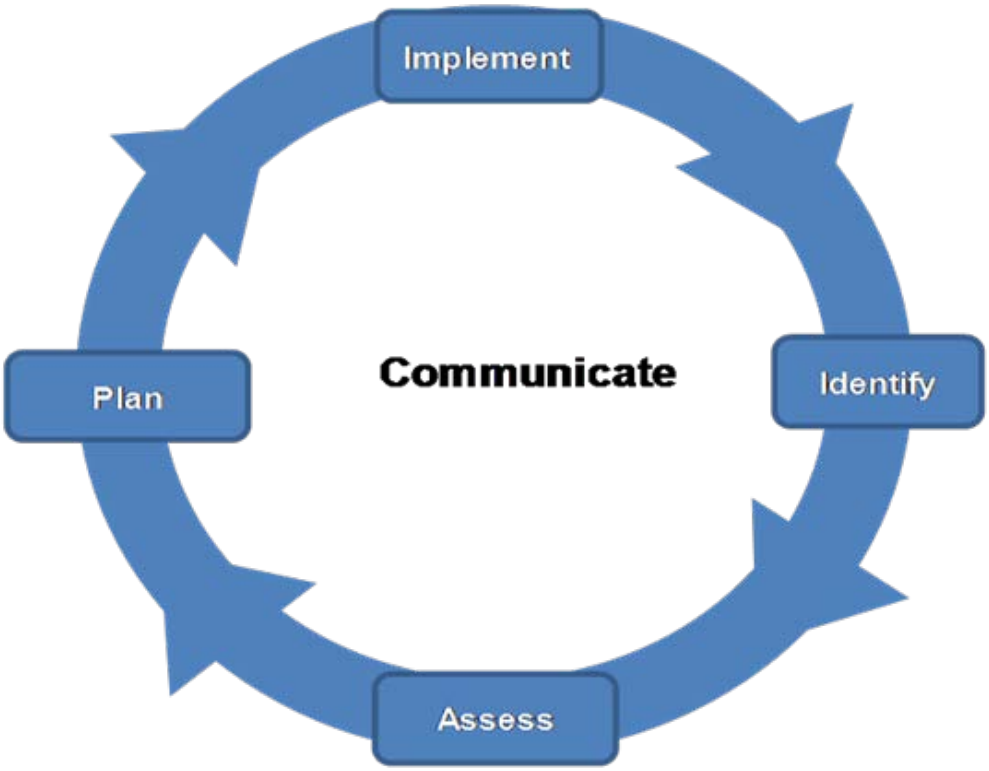


Fig 9.2 The Risk Management Procedure

Step 1 Identify

- First you need to know how the project sees Risk and complete the Risk Management Strategy document. (One of the questions you might ask would be *"Does the Project have a low or high level of Risk Tolerance?"*).
- Then identify the risks (threats & opportunities) that could affect the Project objectives.

Step 2: Assess

- Assess the risks in terms of their probability and impact on the project objectives.

Step 3: Plan

- Here your Plan steps are to prepare the specific response to the threats (e.g., to help reduce or avoid the threat, or this could also be to plan to maximize the opportunity if the risk happens.

Step 4: Implement

- Carry out the planned responses mentioned in step 3 Plan.

Step 5: Communicate

- Keep communicating to the stakeholders. This can be done using a number of existing management reports that are created during the project (e.g., End Stage Report).

9.9 Step 1: Identify

The Identify step can be divided into a number of smaller steps. I will list these and then explain them further.

- Identify the context: which is to understand the project from a risk point of view; whether this is a high- or low-risk tolerance project.
- Complete the Risk Management Strategy document.
- Identify the risks using a number of techniques.
- And describe the risks in terms to cause, event and effect.

Identify context

We need to ask a number of questions about the project. The answers will enable the Project Manager to complete the Risk Management Strategy.

- What type of project is this? Are we building a satellite where Risk Tolerance will be very low or are we creating a prototype product that will only be used for a few months in-house where the Risk Tolerance is very high or something in between?
- What is the customer's Quality Expectations? Will the product be available to thousands of users who will expect all functionality to work immediately or to a small in-house team of three to four people to evaluate?
- Number of organizations involved and the relationship between them.
- What is the complexity and scale of the project?
- What is the Project Board's attitude to risk?
- What is the organization's approach to risk?

These questions need to be asked as soon as possible in the project and before the Risk Management Strategy is created. Note that the Risk Management Strategy document is created during the Initiation Stage with the other 3 strategy documents.

Most of the answers to these above questions can come from 3 documents: the project mandate, the Project Brief and the Project Product Description.

The Risk Management Strategy will include information on

- The Risk Management procedures to follow.
- Tool and techniques (e.g., use workshops to discover risks).
- What information needs to be kept, as well as the structure of the Risk Register?
- Timing of Risk Management activities.
- Roles and Responsibilities.
- Scales to use for likelihood, impact, proximity (e.g., very low, low, normal, etc.)
- How scales will be categorized.
- Risk Tolerances that will be used.
- Risk budget information (this is optional).
- Early warning indicators (For example, just imagine the dashboard in your car having a red light for the number of issues raised in a week, e.g., average number of defects captured in a quality inspection, percentage of cost increase, type of customer feedback, project staff turnover, etc. Any of these can have an effect on a number of project objectives.)

PRINCE2 also recommends a number of techniques to help identify risks, such as *Review Lessons*, *Use Risk Checklists*, and *Brainstorming*.

- **Review lessons:** Review lessons from similar and previous projects to see what were the threats and opportunities.
- **Risk Checklists:** These are in-house checklists that may exist. They help to make sure that risks that were identified on previous projects are not overlooked.
    - Checklist for a legal project, financial investment, merger, etc. (some of these can be purchased from specialist companies).

- **Brainstorming:** For example, invite different types of stakeholders to a brainstorming-type meeting or workshop. You may choose to gather risks beforehand and use the workshop to categorize and prioritize them. Use Post-Its or a whiteboard to discover threats and opportunities. This should be led by someone with good facilitation techniques.

Part of Identify Risk is to describe the risk in a specific way, but this will be covered in a separate topic, as I want to give a number of examples because it is important to learn how to describe risks.

9.10 How to Express the Risk

Let us learn how to express Risk or in other words how to describe it.

PRINCE2 recommends that risk should be described in a certain way. For example, we cannot say that the risk to an international business conference in London might be a volcano. This does not tell us very much in terms of how the volcano would affect the project. PRINCE2 recommends that we should describe this risk in terms of the cause, event and effect. We need a few examples to get this across.

Example 1: Let us say that our project is to organize a European conference on solar energy in London and we invite the top 300 persons from around Europe to this event who would mostly travel by air. Now let us look at the volcano example again. I will describe the risk in terms of cause, event and effect.

> Due to an active volcano in Iceland that is releasing ash, there is a threat that the winds could bring this ash into UK airspace, thus grounding planes, which would cause many people to miss the event.

Now let us look at the cause, event and effect in the last statement:

- The **cause** is that there is an active volcano in Iceland that is releasing ash. This cause is already happening.
- The **event** is a threat that the winds might bring the ash into UK airspace so planes could be grounded. The event might happen.
- The **effect** on our project is that it would cause many people to miss the event or not be able to return home after the event.

Here is Example 2, taken from the PRINCE2 Manual:

I will first mix up the sentence so you can think about the cause, the event that is a threat, and the effect.

Farmers' crops might get damaged due to heavy rain, as fields will get flooded.

- What is original cause? The cause is heavy rain.
- What is the threat? The threat is that fields might get flooded
- What is the risk? The effect if the risk does happen is that the crops will get damaged.

So the correct way to describe this risk would be:

> *"Due to the heavy rain, there is a threat that the fields might be flooded which would damage the crops."* You could make this easy by starting the sentence with the words "*Due to* [the cause], then follow it with communicating that "there is a threat" of an event that could happen which would result in (describe the effect)

Here is an example of an opportunity: Let us say that the project is to organize an outdoor concert that is about 10 kilometers away from Heathrow Airport, but near the flight path. Concert organizers see this as an opportunity, as there would be no overhead noise from the airplanes.

Let us describe this from a cause, event and effect point of view:

> The cause is that the volcano is releasing ash, and there is an opportunity that the winds might blow the ash into UK airspace, which would ground airplanes and result in no noise disturbance.

We could write this risk like the following: - Cause, Event & Effect

Due to the fact that the volcano is active and releasing ash, there is an opportunity that the winds might blow the ash into UK airspace and ground airplanes, which would result in a better experience for concert goers and more visitors.

Tip: Write the sentence in the following manner as this will make it easy. Due to the *Cause*, the *Event* might happen, which would result in …

Due to … there is the risk of … that could result in….

9.11 Step 2: Assess Risk

How to Assess Risk?

Assess Risk is the 2nd step in the PRINCE2 Risk Management procedure of Identify, Assess, Plan, Implement and Communicate. Assess Risk covers two actions: Estimating and Evaluating Risk. You will see that these go together.

Estimating is about assessing the probability, the impact, and the proximity for each threat or opportunity. These are three of the columns in the Risk Register.

Evaluating is to group all the risks together (both threats and opportunities) and get an overall Risk Value for the whole project.

9.12 Step 2: Assess Risk: Estimating

There are a number of techniques for estimating Risk, such as probability trees, expected value, Pareto analysis, and probability impact grid. You do not need to know these for the exam. I will give one example, however, so that you'll have a good idea of how to use one of these.

The Expected Value technique: This technique combines impact cost (e.g., €80,000) with the probability (e.g., 5%). In other words, it combines the cost of impact – in case it does happen by likelihood – with the percentages used to put a value on the likelihood.

Let me give an example:
The risk is that some specialized computer-testing equipment that you use on your project may be damaged or stolen.

- The impact of this would be €80,000, as this is the cost to buy a new one.
- Let us say the probability of this happening is 2%.
- So the Expected Value is impact by probability, so €80,000 by 2% is **€1,600.**

See this represented in the following table and you can get a Risk Value for the whole project by totaling all the Expected Values.

Risk ID	Like-lihood	Impact	Expected value
04	2%	€80,000	€1,600
05	4%	€10,000	€400
06	10%	€15,000	€1,500
Expected monetary value			€3,500

Fig 9.3 Expected monetary value example

Now you see that you can use this technique for each risk, and place a value on each risk. Most important, this makes it easy to compare the risks with each other.

PRINCE2 recommends the following is understood for each threat and opportunity:

- The probability of the risk (i.e., the likelihood of it happening)
- The impact, in terms of project objectives (quantify this as to what would be the damage done)
- The proximity of these threats, i.e., when this is likely to happen. (e.g. icy roads may be 5 months away for a summer event, but much nearer if the event was held in November.
- And how the impact of the risk may change over the life of the project. I think I need to give an example to explain this:
    - Let us say there is a threat that a supplier will take 20% longer to do their tasks than planned. The impact at the start of a project is for the whole project, while the impact towards the end may only cover one stage. So, the Impact of this risk gets lower as the project goes on.

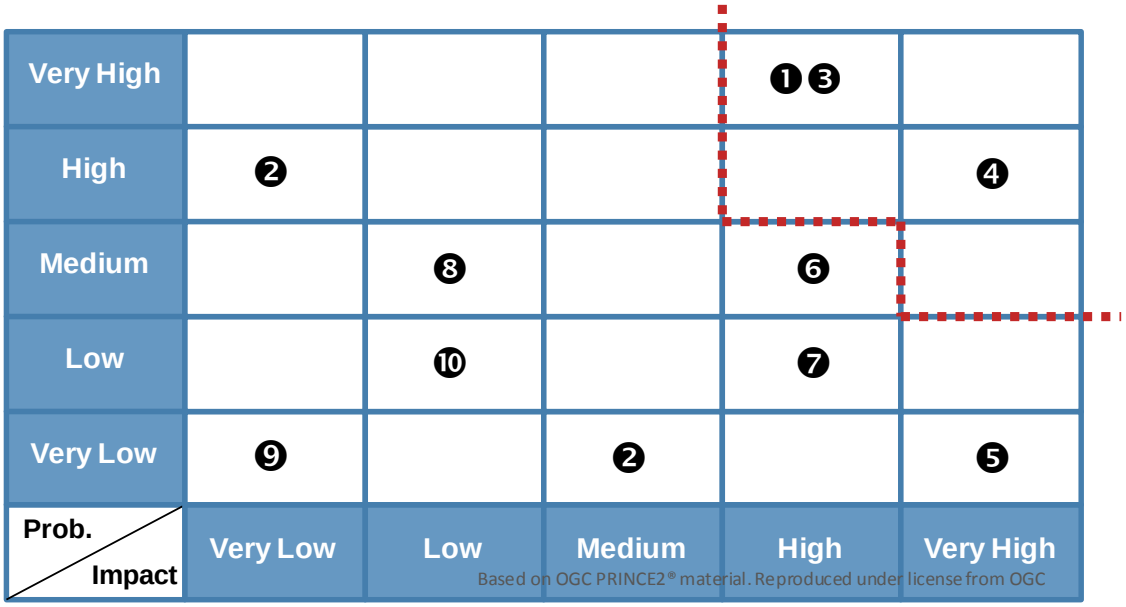


Fig 9.4 Summary Risk Profile

PRINCE2 recommends plotting the estimates on a Summary Risk Profile diagram. This is a *Probability versus Impact* diagram and it's an easy way to compare risks with each other. I would strongly advise you to take a good look the Summary Risk Diagram example and understand its structure.

There are a number of advantages to this diagram:

- It is easy to get an overview of all the risks.
- It is very useful for communicating the level of risk for the project to the Project Board.
- You can see which risks will need attention.
- You can draw a Risk Tolerance line on the diagram to distinguish risks that have both a higher impact and a higher probability rate from risks that have a lower level of probability and impact.
- All risks above this Risk Tolerance line might need action to be taken.

Note: The Summary Risk Profile diagram is a snapshot of the risks at a specific point in time. This will keep changing during the project.

If you are looking at the diagram, which risk do you think the Project Manager will communicate to the Project Board? They will definitely communicate the risks above the Risk Tolerance line and any changes that happen to these risks.

The Project Manager is expected to provide Risk information to the Executive and Project Board and one of the times they will do this is at the end of each stage. So the Project Manager will include information on any changes to the Risk above the Risk Tolerance line in the End Stage

Report. The Project Manager will immediately inform the Executive if a risk moves from below to above the Risk Tolerance line.

9.13 Step 2: Assess Risk – Evaluate

Evaluate

Evaluate is the 2nd of two parts of the Assess step in the PRINCE2 Risk Management procedure.

What is Evaluate and how does it differ from Estimate?

The objective of *Evaluate* is to evaluate all the risks together (both threats and opportunities) and get an overall Risk Value for the whole project. From a Corporate, Program Management or Project Board point of view, such a figure for each project before it starts would be very useful. For example, a Project Board might want to continue with a project only if the risk for the project is less than an agreed tolerance.

How do you think we could get a risk value for the whole project?

Earlier in this theme we gave an example using the expected monetary value technique to assign a value to a risk. The calculation in the example was €1,600. So imagine adding all these values together for each risk. This would give you the Risk Value of the whole project. Remember to include any opportunities into the calculation. As you can imagine, these will be positive amounts, while threats will be negative amounts.

To summarize, *Estimate* deals with one risk at a time and *Evaluate* groups all risks together to give one Risk Value for the whole project.

9.14 Step 3: Plan is about Planning the Responses

Planning the responses to risks is the 3rd step in the PRINCE2 Risk Management procedure of Identify, Assess, Plan, Implement and Communicate. Its primary goal is to plan specific responses to the threats and opportunities:

> The objective of planning the responses to risk is to reduce the threats and maximize the opportunities.

If the Project Manager fails to plan responses to a risk, they will be caught off-guard if this risk materializes. It is always good to be prepared. After all, failing to plan is planning to fail, for example, if your project is to organize an outdoor event and one of the risks is a threat of rain. If you do nothing to prepare for this and halfway during the concert it starts to rain heavily, it's a bit too late to start erecting a tent or ordering plastic ponchos to distribute.

<table>
<tr><th>Threat Responses</th><th>Opportunity Responses</th></tr>
<tr><td>Avoid</td><td>Exploit</td></tr>
<tr><td>Reduce
(probability and/or impact)
Fallback
(reduces impact only)
Transfer
(reduces impact only, and often only the financial impact)</td><td>Enhance

Based on OGC PRINCE2® material.
Reproduced under license from OGC</td></tr>
<tr><td colspan="2">Share</td></tr>
<tr><td>Accept</td><td>Reject</td></tr>
</table>

Fig 9.5 Responses to Threats and Opportunities

It's important to note that responses do not necessarily remove the risk. Most of the Risk Response actions taken in a project are done to reduce the Risk Impact. To help to decide the type of responses that are best to use to reduce the impact of the risk, you can look in the Lessons Learned report from similar projects that have already been done.

PRINCE2 suggest 6 responses for threats and four responses for opportunities. The 6 responses for threats are: *Avoid*, *Reduce*, *Fallback*, *Transfer*, *Share* and *Accept* while the 4 responses for Opportunity are *Exploit*, *Enhance*, *Share* and *Reject*. I mentioned "*Share*" twice as it both a response to threats and to opportunities.

9.15 Plan the Responses to Threats

Here I will explain the different responses to Threats and give an example of each, as we have already seen, the responses are: *Avoid*, *Reduce*, *Fallback*, *Transfer*, *Accept* and *Share*.

1) Response Avoid:

This involves changing something in the project so that the threat no longer has impact or can no longer happen. You avoid the risk.

Example:

You are organizing an outdoor concert for 600 people in April in the UK. One of the risks is that it may rain, so you decide to move the concert indoors thus avoiding the risk. This response has removed the threat. Now, if it rains, then the rain has **no impact** on the concert.

2) Response Reduce:

Here, actions are taken to:

a) Reduce the **probability** of the risk
b) Reduce the **impact** if the risk does occur

To help understand this, I will give an example of both *reduce probability* and *reduce impact*. *Reduce response* is the most common way of dealing with risks.

Example to Reduce Probability:

The objective is to reduce the probability of the risk happening. Using the concert example with the threat from rain, we could move the concert to July where it's 3 less times less likely to rain. This is a clear example of reducing the probability but the risk is still there.

Example to Reduce impact:

The objective is to reduce the impact in case the risk occurs. Here, the organizers could order a load of sponsored plastic ponchos to be offered to the concert-goers when they arrive. If it does rain during the concert, the people would not get soaked from the rain and thus, you have reduced the impact of the rain.

3) Response Fallback:

Fallback is also referred to as contingency. See fallback as a fallback plan of actions that would be done if the risk occurs and therefore would become an issue. These actions will help to reduce the impact of the threat.

Example:

There is an important tennis game at Wimbledon in Centre Court which now has a roof that can be closed. The fallback plan is to close the roof once it starts to rain. This would not stop it from raining and it takes 5 minutes to close the roof of the tennis court, so the grass could still get a few drops of rain. This fallback plan does reduce the impact of the rain, however, and it allows the game to continue after the roof has been closed.

Note: The action of closing the roof is only done once the threat is real.

4) Response Transfer:

Here you can transfer the financial risk to another party. For example, using an insurance policy, you could recover the costs if the threat does happen.

Example:

Let us use the example of the concert again. One of the threats might be that one of your top acts might not be able to play at the event due to illness or some other reason. Concert-goers might want to have their money back but you have spent a lot of money already just organizing the event. So you take out an insurance policy to cover any losses you could incur if this risk does happen.

5) Response Accept:

Here, a decision is taken to accept the risk. It just may cost too much money to do something about it or it may not be possible to do anything about it. However, you do keep the status of this risk open and continue to monitor it.

Example:

There is a risk that another outdoor concert could be held around the same day as your concert and this might affect ticket sales. After some consideration, you decide to do nothing about it and continue as normal. Moving the concert to another time will just cost too much and some people have already bought tickets, so you just live with the risk.

5) Share:

Share is both a response for threats and opportunities. Share is very common in customer/supplier projects where both parties share the gain if the costs are less than the planned costs and share the loss, too, if the costs are exceeded.

Example:

In the concert example, suppose you have a supplier that provides VIP toilet facilities and people are charged €1 for each service. There is a certain fixed cost that you must pay to provide this service and you agree with the supplier to share the profits if the revenue is above this fixed cost amount and share the losses if it is below this amount.

We have covered the 6 responses to threats which are Avoid, Reduce, Fallback, Transfer, Accept and Share. I am sure that the examples included have helped to explain these.

9.16 Plan the Responses to opportunities

Here you will learn how to plan the responses to the opportunities. The responses to opportunities are: *Share*, *Exploit*, *Enhance* and *Reject*.

Note: For the exam, you just need to aware of what each response is.

1) Share:

I already covered “Share” when discussing the planning responses to threats. It’s where you share the profits and losses with another party.

2) Exploit:

Exploit is where if the risk does happen, you would take advantage of it and use it.

Example:

I will use the outdoor concert event project. The Risk is: Due to the fact that your local radio station regularly interviews artists who are playing in the local region, there is an opportunity to get your top artist interviewed, which would result in more publicity and selling more tickets. If this risk does happen, then you have agreed with the record company to exploit it and do the interview.

3) Enhance:

Enhance is where you take actions to improve the likelihood of the event occurring and you enhance the impact if the opportunity should occur. This is not the same as “Exploit,” but doing certain things will give a greater chance for the opportunity to happen.

Example:

The Risk is: Due to the fact that your local radio station regularly interviews artists who are playing in the local region, there is an opportunity to get your top artist interviewed, which would result in more publicity and selling more tickets.

So you take the following actions to enhance the likelihood of this happening:

- You contact the radio station's managers with a suggestion.
- You ask the record company to contact the radio stations.
- You ask your other contacts at the radio station to make this happen.
- You suggest the idea of a ticket giveaway with an interview.

.

So what is the difference with Exploit?

- With Exploit, if the risk does happen, then you take advantage of it.
- With Enhance, you try to increase the chances of making it happen.

4) Reject:

This is where you identify an opportunity and decide not to take any action on this opportunity. There can be many reasons not to do this. For example, it could cause you to lose focus on your main objective, or the return on this opportunity could be low compared to the rest of the project.

Example:

There is an opportunity to invite another equally known guest star free from the same label as your lead top act; however, you decide not to go ahead with this, as you cannot mention the artist's name on the posters and advertising, so you will not sell any extra tickets because of this. Also, it will cost you extra to provide facilities for this extra artist. So it sounded like a cool idea, but did not bring any extra value to the bottom line for the concert, only extra costs.

The 4 responses for Opportunity were *Share*, *Exploit*, *Enhance* and *Reject*. Again, I hope the examples help your understanding.

9.17 Step 4: Implement the Responses

Implement the Responses is the 4th step in the PRINCE2 Risk Management procedure. The goal of this step is to ensure that the Planned Responses to risk are done, i.e., both monitored and corrective action taken. The main thing to decide in this step is:

- Who is going to monitor these Risks? (**Risk Owner**)
- Who is going to carry out the planned Risk Responses? (**Risk Actionee**)

The PRINCE2 manual mentions two specific roles which are: **Risk Owner** and **Risk Actionee**.

- The **Risk Owner** is responsible for managing & monitoring risks aspects. They can also carry out actions that have been assigned to them.
- The **Risk Actionee** is someone who is assigned to carry out a particular action and they support the Risk Owner. So they are not responsible for monitoring or managing the risk.

Let me give you an example to explain this:

Let us say you are working a project and you need to get very specific parts from a supplier in Asia. Currently you have a buffer of one week for these parts to arrive in your company but need someone to monitor this and put the planned response actions into effect if products are going to be late. As a precaution, some of the parts will stay at the factory and can be sent by air freight if there is an issue with the much cheaper shipping service. So you need a person to own this responsibility, monitor it and take ownership. You also need a person to put the Response Plan into action who will arrange the air freight. In this instance, the Team Manager of the team that will use these products will be the Risk Owner, and the Risk Actionee will be a person in the purchasing department who has experience with air freight.

Note: The Risk Owner and Risk Actionee can be the same person

9.18 Step 5: Communicate

Communicate is the 5th step in the PRINCE2 Risk Management procedure, but is actually done throughout the whole Risk Management procedure. This communication step ensures that the information related to the threats and opportunities faced by the project are communicated within and outside the project to all necessary stakeholders.

How do you think the Project Manager communicates?

The existing management report products are mostly used to communicate Risk information, such as

- The Project Brief
- Highlight Report
- End Stage Report
- Lessons Learned reports

The guidelines for reporting come from the Communication Management Strategy document.

How does the Project Manager decide which risk information to communicate?

The Project Manager will ask such questions as, “What has changed since the last report?” as Risk is never static. Think again of the Summary Risk Diagram and that a Risk can move around the diagram or even above or below the Risk threshold line during the project as conditions change.

Other less formal methods such as meetings and memos can also be used.

Effective Risk Management is dependent on good communication. The more the Project Manager communicates, the more feedback they will get and increase trust within the project.

9.19 What is a Risk Budget?

A Risk Budget is a sum of money that is put aside just to deal with specific responses to threats or opportunities and it cannot be used for anything else. Certain responses to Risk will require certain actions to be done that cost money; this will be budgeted in the Risk Budget.

How do you think you can calculate a value for the Risk Budget?

There is a certain process that needs to be followed in order to calculate a value for the Risk Budget. You cannot just pull a value out of thin air. Each risk needs to be analyzed and a value assigned to the costs of the response and the likelihood. Using the likelihood and cost of Response Information for all risks, it is possible to calculate a value for the risk budget.

What can the Risk Budget be used for?

The PRINCE2 manual reminds us that this budget is used for responding to risks that occur. It should *not* be used to fund extra requirements that are introduced in the project or cover the cost of any delays. The Risk Budget has nothing to do with the Change Budget, so it should not be raided if the Change Budget is empty.

The Risk Budget is set at the start of the project but new risks can be detected during the project, so it’s a good idea to increase the original Risk Budget to cover extra risks that may be identified during the project.

9.20 Risk Roles and Responsibilities

What are the Corporate and Program Management responsible for with regard to risk?

Provide the Corporate Risk Management policy and information.

What is the Executive responsible for?

- Accountable for all aspects of the Risk Management.
- Ensure that a Risk Management Strategy exits.
- Ensure that Risks associated with the Business Case are identified, assessed and controlled.
- Escalate Risk to the Corporate or Project Management if necessary.

What is Senior User responsible for with regard to risk?

- Ensure that Risks to the Users are identified, assessed and controlled.
- This encourages Users to identify risks and provide information to the Project Manager and also to read the reports provided by the Project Manager.

What is the Senior Supplier responsible for with regard to risk?

- Ensure that risks to the supplier are identified, assessed and controlled.

What is the Project Manager responsible for with regard to risk?

- Create the Risk Management Strategy document. They can get a good template from Program Management, which will reduce the amount of work.
- Create and maintain the Risk Register. They can get assistance from Project Support.
- Ensure that risks are continually identified, assessed and controlled throughout the project lifecycle.
- Keep the Summary Risk Diagram up to date and communicate to the project stakeholders.

What is the Team Manager responsible for with regard to risk?

- Help with the identifying, assessing and controlling risk. For example, they would be asked to participate in the workshops used to identify risks.

What is the Project Assurance responsible for with regard to risk?

- Review the Risk Management practices to make sure they are performed in line with the projects Risk Management Strategy.

What is the Project Support responsible for with regard to risk?

- Assist the Project Manager in maintaining the projects Risk Register

We have just discussed the main responsibilities and it is good to be aware of these.

9.21 Risk Summary

This is the summary of the Risk Theme and you will have learned the following:

- The purpose of the information in the Risk Theme.
- The definition of Risk: What is Risk, what is at risk in the project and what is Risk Management & what is Risk Attitude.
- You learned about the 3 steps to Risk Management, which are Identify, Assess and Control.
- You learned about the relationship between the Risk Theme and the Management of Risk method from OGC.
- You learned about the Risk Register, how it is used and its contents.
- You learned about the 5 steps in the Risk Management Procedure which are Identify, Assess, Plan, Implement and Communicate (I ate peaches in China).
- Step 1: You learn about 3 techniques that can be used to uncover risk, such as Review Lessons, Risk Checklists and Brainstorming.

- You learned how express risk in the syntax of cause, event & effect.
- Step 2: You learned how to assess risk, which is done in two steps: Estimate each risk one at a time and then evaluate all the risks together to get the Project Risk.
- Step 3: You learned how to Plan a response to each risk, both Threats and Opportunities.
- Step 4: You learned how to implement the responses, as well as the two roles of Risk Owner and Risk Actionee.
- Step 5: You learned what is done to communicate, how often this is done and which management documents can be used.
- You learned about the Risk Budget, what is it used for and when it is created.
- And lastly, you learned about the Risk Roles & Responsibilities.

9.22 Learn Thru Questions

Try and answer the following, these are taken from the Learn Thru Questions audio course. Check the answers in the Learn Thru Questions document available on our site: You can also listen to these questions and answers (use the **LTQ audio course**)

Q01: What is the purpose of the Risk Theme? Just answer in your own words.

Q02: What do you think is the connection between a project, change, uncertainty and risk?

Q03: Is Risk Management just done at the start of the project, for example, when creating the Risk Management Strategy?

Q04: Which role is the main person responsible for risk in a project? (**Note:** I am not asking for the role that will do most of the work and follow-up, but the main person responsible.)

Q05: PRINCE2 uses the MOR definition of Risk. MOR is the Risk Method from OCG that is focused on Risk. Finish this definition by adding one word: *"Risk is a set of events, that should it occur, will have an effect on the achieving of the project _____."*

Q06: Name two types of risks?

Q07: What is at Risk or what does PRINCE2 say is at Risk?

Q08: What is Risk Management? (**Tip:** Begin your answer with *"Risk Management is about the steps you take in a systematic way that will enable you to identify……"*)

Q09: Name the three steps to Risk Management. (**Tip:** First is Identification)

Q10: Which other OGC method does PRINCE2 get its Risk Management procedures and principles from?

Q11: What is normally the first question about Risk that should be asked by the Project Manager when considering risk and the approach to Risk Management?

Q12: List some of the information that you would expect to find in a company's risk policy and procedures to help with Risk Management.

Q13: What would you advise a Project Manager to do if they don't have internal Risk Policy in the company?

Q14: What is the advantage for stakeholders to have a common approach to Risk Management?

Q15: Does PRINCE2 recommend using one Risk Management Strategy for all projects in a company or should each project have a separate Risk Management Strategy?

Q16: What does the Risk Register do? (**Tip:** use the words *capture*, *maintain* and *history* in your reply)

Q17: List 3 to 4 of the fields you might expect to find in a Risk Register spreadsheet?

Q18: Where can you get the following: (1) more information on the exact structure of the Risk Register, (2) a description of the expected information that it should contain and (3) format and presentation information?

Q19: Who is responsible for creating and maintaining the Risk Register? I am interested in the roles.

Q20: We know that the 3 steps to Risk Management are: Identification, Assessment and Control. The Risk Management Procedure has 5 steps. Name them using the following line to remind you: *I Ate Plants In China.*

Q21: Which of the 5 Risk Management Procedure steps are sequential and which steps have to be done constantly? The 5 steps are: Identify, Assess, Plan, Implement and Communicate.

Q22: The first step in the Risk Management Procedure is Identify but there are two important things that have to be done before the project can start to identify risks. Can you name them? (**Tip:** Appetite and the document that describes how Risk will be done in the project)

Q23: The Project Manager has to prepare the Risk Management Strategy document. They will ask a number of questions to make sure that the Risk Management Strategy provides the correct Risk Management approach to the project. List one or two questions that the Project Manager could ask in order to understand and uncover the Risk Management requirements in a project.

Q24: The answers to questions asked in order to understand the Risk Management Requirements and to be able to prepare the Risk Management Strategy document mostly come from three Management Products that are available before the Risk Management Strategy document has to be completed. List one or two of these documents. (**Tip:** The Risk Management Strategy document is created in the Initiation Stage.)

Q25: Can you name 2 of the topics that you might expect to find in the Risk Management Strategy document? (**Tip:** Just think of the information that you need to do Risk Management for a whole project when you are identifying, assessing, planning responses, implementing responses and communicating.)

Q26: PRINCE2 recommends that risks should be described in a certain way that should include the cause, the event and _____. Fill in the blank and explain each of the three terms in a few words.

Q27: Describe the following example of Risk in terms of *cause*, *event* and *effect on the project objectives:* "*Fewer people might come to the event, as all planes could be grounded due to ash from the volcano that is blowing into UK airspace."* Start with the cause, then the event that is likely to happen, and then the effect on your project, which is to organize a conference in London for business managers from around Europe who are expected to fly in.

Q28: Let us say that our project is to organize an outdoor concert which is near Heathrow Airport. The risk of the ash affecting planes is an opportunity, as more people might attend, increasing the revenue. It would be easier to get there and there would be no noise interference from overhead. Express this in a sentence using *cause*, *event* (which is an opportunity) and the *effect* on the project. **Tip:** Use the following syntax (this will make it easy): **Due to the fact that** … there is an opportunity …, which will result in….

Q29: *Assess Risk* is the 2nd step in the Risk Management procedure. It has two steps, which are *Estimating* and *Evaluating Risk*. What is the difference between Estimating and Evaluating Risk?

Q30: Which 3 things are assessed when estimating a risk? (**Tip:** Likelihood, Cost & When)

Q31: One of the techniques mentioned in the PRINCE2 manual that is used to estimate a risk and give a value to a risk is the **Expected Value technique,** where you multiply probability by impact. So, let's say that you were to ship some equipment via air cargo. The risk is that the equipment might get damaged, and this would cost €60,000; there is just a 2% chance of this happening. What is the estimated value for this risk using the **Expected Value technique**? (**Tip:** Impact Cost by %)

Q32: How would you explain the following using just a few simple words: probability, impact and proximity? What kind of scale could be used? Use your own words as there are many ways to explain these terms.

Q33: What is the name of the diagram that PRINCE2 recommends to plot the Estimate Risk results so that it becomes very easy to compare risks with each other? (**Tip:** Summary something, something diagram)

Q34: There are a number of advantages to using the Summary Risk Profile diagram to communicate Risk. Can you suggest two of them? (**Tip:** Just think of the different information that you can get and who will read it.)

Q35: Evaluating is the 2nd part of assessing risk after estimating. What is the objective of *Evaluating* in your own words?

Q36: Why is the Estimate value useful? Answer in your own words.

Q37: *Plan the Responses* is the 3rd step in the Risk Management procedure. What is planned or done in this step?

Q38: What do you think happens if the Project Manager does not plan for a risk and the risk occurs?

Q39: Does the step of Planning the Responses remove or reduce risks?

Q40: PRINCE2 suggests 6 responses for Threats; name 3 of them. The most important thing is to be able to recognize these names if you see them in a question.

Q41: PRINCE2 suggests 4 responses for Opportunities; name 2 of them. Which response for Opportunity is the same as one of the responses for Threat?

Q42: Explain the Threat response **Avoid**. What effect and impact does it have on the Threat? Answer in your own words.

Q43: Explain the response **Reduce**. What effect does this have on the Threat? Explain in your own words. (**Tip:** Comment on **Probability** and **Impact.)**

Q44: Give an example of **Reduce probability**. In other words, reduce the likelihood of a Risk happening. Use the example of organizing an outdoor concert the UK in April, where the Threat is rain, as it will have an effect on the concert-goers.

Q45: Give an example of **Reduce impact** if the Risk should occur. Use the example of organizing an outdoor concert the UK in April, where the threat is rain, as it would have an effect on the concert-goers.

Q46: Explain the response **Fallback**. When is this Response put into action? What is the effect on the impact of the risk?

Q47: Give an example of **Fallback** using the following scenario. *"There is a big game on Centre Court at Wimbledon and there is a threat that it might rain. The Centre Court now has a roof but it takes about 10 minutes to close."*

Q48: Give an example of **Transfer** response using the example of the concert. The Threat that you wish to respond to is that one of your top acts might not be able to play at the event due to illness or some other reason. This could cost you a lot of money, as people might ask for their money back and you have spent a lot of money organizing this event.

Q49: Give me an example of the response **Accept** and why you would choose this response. Use the following example: *"There is a risk that another outdoor concert could be held around the same day as your concert and this could affect ticket sales."*

Q50: Share is both a response for Threats and Opportunities. Both parties share the *gain* if the costs are less that the planned costs and share the *loss* if the costs are exceeded. Give an example of *share* using the following scenario, again, with the outdoor concert: *You have a supplier that provides VIP toilet facilities, and people are charged €1 for each service, but there is a certain fixed cost that you must pay to provide this service:*

Q51: What is meant by response **Exploit** an opportunity? Answer in your own words.

Q52: What is meant by the response **Enhance an opportunity**? Answer in your own words.

Q53: What is meant by the response **Reject an opportunity**? Give an example.

Q54: What is the objective of *Implement the planned responses*? (**Tip:** Also think of what is done after you after you take action.)

Q55: There are two specific roles to *Implement the responses*; name them. (**Tip:** They both start with Risk.)

Q56: What happens in the **Communicate** step (the 5th step of the Risk Management procedure) and when is *communication* done?

Q57: Name two of the existing Management Reports that are used to communicate threats and opportunities after the Initiation Stage has been completed.

Q58: Where are the guidelines for how to communicate Risk Information to stakeholders? (**Tip:** This is not the Risk Management Strategy document)

Q59: What is a Risk Budget? Is it mandatory, and when is created?

Q60: If the Risk Budget is still not used late in the project, can it be used to help with extra Change Requests that have been agreed?

Q61: In the Risk theme, who handles the following responsibilities?

- Is accountable for all aspects of the Risk Management
- Ensures that the Risk Management Strategy exists
- Ensure that risks associated with the Business Case are identified, assessed and controlled
- Escalates risk to the Corporate or Program Management as necessary

Q62: Who is responsible for the following in the Risk theme?

- Ensuring that risks to the **User** are identified, assessed, and controlled. (**Tip:** This encourages them to identify risks and provide information to the Project Manager and to read the reports provided by the Project Manager.)

Q63: Who is responsible for the following in the Risk theme?

- Creating the Risk Management Strategy document,
- Creating and maintains the Risk Register and can get assistance from Project Support
- Ensuring that risks are continually identified, assessed and controlled throughout the project lifecycle
- Keeping the **Summary Risk Diagram** up to date and communicates to the project stakeholders

Q64: Who is responsible for the following in the Risk theme?

- Providing the Corporate Risk Management policy and Risk Management process guide, or similar documents

Q65: Who is responsible for the following in the Risk theme?

- Helping with the identification, assessment and control of risk. (For example, they would be asked to participate in the workshops used to identify risks.)
- Including risk information in the Checkpoint Reports

Q66: Who is responsible for the following in the Risk theme?

- Reviewing the Risk Management practices to make sure they are performed in line with the projects Risk Management Strategy. (**Tip:** Actually they do this for the 4 strategy documents.

Q67: Who is responsible for the following in the Risk theme?

- Assisting the Project Manager in maintaining the projects Risk Register

10 Change

10.1 Introduction to Change Knowledge

Let us take a look at what will be covered in this Change Theme.

- You will learn the purpose of the knowledge in the Change Theme – that it covers both *Change Management*, which is about looking after the products in the project and *Issue & Change Control Management*, which is about handling issues and change requests.
- You will be able to answer the following questions: *What is Configuration Management? What is a configuration item? What is an issue and what are the three types of issues?*
- You will learn about the PRINCE2 approach to change.
- You will learn about the Configuration Management Strategy document
- You will learn how to prioritize issues using the MoSCoW technique and track severity
- You will learn what the Change Authority does and about the Change Budget.
- You will learn about Configuration Management procedure which has 5 activities: *Planning*, *Identification*, C*ontrol Change*, *Status Accounting* and *Verification & Audit*.
- You will learn about the Issue and Change Control Procedure, which has 5 steps: *Capture*, *Examine*, *Propose*, *Decide* and *Implement*.
- Lastly, you will learn about the Roles and Responsibilities relevant to the Change Theme.

10.2 What happens in real world?

One of the biggest issues many Project Managers have is the ability to say *no*, or at least that is what they would like to say when they are asked to add more requirements to the project. This of course, depends on the organization. In some organizations where there is little understanding of Quality and a Change Control process, Project Managers that say *no* are not seen as team players and can quickly develop a name as being uncooperative.

In some projects, there may be a rush to get the project started and so the required amount of time is not spent on defining the requirements and Product Descriptions, and then the budget is set for the project. It can later become apparent that extra functionality has to be added and the Project Manager needs to know how to handle this situation.

What I like most about the Change Theme is that it shows you that as a Project Manager, you never have to say *no* or *yes*, but when requested to add new functionality, you can even thank the person for suggesting this, then provide them a Change Request form to fill in and offer help if required. You then promise to follow up on this Change Request, letting the requester know that it will be Change Authority/Project Board that will decide on this request.

The Change Theme also describes the roles and responsibility of the Executive and the Project Board; this is useful, as you may need to remind the Executive of this. I have seen a few projects where the Executive was actually the person who was putting the pressure on the Project Manager to allow changes to creep into the project without providing extra resources. So this theme will show you how to deal with these situations.

Most Project Managers are also aware that they have to look after the products produced by the project and this is called Configuration Management. This mainly involves tracking changes, making sure the correct persons have access to the latest versions, baselining documents, and providing a central, accessible storage location. Some companies provide an easy-to-use documented IT system that makes it easy for the Project Manager to manage, control and distribute project information, while other companies provide systems that are very difficult to use and therefore ends up not being used. The good news is that it is very easy to get an easy-to-use online system that will provide most of the required functionality including secure access to the information.

The last point before moving on is that most Project Managers don't plan any time for Configuration Management activities and believe this is something they can do in the evening or perhaps while on a conference call. It is a very good idea to plan this work, however.

10.3 Purpose of knowledge in the Change Theme

The purpose of the knowledge in the Change Theme is to help you identify, assess and control any potential changes to the products that have already been approved and baselined. The Change Theme is not just about handling change requests but also handling issues that arise during the project. In fact, it is better to say that the Change Theme provides a common approach to issue and Change Control.

Change is inevitable in any project and all projects need a good approach to identify, assess and control issues that may result in change. This theme provides an approach to Issues and Change Control.

When is Issue and Change Control done?

Issue and Change Control happens during the full lifecycle of the project. Remember, the objective is not to prevent changes but to get changes agreed and approved before they can take place.

Each project requires a Configuration Management System that tracks products, records when products are approved and baselined, and helps to ensure that the correct versions are being used during the project and delivered to the customer.

10.4 Change Lingo

Configuration Management:

Configuration Management is the technical and administrative activity concerned with the creation, maintenance and controlled change of the configuration of a product. This is a nice way of saying that Configuration Management is about looking after products in the project.

What is meant by the term "configuration item"?

- A configuration item is the name given to an entity (or item) that is managed by Configuration Management, i.e., a component of a product, a product or a Release. An example using a component in a laptop computer would be the cooling fan, the memory or the hard drive. An example of a product would be the complete laptop.

A Release is a complete and consistent set of products that are managed, tested and deployed as a single entity to be handed over to users. An example of a Release could be a new version of a laptop computer with a certain version build of OS, certain CPU, certain BIOS, and certain versions of applications.

Issues

PRINCE2 uses the term *issue* to cover any relevant event that has happened, that was not planned, and that requires some management action. For example, a question or a Change Request. Issues can be raised at any time during the project and by anyone with an interest in the project.

Types of issues

There are 3 types of Issues; they are

- Request for Change
- Off-Specification
- Problem/Concern which could also be a question.

Request for Change

- **Definition**: A proposal for a change to a baselined product, i.e., a product that has already been approved. (This could be a Product Description document and one of the specialist products being created by the project. *Example*: A stakeholder requests to support a new language.)

Off-Specification

- **Definition**: This is something that was agreed to be done but is not provided by the supplier or forecast not to be provided. *Example*: The supplier could not complete the

automated *Forget Password* feature; therefore password will have to be manually reset by the central administrator.

Problem/Concern

- **Definition**: Any other issue that the Project Manager needs to resolve or escalate. *Example*: One of the team was taken off the project for one week.

10.5 The PRINCE2 Approach to Change

The Issue and Change Management approach will be decided early in the project (IP stage), which is the first stage. This can be reviewed at the end of each stage in the Stage Boundary Process.

PRINCE2 has 6 management products that are used to control issues, changes and Configuration Management. The Configuration Management Strategy document is used to establish the project controls and the rest of the documents help to maintain the project controls.

The other five management products are:

- Configuration Items Records
- Product Status Account
- Daily Log
- Issue Register
- Issue Reports

Here is a quick introduction of these 6 management products. :

- The **Configuration Management Strategy**. This document contains the strategy on how issues and changes will be handled in the project. E.g. how to identify products, how to control products and how to do status accounting and verification.
- **Configuration Items Records**: They provide a set of data for each product used in the project (like meta data). E.g. The central desk of library would have card for each book with specific information including location, classification, ISBN number, etc…
- **Product Status Account**: This is a report on the status of products. E.g. List status of all products produced by Supplier X in stage 3.
- **Daily Log**: This log is used by the Project Manager as a diary for all informal information. Formal information is placed in a register (Issue or Risk).
- **Issue Register**: Imagine a spreadsheet to capture and maintain issues.
- **Issue Report**: This report describes an issue and according to PRINCE2 an issue can be 1) Request for Change, 2) an Off-Specification or 3) problem/concern.

10.6 Configuration Management Strategy

The Configuration Management Strategy document contains the strategy of how issues and changes will be handled in the project. One of the first questions the Project Manager should ask is: *What are the existing standards for Issue and Change Control in the company?* They could then incorporate them into the Configuration Management Strategy document.

If there is a program nvironment in place, there will usually be guidelines available to all Project Managers. If not, the Project Manager must ask a number of questions so that they can create a Configuration Management Strategy document.

- Q1: How should products be planned, identified, controlled and verified? (This is Configuration Management)
- Q2: How are Issues and Changes? (E.g. *Capture*, *Examine*, *Propose*, *Decision*, & *Implement*.
- Q3: What tools will be used to help track Issues and Product Information (e.g., SharePoint, Niku Clarity, Shared Drive, a spreadsheet)?

- Q4: What data should be kept for each product (e.g., Product Description, Configuration Item Record, etc.)?
- Q5: How often will the Project Manager consider Issue & Change Control (e.g., once a week, twice a month, etc.)?
- Q6: Who will be responsible for what? In other words, what will be the Roles and Responsibilities? (For example, who has the role of Change Authority?)
- Q7: How are issues and changes prioritized? What scale will be used to prioritize issues?
- Q8: What scale will be used for rating the severity of issues (e.g., 1 to 4, 1 for minor and 4 for critical...)?
- Q9: Which management levels will deal with different severity issues? (For example, Severity 1 issue can be decided upon by the Project Manager and Severity 3 & 4 has to go to the Change Authority.)

This Configuration Management Strategy document is created in the IP stage by the Project Manager and will be approved by Project Board

10.7 How to prioritize issues & track severity

Remember, again, that Issues are Change Requests, off-specifications or problems/concerns. There are many ways to prioritize a change request and PRINCE2 introduces the **M**o**SC**o**W** technique to help with this. **M**o**SC**o**W** is written with big M, S, C and W which stand for *Must have*, *Should have*, *Could have* and *Won't have for now*.

- **Must have**: The change is essential for the viability of the project and its absence would affect the project objectives. E.g. The end product may not work as required.
- **Should have:** The change is important and its absence would weaken the Business Case; the project would still meet its objectives, however.
- **Could have** (also known as *nice to have*): The change is useful but its absence does not weaken the Business Case.
- **Won't have for now**: The change is not essential or important, so it can wait.

Good questions to ask to prioritize the Issue and Change Request

- Must have: Will the end product work if not resolved? (Yes)
- Should have: Does it affect the Business Case (Yes)
- Could have: Does it affect the Business Case (No)
- Won't have for now Is change essential or important (Yes)

Priority & Severity

So **M**o**SC**o**W** is good for prioritizing but what about rating the severity of an issue?

Example: You can use a scale of 1-5 or words such as *minor*, *significant*, *major* & *critical*.
You can link a severity level of an issue by linking a severity with a role.

- Severity Minor: Project Manager
- Severity Significant Change Authority
- Severity Major Project Board
- Severity Critical Program Management (e.g. project out of tolerance)

10.8 Change Authority and Change Budget

The Change Authority is a person or a group who consider requests for change and off-specifications. It is the responsibility of the Project Board, so they can do it themselves, which is more common where few changes are expected, or they can assign this to other persons. If a lot of changes are expected then this will take up too much time from the Project Board and it is better to give the authority to another person or group of persons.

What kind of persons can take on this role?

This all depends on the size and value of the project, the change budget, the amount that the Change Authority can spend on each change and other such factors. So this could be the secretary of the Executive, one of the board, a financial person or any other competent person. The Change Authority will then act on the instructions from the Project Board.

The Change Authority will have a change budget, which is a sum of money that the customer and supplier agree to use to fund the cost of Requests for Change. It is advisable to always have a change budget for each project unless you are sure there will be very few or no change requests. The Project Board can still exert control, as they can put a limit on the cost of a single change or the amount to be spent in any one stage.

The Change Control process is a very important tool for the Project Manager. Let me give you an example. You have senior members of the organization asking for changes and you don't want to appear as negative or be forced to add something new that will put the project in jeopardy. So when asked to add something new to the project, you can start by saying *"Sure. This is our change request process and here is our Change Request form. I can explain this to you or help you to fill this in."* You can then pass the Change Request to the Change Authority and you never have to say *no* while you keep the project on track.

10.9 Management Products used by the Change Theme

Configuration Item Records (CIR):

The purpose of Configuration Items Records is to provide a set of records that describe the products of a project. The best way to explain this is by using the example of a library card that will provide metadata for each book in the library or MP3 TAG information for a song.

Here is an example of an CIR for a Elevator product in a new apartment building project.

Configuration Item Record	
Project Identifier	B024
Item Identifier	B024-034
Current version	V03
Item Title	Elevator 1
Date last changed	22/01/2009
Owner	Maintenance Manager
Location	Bob Geldof Street 2, 1050 Brussels
Item type	Elevator
Item attributes	• Elevator Computer (B024-634), • Elevator Lighting (B024-724),
Stage	Stage 3 : Electric Fittings
Users	All
Status	Approved and in use Next Safety Check 24/10/2009
Producer	Otis
Date Allocated	05/01/2009
Source	Purchased from Otis
Relationship – Items	All items will Category – Elevator • Lift Shaft (B024-024), • Electric System (B024-104), • Elevator Doors (B024-89 to B024-94),
Cross Reference	Building Architecture Plan

Table: Example Configuration Item Record for Elevator

Just imagine a Configuration Item Record to be a one-page document (or less) that describes a product using metadata.

Product Status Accounting

The purpose of the Product Status Account is to provide information about the status of products during the project. This can be a report on one product, a group of products, or all products created during a stage. Look at it as ensuring that the right product is in the right place and being used by the right persons. It is very helpful to the Project Manager. For instance, imagine that you are trying to organize a business event and an older version of the registered users is sent to the taxi company that will pick up these persons at the airport. So it is very important that the correct persons are using the correct products.

Daily Log

The Daily Log is used to record **informal** issues, notes, etc… that are not captured in other project documents at that time. It is like a diary for the Project Manager in a Word document with a number of columns such as *Date*, *Comment*, *Person Responsible*, *and Date of Follow-Up* if needed.

Example: A stakeholder sent an email saying they would like to sit in a Quality Review meeting for a specific product, or a stakeholder has asked you to resend the information

Let me give you an example of the type of data you would store: When you first hear of an issue, you may not have too much information or it may not be very serious, so you decide to enter this into the Daily Log. If the issue becomes more serious and requires follow-up action, then it can be inserted in the Issue Register

Project Name	Apartment – B04
Project No	B024
Project Manager	P. James
Project Executive	G. Owens

Daily Log

Date	Problem, Action, Comment	Person Responsible	**Target Date**	Results
03/01/09	Got a call from supplier to confirm delivery of item B024-034	P. Egan	**Closed**	Confirmed by email (see Sent Folder)
04/01/09	Work Package 056 may be late, this affects WP 67 & 69	K. Cooper	**05/01/09**	Check progress
04/01/09	Stakeholder: City requests meeting in the next month	P. James	**08/01/09**	Plan & Prepare meeting

Fig: 10.1 Daily Log Example

Using the Daily Log: Tips

- Use Excel, as it easier to sort via **target date** so you know what to follow-up on next.
- Keep the Daily Log open on your PC, so it is easy to add new information and check if you have any tasks to complete for that day.

Issue Register

The purpose of the Issue Register is to capture and maintain information on the issues raised in the project.

See this as a spreadsheet with a number of columns like *Issue Identifier*, *Issue Type* (*Request For Change*, Off-Specification or Concern), *Priority*, *Severity*, *Date* on *Which Issue Was Raised*, *Raised By, Description, Status* and *Closure Date*.

Issue No.	Type	Date raised	Description	Resolution Cost	Raised by	Issue Owner	Status	Priority	Target Date	Closed Date
124	Request	03/01/2009	Different Evelvator Display, easier to see in day light	€500	K. Green	K Green	Granted	Med	04/02/2009	06/02/2009
125	Off-Spec	07/01/2009	Supplier did not fit correct Extractors in Kitchens	0	L. Murphy	K Green	Open	Med	25/03/2009	
126	Problem	14/01/2009	Roof Insulaiton - May be a problem getting delivery	0	K. Green	K Green	Closed	High	20/01/2009	20/01/2009

Fig 10.2 Issue Register Example

Issue Reports

An Issue Report is a description of an issue, which could be:

- Request for Change
- Off- Specification
- A Problem/Concern

It also contains an impact assessment of the issue(s). The report is usually created when the issue is first registered in the Risk Register. Basic information can be added like *Identifier, Issue Type, Date on Which it Was Raised* and *Raised By*. It can then be updated again after the issue has been examined, solutions proposed, and a solution chosen. The final update that is done to an Issue Report document may be to change the status to "closed" and add the closed date.

10.10 The Configuration Management Procedure

What is Configuration Management?

Configuration Management is a collection of all the activities that maintain and control changes for each product throughout the lifecycle of the project and after the project is completed. It is about looking after the Project Products. PRINCE2 suggests 5 activities to follow

Start of the Project

1)	Planning:	To what level will we do CM – how low?
2)	Identification:	e.g. Coding system?: project-product-owner-version-date

During the Project

3)	Control:	Activities such as Baselinig, archiving, distribution copies,
4)	Status Accounting	Check up & report on a group of products.
5)	Verification & Audit	Are products in-line with CIR documents

1) Planning: What happens in planning?

This is done at the start of the project. Each project is different, so the first question to ask is to what level of Configuration Management must be done. . For example, if we are designing a new laptop, we might decide to do Configuration Management for all major products that make up the laptop, but not worry about the tiny internal components in the main components, like the motor used in the hard-disk. The project will have a configuration item record and product description for the hard-disk but not for any internal components in the hard disk.

E.g. a CRM Project : you may wish to look after the following documents

- Main product, all major components, design, processes, user documentation

E.g. 100 person customer event project, you may want to look after,

- Invites lists, speaker notes, handouts, catering information, venue contracts, etc..

2) Identification: What happens in Identification?

Identification of all products that will be used in the project is done and a coding system is established to provide each product with a unique identifier. For example, a product name could be made of the following:

<Product Code> <Initials of Owner> < version number> <Latest Modified number>

E.g. 045-FT-v04-20112304.pdf

3) Control or Control Changes: What happens in Control?

Control is about controlling changes that are made to products during the project as once a product is approved *"nothing moves and nothing changes without authorization".* Baselined products are also used to compare the current situation with the previous objectives.

Control also deals with the storing, distribution of copies, access control, archiving and other such activities for both management and specialist products.

Tip: Think about a recent project that you have worked on and how you controlled access to documents and prevented other users from making changes to agreed documents.

4) Status Accounting: What happens in Status Accounting?

This is something that you may never have done or seen in a project, but it is good to know that this activity exists and can be used if required.

Status Accounting is the reporting of all current and historical data for each product using the Product Status Account report format. The report shows the current status of the product and how the product has changed with each new version. Status Account can include the following status information for each product it looks at:

- Identifier
- Version
- Last update
- Current status
- Owner
- Changes since last update
- List of users
- Date of next baseline
- Related items

Let me give you two examples of a Status Account

- The Librarian may ask for report from the computer systems
  - **Query**: **Author**=George Orwell, **Date**=1940 to 1947, **Status**=In Library
- The purchasing manager may have received an invoice from Supplier X and will ask you the Project Manager for the status on all products by that supplier in Stage 3.
  - **Query**: **Provider**=Supplier X, **Stage Produced**=3, **Current Status**=Show Status

5) Verification and audit: What happens in Verification & Audit?

This is to verify that products are in line with the data in the Configuration Item Records. . For example: *Do certain users have access to the correct product versions? Are products where they are supposed to be? Have they the correct identification numbers? Are the products secured?*

Verification and audit also checks that the Configuration Management procedure outlined in the Configuration Management Strategy document is being followed correctly.

10.11 Issue and Change Control Procedure:

Issue and Change Control is about dealing with issues, which could be requests for change, off-specification and concerns/problems. There are 5 steps to Issue and Change Management; they are: *Capture, Examine, Propose, Decide* and *Implement.*

- Capture: Determine type of issue, formal, informal, request for change or off-specification.
- Examine: Assess the impact of the issue on the project objectives.
- Propose: Propose actions to take, so identify the options, evaluate and recommend.
- Decide: Someone higher up in the organization decides whether to approve, reject or defer the recommend solution.
- Implement: Put the recommended solution in action. This is known as taking corrective action. It can involve updating a Work Package or creating an Exception Plan.

The Project Manager can make certain decisions provided the Stage stays within tolerance; however if the recommended option is costly or takes time and has been forecast to take the Stage out of tolerance, then this is escalated to the Project Board.

I will use 3 example Issues from a CRM project in each step of the Issue and Change Control process. The 3 three issue examples are:

1. One of the external hard-disks used for taking backups is broken.
2. Default Page Background Color needs to be changed to match the new corporate colors.
3. The supplier did not complete the automated Forget Password feature, as it was difficult to integrate the intended module into the CRM application.

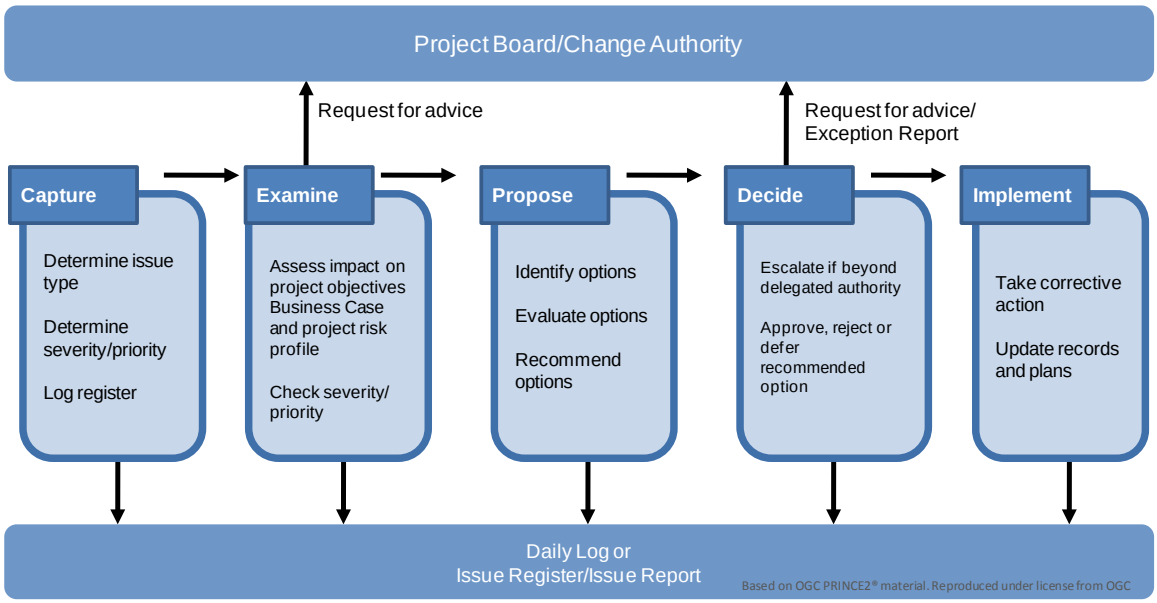


Fig 10.3 The Issue and Change Control procedure

10.12 Capture: Issue and Change Control Procedure:

Capture is the first step in the Issue and Change Control procedure. The five steps are *Capture, Examine, Propose, Decide* and *Implement*. The objective is to determine the type of issue (change request, off-specification, problem/concern), and then determine how serious it is and if needs to be treated formally. It is then added to the Issue Register. If the issue does not need to be handled informally, then it can be noted in the Daily Log.

The Project Manager will receive many issues during the project, some of which can be solved immediately by the Project Manager without the need for any formal follow-up. For instance, if a team member needs access to an application; the Project Manager could send an email to request it. This type of issue can be handled quickly and informally.

Distinguishing between formal and informal issues has a number of advantages.

- Some issues can be solved immediately, so there is less administrative burden at having to handle every small issue formally (e.g., entering in the Issue Register and creating an Issue Report).
- It is possible to avoid the Project Board from being overwhelmed with too many issues. Less time can be devoted to dealing with the issues that really *do* need attention.

Let us look at the three example issues, the type of issue and their severity:

1. **1st Issue:** The 2nd external hard-disk used for taking backups of the project data is broken.
    - What type of issue is this? Is it *(1) Change Request, (2) Off-Specification or (3) Problem or Concern?* This is a problem or concern, as it is not an off-specification or change request.
    - This is something that can be handled immediately by the Project Manager. The cost of a new hard-disk is just €90 and it does not need to be registered in the Issue Register, but can be noted in the Daily Log.
    - The severity is low, as it can be solved by the Project Manager.

2. **2nd Issue:** Default Page Background Color needs to be changed to match the new corporate color.

   Question: What type of issue is this? Is it (1) Change Request, (2) Off-Specification or (3) Problem or Concern?

   - This is a change request.

   Question: Do you think it has it has to be handled formally or informally? (**Tip:** The Project Product Description has already been baselined and this change request happened during the project).

   - This issue has to be handled formally, as we cannot change the Project Product Description that has already been baselined; therefore, this issue will be recorded in the Issue Register.
   - The severity could be normal, as the cost & time to do this change will be low and should be well within the tolerance level of the Project Manager.
   - The Project Manager will normally contact the necessary people to request permission to do this. Update the Project Product Description and get it approved.

3. **3rd Issue:** The supplier did not complete the automated Forget Password feature, as it was difficult to integrate the intended module into the CRM application.

   Question: What type of issue is this? Is it (1) Change Request, (2) Off-Specification or (3) Problem or Concern?

   - This is an off specification and it should have been done by the supplier but it was not.

   Question: Should it be handled formally or informally?

   - It needs to be handled formally and will therefore be entered in the Issue Register.
   - The severity maybe high, as only the Project Board can take a decision on this.

Q: When is an Issue Report created?

You should start to create the Issue Report once you enter the information into the Issue Register, then start to investigate the issue. The Issue Register then acts as an overview for all the issues. It is possible to see at any time how many issues are open and the status of each issue.

10.13 Examine: Issue and Change Control Procedure:

Examine is the second step in the Issue and Change Control procedure. This step involves examination of the issue by doing an Impact Analysis, i.e., looking at what effect the issue will have on the project objectives.

The Impact Analysis should consider the impact that the issue has on:

- The project performance targets: The project variables, time cost, quality and scope and others.
- The project Business Case, especially in terms of the impact on benefits.
- The project's exposure to risk.

The Project Manager will decide how detailed the Impact Analysis should be, as there is no point in spending many hours on this if the issue can be solved in less time than it takes to do an Impact Analysis.

Let us look at the three example issues:

1. **1st Issue:** The broken external hard-disk that is a problem or concern and informal.
   - There is no need to do an Impact Analysis. This issue can be handled immediately by the Project Manager.

2. **2nd Issue:** The default page background Color needs to be changed to match corporate colors.
    - An Impact Analysis should be done. It is also necessary to see what the impact would be if nothing was done. As you can imagine, this Impact Analysis does not have to be detailed.
    - Effect on Cost & Time: Cost would be low, as it can be done centrally and could be done within 2 hours, which includes testing.
    - Effect on Business Case: The marketing department may not allow the application to be put into production unless the colors are changed, so this will have a rather big impact on the Business Case.
3. **3rd Issue:** The supplier did not complete the automated Forget Password feature.
    - This will require a detailed Impact Analysis to see what the effect will be if this functionality is not added, and to look for other options as well.
    - Effect on Cost & Time: This has no effect on the cost from the client's point of view, as it should be done by the supplier. It might add an extra 4 workings days to the project.
    - Effect on Quality: Yes, as users will have to contact the support desk if they forget their password.
    - Effect on Business Case: Will only have a small impact on the Business Case.
    - Effect on risk profile: none.

After doing the Impact Analysis, the Project Manager can add more information to the Issue Register, including the severity, and also update the Issue Report and of course, keep the person informed who raised the issue.

10.14 Propose

Propose is the third step in the Issue and Change Control procedure. After the *Examine* step, the Project Manager has a much better understanding of the issue. The next step is to propose the actions to take to deal with this issue.

The Project Manager will now consider different options and will propose a course of action to take. These different options must also balance the cost with the advantage gained by doing a certain action and also look at the effect of each option on the project objectives, i.e., *time, cost, quality, scope, benefits* and *risk.*

Let us look at the 3 example issues:

1. **1st Issue:** The 2nd external hard-disk used for taking backups is broken.
    - This is easy to solve, in fact the Project Manager will not bother to spend too much time investing this issue or thinking about different options.
    - They will usually take a quick decision to order a new one and close the issue.
2. **2nd Issue**: Default Page Background Color needs to be changed to match the new corporate colors.
    - Options: There are just two obvious options: (1) change the color or (2) do nothing.
    - Cost will be low and it is very easy to do.
    - Effect on the project: There will be no negative effect on project objectives if this change is done. Not doing this change, however, might prevent the application from going live, as the marketing department might block it until the new corporate colors are used.
3. **3rd Issue:** The supplier did not complete the automated Forget Password feature.

   Options can be:
    - Ask the supplier to find a new module that will provide a solution.
    - Write a new module.

- Implement a part solution where users can fill in a form to request a new password. This would be sent directly to the support desk and there is no need to call the support desk.
- Ask supplier to find a solution to the current module that they tried to use already.

Cost: These options will have different costs. This could be for the supplier or shared, or the supplier could ask the customer to pay for the extra work. This all depends on the agreed contract.

From a risk point, any of these actions will not have a negative effect on the project. Doing nothing, however, will increase the cost of future maintenance & support.

If any of the options were forecast to put the stage or project out of tolerance, then the Project Manager should consider creating an Exception Report to be included with the option, as they would need permission from the Project Board or higher management level to continue. PRINCE2 says that the Project Manager should recommend one or more of these options and of course, they could get advice from other people.

10.15 Decide

Decide is the 4th step in the Issue and Change Control procedure. Depending on the issue, the Project Manager, Project Board or the Change Authority decides if any action should be taken. For issues that do not take the stage out of tolerance and are in line with the Configuration Management Strategy document, the Project Manager can decide on the issues without the need to escalate them to the Project Board.

Let us look at who can decide for the three example issues:

1. **1st Issue:** The 2nd external hard-disk used for taking backups is broken.
   - This has already been dealt with by the Project Manager & is closed.
2. **2nd Issue:** Default Page Background Color needs to be changed to match corporate color
   - This is a Request for Change that normally could be decided by the Project Manager from a tolerance point of view, as the cost if very low.
   - It's a change to an approved product description, however, and may need to be approved by the Project Board or Change Authority.
   - In this case, such requests would get approved if there is little cost and it brings the project in line with company standards. Doing nothing would create a new risk that the project might not be able to go live.
   - **Note:** The Configuration Management Strategy will document what the Project Manager is allowed to change without having to ask the Project Board or Change Authority.
   - I have also seen projects where the Project Manager was allowed to decide on minor changes to products provided they had no effect on any other products in the project.
3. **3rd Issue:** The supplier did not complete the automated Forget Password feature.
   1. Remember, this is an off-specification and the Project Board or Change Authority can decide to:
      - Grant a concession, which is to say that the supplier does not have to do this. This is unlikely here, as it will raise the future support cost of the project.
      - Instruct the supplier to solve this issue at their cost.
   2. OR choose one of the other options

10.16 Implement

Implement is the 5th step in the Issue and Change Control procedure. *Implement* is for the Project Manager, they will either:

- Take the corrective action, such as updating a Work Package or issuing a new Work Package.
- Create an Exception Plan that, again, would have to be approved by the Project Board.

Let us look at the example issue.

1. 1st Issue: The 2nd external hard-disk used for taking backups is broken.
    - The Project Manager will order a new Hard Disk & close the issue.
2. 2nd Issue: Default Page Background Color needs to be changed to match corporate color.
    - This is Request for Change and a small change.
    - The Project Manager would normally include this request for change in one of the Work Packages.
    - **Note:** The Project Manager will check that the change to the Project Product Description document has been approved (signed off); otherwise they cannot implement the change.
3. 3rd Issue: The supplier did not complete the automated Forget Password feature.
    - The Project Manager would most likely give out a new Work Package to solve this.

In both the 2nd& 3rd example cases, the Project Manager will update the Issue Register and Issue Report with the decision and then inform the interested parties that action will be taken. The 1st issue was only documented in the Daily Log.

Lastly, after implementation has been done, checked and accepted for an issue, the issue can be closed. The Project Manager will update the Issue Register & Issue Report with the status “closed.”

10.17 Roles and Responsibilities

Here are the responsibilities relevant to the Change theme.

What are the responsibilities of the Corporate and Program Management with regard to change?

- They provide the corporate or program strategy for change control, issue resolution and Configuration Management. In other words, they tell the project what standards already exist.

What are the responsibilities of the Executive?

- Determine the Change Authority and change budget.
- Set the scale for severity rating, issues & priority ratings (e.g., 1-5 or low, medium, high).
- Respond to requests for advice from the Project Manager during the project.
- Make decisions on issues that are escalated by the Project Manager.

What are the responsibilities of the Senior User & Senior Suppler?

- Respond to requests for advice from the Project Manager.
- Make decisions on escalated issues from the Project Manager.

What are the responsibilities of the Project Manager with regards to change?

- Manage the Configuration Management procedure.
- Manage the issues and change control procedure.
- Create and maintain the Issue Register.
- Implement corrective actions.
- **Note:** the Project Manager can be assisted by Project Support.

What are the responsibilities of a Team Manager with regards to change?

- Implement corrective actions that were assigned by the Project Manager.

What are the responsibilities of Project Assurance?

- They provide advice on examining and resolving issues, and check that the procedures in the Configuration Management Strategy documents are being followed.

What are the responsibilities of Project Support?

- Their main role is to administer Configuration Management, to look after the Project Products and to do the administrative tasks for the Issue and Change Control procedures.
- Maintain the Configuration Items Records for the products.
- Assist the Project Manager to maintain the Issue Register.

10.18 Summary

Here is the summary of the Change Theme. You will have learned the following:

- You have learned the purpose of the information or knowledge in the Change Theme and that it covers both Change Management, which is about looking after the products in the project, and Issue and Change Control Management, which is about handling issues and change requests.
- You have learned some definitions and should be able to answer the following questions: *What is Configuration Management? What is a configuration item?* and *What is an issue and what are the three types of issues?*
- You have learned about the PRINCE2 approach to change and about the Configuration Management Strategy document.
- You have learned how to prioritize issues and learned about the Moscow technique that breaks up Change Requests into: *Must have, Should have, Could have* and *Won't have for now.*
- You have learned what the Change Authority does and about the Change Budget.
- You have learned about the Management Products that are used by the Change Theme to log and tracks issues, and about changes, such as the Daily Log, Issue Register, Issue Report and others.
- You have learned about the Configuration Management procedure that shows how to care for the project products during the project
- You have learned about the Issue and Change Control Procedure, which has 5 steps: *Capture, Examine, Propose, Decide* and *Implement*. Try to remember these with the help of the acronym ***CEPDI***. We discussed each step in detail and provided good examples.
- Lastly, you have learned about the Roles and Responsibilities relevant to the Change Theme.

10.19 Learn Thru Questions

Try and answer the following, these are taken from the Learn Thru Questions audio course. Check the answers in the Learn Thru Questions document available on our site: You can also listen to these questions and answers (use the **LTQ audio course**)

Q01: What is the purpose of the Change Theme? What information does the Change Theme contain? Answer in your own words. (**Tip:** The Change Theme covers two main parts: looking after products and issues, which include change control.)

Q02: Should the Project Manager try to prevent change so that they can run a smoother project and meet the original project plan?

Q03: When is Issue and Change Control done in a project? **Tip:** This is the same as asking when issues and change requests can arise in the project.

Q04: What is the name of the technical and administrative **activity** concerned with the creation, maintenance and controlled change of a product? This is also referred to as *tracking products* or the activity of looking after products.

Q05: From a PRINCE2 point of view, what is a release? Answer in your own words. (**Tip:** Try to use the words “single entity” in your answer and give an example using a laptop computer.)

Q06: In a PRINCE2-specific term, what is the name given to the entity or item that is managed by Configuration Management? This entity could be a product, a component of a product or it could be a release. (**Tip:** Two words, the first one starting with *C* and the second word is *Item*.)

Q07: According to PRINCE2, *What are Issues? When can they be raised?* and *Who can raise them?*

Q08: Name the three types of issues and give an example of each. Answer in your own words.

Q09: When will it be decided in the project how the project will control issues, changes and change management, and which document contains this information?

Q10: PRINCE2 uses 6 management products to control issues, changes and Configuration Management. The Configuration Management Strategy document is used to establish the project controls. The rest of the documents help to maintain the project controls. Name two of the other management products. (**Tip:** *Where are formal and informal issues noted? Which reports are used to communicate issues?* and *Which document contains metadata for each product in the project?*)

Q11: What type of information does the Configuration Management Strategy document contain? Answer in just a few words.

Q12: What is one of the first questions that the Project Manager should ask when thinking about the Configuration Management strategy? (**Tip:** This will affect the amount of work one has to do to create the Configuration Management Strategy document.)

Q13: List two questions that the Project Manager might ask when creating or updating the Configuration Management Strategy document. (**Tip:** Just think about some of the things you do when handling issues and looking after products during the project.)

Q14: What is the name of the technique that PRINCE2 suggests to help prioritize change requests and what does the name stand for? Please explain. **Note:** You must know the answers to these questions for the exam.

Q15: Give an example of a scale to grade the severity of an issue and tell how this could be off value in assigning issues to different roles.

Q16: What is the Change Authority? What is the purpose, who do they report to, and can they deal with change requests only or both change requests and off-specification?

Q17: Where does the Change Authority get money from to make changes and when is this decided?

Q18: What kind of control can the Project Board exert on how the change budget can be used, therefore controlling how the Change Authority works?

Q19: What is the purpose of Configuration Item Records (give an example), and who creates and maintains them?

Q20: What is Product Status Accounting? When is this done and who does it?

Q21: What is the Daily Log and who creates it and updates it?

Q22: What is the purpose of the Issue Register and who maintains it?

Q23: Comment on the format of the Issue Register and list 3 to 4 types of information that is gathered on each issue.

Q24: What is an Issue Report? Who creates them and who are they given to?

Q25: When are Issue Reports created? When are they updated and what do you think would be the last update?

Q26: What is the name given to the activities that control, maintain and control changes for each product throughout the project lifecycle or, in other words, that look after the products in the project?

Q27: PRINCE2 suggests five activities to follow to do Configuration Management. They are: (1) Planning, (2) Identification, (3) Control, (4) Status Accounting, and (5) Verification and audit. What happens in Planning and give an example in your own words? (**Tip:** Level of Configuration Management.)

Q28: The 2nd Configuration Management activity is **identification**. What happens in this activity?

Q29: Which of the 5 Configuration Management activities are discussed here? This activity is about managing the changes to the products during the life of the project. For instance, when a product is baselined, it cannot be updated again. Instead, a new version will have to be created. This activity also deals with the storing, distributing of copies, accessing control and archiving for both management and specialist products. Choose from: Planning, Identification, Control, Status Accounting and lastly, Verification and Audit.

Q30: Which of the 5 Configuration Management activities are discussed here? This activity has to do with the reporting of current and historical data for one or more product. This is done in the form of a Product Status Account so that it is possible to see how a product has changed in each version and also in its current status (also known as "history data"). Choose from: *Planning, Identification, Control, Status Accounting* and lastly, *Verification and Audit.*

Q31: Which of the five activities in Configuration Management verify that the products are in line with the data in the Configuration Item Records? Just imagine Project Support picking up a Configuration Item Record and going off to check that all the data in the Configuration Item is correct. Choose an answer from the 5 activities, e.g., from *Planning, Identification, Control, Status Accounting*, and *Verification and Audit.*

Q32: Does PRINCE2 offer two different procedures for Issues and Change Control in the Change Theme or does it offer a joint procedure for both?

Q33: Issue and Change Control is the procedure for handling issues and change requests. What is the other procedure in the Change Theme and what does it do?

Q34: The Issue and Change Control procedure has five steps. Name 2 of the steps in the Issue and Change Control procedure. (**Tip:** I used the memory aid CEPDI, spelled C.E.P.D.I. to make it easy to recall)

Q35: What do you think happens in the Capture step of the Issue and Change Control process? What do you think is the main objective (**Tip:** type of issue)? How many types of issues are there and where is the information stored?

Q36: When can Capture issues happen? Who can report and capture issues?

Q37: Give an example of an issue that a Project Manager would immediately solve and would not register in the Issue Register but the Daily Log.

Q38: An issue that needs to be handled formally is registered in the Issue Register. When does the **Issue Report** need to **first created**? (**Tip:** I am only asking when the Issue Report needs to be created, not all the information filled in.)

Q39: Which step of the Issue and Change Control procedure am I referring to here? The step is to **examine** the issue by doing an **Impact Analysis**. This is a nice way of saying, *"Look at what effect the issue will have on the project objectives."* The key words here are "Impact Analysis." Which of the 5 steps is this? Choose from *Capture, Estimating, Propose, Decide & Implement.*

Q40: The Impact Analysis looks at the possible impact the issue would have on different parts of the project. Name some things that are considered here. (**Tip:** The Project Manager will ask themselves what effect the issue would have on ….")

Q41: Would the Project Manager bother doing an Impact Analysis if the issue was that one of the project team needed security access to the shared drive where the project documents were stored?

Q42: Which two documents may the Project Manager update after doing an Impact Analysis?

Q43: Which step of the Issue and Change Control procedure am I referring to here? After the Impact Analysis and examining the issue, the Project Manager will now consider different options to address the issue and make a recommendation. (**TIP:** think CEPDI)

Q44: Let us say that one of the issues with building a CRM system was that the supplier did not provide the automated Forgot Password functionality and if this is not included, it will mean extra work for the support desk when the application goes live. Pretend you are the Project Manager and have to propose three options to address this issue. **Note:** There are many answers to this, so see this as more of an exercise than a *question & answer*.

.

Q45: What is the next step in the Issue and Change Control procedure after the Project Manager proposes different options for dealing with the issue? The exact name is not important, but what happens is.

Q46: Name two of the roles that can decide which of the proposed solutions will be chosen. (**Tip:** Think about the types of issues you have: *off-specifications, change request and problem concerns*.)

Q47: The Project Manager is one of the roles that can decide what action to take. Can you give an example why this would be possible and why this decision would not be made by the Project Board or Change Control?

Q48: Which document do you think defines the situations where the Project Manager can decide on issues? (**Tip:** This is one of the strategy documents that are created in the Initiation Stage.)

Q49: *Implement* is the 5th step in the Issue and Change Control Procedure. What happens here and who takes the action?

Q50: Does the Project Manager need to update the Issue Register and Issue Report during the "Implement" step?

Q51: In the Change Theme, who is responsible for the following?

- Managing the Configuration Management procedure
- Managing the issues and change control procedures
- Creating and maintain the Issue Register
- Implementing corrective actions

Q52: Who is responsible for the following in the Change Theme?

- Main role is to administer Configuration Management, so look after the Project Products and do the administrative tasks for the Issue and Change Control procedures
- Maintaining the configuration items records for the products
- Assisting the Project Manager to maintain the Issue Register

Q53: Who is responsible for the following in the Change theme?

- Providing advice on examining and resolving issues, and checking that the procedures in the Configuration Management Strategy documents are being followed

Q54: Who is responsible for the following in the Change theme?

- Determining the Change Authority and change budget
- Setting the scale for severity rating, issues & priority ratings (e.g., 1-5 or low, medium, high)
- Responding to requests for advice from the Project Manager during the project
- Making decisions on issues that are escalated by the Project Manager

Q56: Who is responsible for the following in the Change theme?

- Implementing corrective actions that were assigned by the Project Manager

11 Progress

11.1 Introduction

Let us take a look at what you will learn in this Progress theme. You will learn:

- The purpose of Progress, which is:
    1. to check the progress of the project compared to the plan,
    2. to check project viability
    3. and to control any deviations.
- What is Progress? What are Progress Controls? What are Exceptions and Tolerances?
- The PRINCE2 approach to Progress and the four main controls provided by PRINCE2: (1) Delegating Authority, (2) Using Stages, (3) Time & Event-driven reports, and (4) Raising Exceptions
- The four levels of authority in the Project Organization and 3 levels in the Project Team.
- The 3 Project Controls used by the Project Board and Project Manager, i.e., Authorizations, Progress Updates, and Exceptions & Changes and how they differ.
- Management Stages and why Management Stages are used by the Project Board as controls.
- Points to consider when deciding on the number of stages on the project and how long a stage should be.
- What are technical stages? How do they differ from Management Stages? and How it is possible to manage Technical Stages from Management Stages?
- How does the Project Manager review progress? How do they use the different management products such as the Checkpoint Reports, Daily Log and Issue Register?
- How the Lessons Log and the Lesson Report are used from a Progress point of view.
- The three reports used by the Project Manager to report progress to the Project Board.
- How the Project Manager raise exceptions and why.
- And lastly, the Progress Roles and Responsibilities.

11.2 What happens in the real world?

Progress is all about how to control the project and know where you are against the current plan. Each company and Project Manager will have different ideas on how best to do this and if you are Project Manager in a company the, one good question to ask your Project Board is: “how do I best keep you informed of the progress of the project?. The answer to this question will tell you a lot about the maturity of project control in the organization.

I believe the most important points that a Project Manager has to keep in mind are:

- The format of reports used to provide information to the Project Board (this should be provided)
- How best to keep track of issues, changes and risks
- How to check that the Business Case is still valid etc…
- And constantly check the current progress compared to the current plan

Most poor Projects Managers make the following mistakes

- Don’t have a good system in place to track progress
- Feel responsible for issues as they arise and try to solve them, thus they end up firefighting and not managing the project
- Are afraid to escalate issues as they may work in a shoot the messenger environment or work for a Project Board that does not understand their role.

You will find this chapter on PRINCE2 easy to read and understand and you will also learn how tolerances are used to help each management layer manage the layer below. The last point I

would like to make is that the Project Manager should make sure they have time during the project to manage progress and control the project.

11.3 Purpose of the information in the Progress Theme

The purpose of the information in the Progress Theme can be explained in three parts:

- To establish how to monitor and then to compare actual achievements against those planned during the project.
- To provide a forecast for the project objectives and the project's continued viability.
- To be able to control any unacceptable deviations.

Progress is about checking progress compared to the plan, checking project viability and controlling any deviations.

How many of the Principles are represented in the Progress Theme?

Three of the seven principles are represented in the Progress Theme; they are:

- Manage by stages: the Project Board is to use stages as a control point.
- Continued business justification, as the Business Case is continually checked that the project is still worth doing.
- Managed by Exception. Where tolerances are used, refer certain issues up to the next management level.

Now let us get a picture of who needs to control who, as this will make it much easier to understand. Recall that there are four levels in a project organization and three levels in a project team. Well, each above-level wants to be able to control the level below and there are three levels of control in a Project Organization and two levels of control in a project team.

Control or progress is all about decision-making and is central to project management ensuring that the project remains viable against its approved Business Case

11.4 Progress, Progress Controls, Exceptions and Tolerances

What is Progress?

Progress is checking and controlling where you are compared to the plan. This is done for the Project Plan, Stage Plan and Work Package.

What are Progress Controls?

Progress Controls are used by one layer to monitor the progress of the layer below it. For instance, the Project Board is to monitor the progress of Project Manager or Project Manager to monitor the progress of the Teams that create the products. The layer above can do the following:

- Monitor actual progress against plans
- Review plans with forecast
- Detect problems and identify risks
- Initiate corrective action to fix issues
- Authorize further work to be done. Example: The Project Board can authorize a next stage and a Project Manager can authorize a new Work Package.

What are Exceptions and Tolerances?

An **Exception** is a situation where it can be forecast that there will be a deviation beyond the agreed tolerance levels.

Tolerances are the deviation above and below a plan's target. For example, the project should take 6 months, with a tolerance of ±1 month. Tolerance levels could also be set for all six tolerance areas, i.e., *Time, Cost, Quality, Scope, Benefits* and *Risk*. These are also known as the project variables.

Question: What do you think would be the result if Tolerance were not used in a project between the Project Board and the Project Manager levels?

Answer: In that case, every small issue that would occur, the Project Manager would escalate to the Project Board and they would end up working on the project 8 hours a day and therefore would be doing a lot of work for the Project Manager.

Remember the Project Board are busy people and we don't want the project to take up much of their time. Setting tolerances allows the Project Manager to handle smaller issues and only bother the Project Board for bigger issues (more efficient use of time for Project Board)

Remember the Project Board are busy people and we don't want the project to take up much of their time. Setting tolerances allows the Project Manager to handle smaller issues and only bother the Project Board for bigger issues that are outside the specified tolerance.

Tolerance Example: A 6-month project with a tolerance of ±1 months. If the project is forecast to be 1 week late, the Project Manager would deal with this and not escalate it. But if the project is forecast to be two *months* late, then they would escalate it to the Project Board.

11.4.1 When are the Six Tolerances set?

Let us look at when tolerances can be decided on:

- Time and Cost Tolerances: These are decided in the Project Plan, Stage Plans and Work Packages.
- Scope Tolerances: Decided in Project Plan, Stage Plan and Work Packages. **Note:** Scope changes would require change control.
- Risk tolerances will be first defined in the Risk Management Strategy document and the Project Board can change risk tolerance for the Stage Plan. The Project Manager may change risk tolerances for the Work Package.
- Quality Tolerances are defined in the Project Product Descriptions and the Product Descriptions, as Quality is related to the products.
- Benefits tolerances are defined only in the Business Case and this is kept up to date during the project. The Benefits are also defined in the Business Case

Tolerances areas	**Project** Level Tolerances	**Stage** level Tolerances	**Work Package** Level tolerances
Time: +/- days, weeks, months,...	Project Plan	Stage Plan	Work Package
Cost: +/- % of budget	Project Plan	Stage Plan	Work Package
Quality: eg: Search time 10 sec +/1 20%	Project Product Description	NA	NA
Scope: Use **MoSCoW**	Project Plan	Stage Plan (Agile)	Work Package
Benefits:	Business Case	NA	NA
Risk: Limit total Risk to % of budget	Risk Mgmt Strategy	Stage Plan	Work Package

Fig 11.1 The six tolerance areas by Project, Stage and Work Package

11.5 What is the PRINCE2 Approach to Progress?

Progress is about checking actual progress against the performance targets of Time, Cost, Quality, Scope, Benefits and Risk.

PRINCE2 provides control through four main ways:

- Delegating Authority from one level to the next. (Ex: The Project Board will delegate authority to the Project Manager.)
- Dividing the project into management stages and authorizing one stage at a time.
- Time-driven and event-driven progress reports.
- Raising Exceptions: Use exceptions to alert above layer.

How these controls will be used in the project is decided early in the project and documented in the Project Initiation Documentation.

Delegating Authority from one level to the next:

Here I will discuss how each level monitors the level below.

Corporate or Program Management

- The Corporate or Program Management is outside the project. They set the overall requirements and tolerance levels for the project. In other words, they set the project tolerances.
- If the project tolerances are exceeded, this should be escalated to Corporate or Program Management.
- **Tip:** Remember the Project Tolerances are set by Corporate or Program Management.

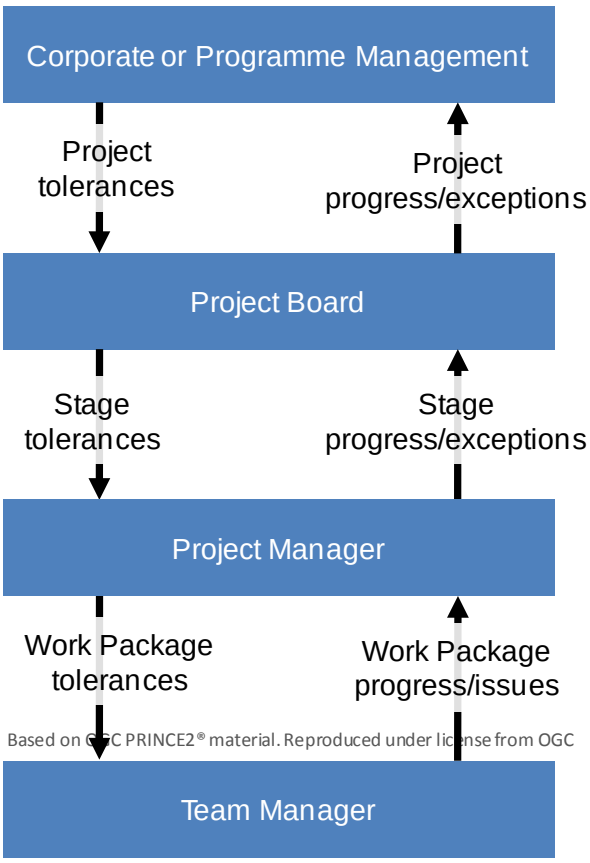


Fig 11.2 Delegating Tolerance and reporting progress

The Project Board

- The Project Board sets the tolerances for the stages. Therefore the Project Manager will escalate issues to them as soon as it is identified that they will go out of tolerance on any of the project tolerance targets.
- If this exception affects the project's tolerance, then the Project Board has to escalate this to Corporate and Program Management.

The Project Manager

- The Project Managers have day-to-day control over the stage and they work within the tolerances set by the Project Board.
- They also set and agree to the tolerances in the Work Packages.

The Team Manager

- The Team Manager has control for a Work Package and works within the tolerances agreed with the Project Manager.

11.6 What are the 3 Project Board Controls?

The Project Board has three main controls available to them to manage the levels below.

- Authorizations: i.e., they can authorize next stage to start
- Progress Updates: They get regular reports from the Project Manager
- Exceptions & Changes: They can receive Exception Reports and Issue Reports.

Authorizations

- Look at the Process Model Diagram. It is very easy to see the authorizations.
- 1st Authorize Initiation: To allow the Initiation stage to start & to create the PID.
- 2nd Authorize the project: The Project Initiation Documentation is approved so that the first stage of the project can start after the initiation stage.
- 3rd Authorize each stage: This happens after each SB process.
- And lastly, authorize project closure and review the End Project Report.

Progress Updates are the 2nd type of control for the Project Board.

- This includes Highlight Reports and End Stage Reports.
- The Highlight Reports are sent regularly the Project Manager to the Project Board during the Controlling a Stage process. They provide information on how well the stage is running according to the Stage Plan.

Exceptions and changes are the 3rd type of control for the Project Board.

- This includes Exception Reports and Issue Reports.
- Exception Reports advise the Project Board that the stage is out of tolerance, allowing the Project Board to control the next move.
- Issue Reports provide a way to report gathered information and report on a Request for change, an Off-Specification or a problem or concern.

You can see from this that the Project Board has good control over the project and this does not have to take much of their time. As soon as there is an issue in the management layer that will bring or forecast to bring the stage out of tolerance, they should hear about it.

What are the 3 Project Manager Controls?

These have the same names as the Project Board but are at the level of the Project Manager. The three controls are: (1) Authorizations, (2) Progress Updates, and (3) Exception & Change.

1) Authorizations:
   - The Project Manager authorizes Work Packages to the Team Manager during the CS process.
2) Progress Updates:
   - This includes Checkpoint Reports that are provided by the Team Manager or Team Members.
3) Exceptions and changes:
   - They use the project registers and logs to review progress and identify issues that may need to be resolved.

- Changes will be handled through the Issue and Change Control procedure.

11.7 Use of Management Stages for Control

Why are Management Stages used as controls by the Project Board?

Management stages are partitions of the project with decisions points for the Project Board between each stage. A management stage is a collection of activities to produce products and is managed by the Project Manager.

Why are Management Stages important for the Project Board?

- They provide review and decision points at end of each stage and before the next stage.
- They can check the viability of the project.
- They can authorize one stage at a time, or choose to stop the project.
- They review the End Stage Report of the last stage and Review plan for next stage.
- Then can check project progress compared with baselined Project Plan at the end of each stage.

As you can see, stages are important for the Project Board. Also, with the help of tolerance, the Project Board can give the day-to-day authority of running the stage to the Project Manager. The Project Manager sends regular highlight reports to inform them how well the stage is going according to the Stage Plan and does not otherwise bother them unless the stage goes or is forecast to go out of tolerance.

How many stages should be in a project?

First we need to look at the minimum number of stages in a project. The use of stages is mandatory and the minimum number of stages in a project is two: the Initiation Stage to define and agree what needs to be done, and at least one other stage to produce the products. So even for a 2-day project, you may spend one hour in the first morning deciding what will be done, how you are going to do it, who is responsible for what, and other such details. The rest of the time will be creating the products in the 2nd stage.

How to decide the number of stages?

This depends on a number of items and as you can see, it's a bit of a balancing act. Start by considering the following:

- How far ahead is it sensible to plan? (I know one IT development company that does not like to plan any more than 6 weeks ahead if they are working on new applications that they have not created before.)
- Where do key decision points have to be made in the project? (Example: Maybe after creating a prototype or after completion of a major part of the product. This would be a good point for stage end.)
- The amount of risk in a project. (If similar to another project, then there will be less.)
- Think of the control required by the Project Board. Do they require little or lots of control? Decide between too many short management stages compared to few lengthy management stages – in other words, too much administrative overhead versus less control.
- How confident are the Project Board and Project Manager at proceeding? (For instance, if this is a similar project with minor changes, then they would be very confident and they could use less management stages. If this is to create a new kind of product that no other company has created, then the risk is higher. In this case, it would be better to have more stages.

So, I hope you have a good idea on how a Project Board and Project Manager would choose the number of management stages in a project, and as you can see, it is a bit of balancing act.

How long should a stage be in PRINCE2?

The main consideration is the level of risk or complexity. If there is a lot of risk and complexity then it is best to keep the stages short. If there is less risk and complexity and you have done a similar project before, then stages could be much longer.

PRINCE2 mentions the following four points to consider when deciding the length of stage:

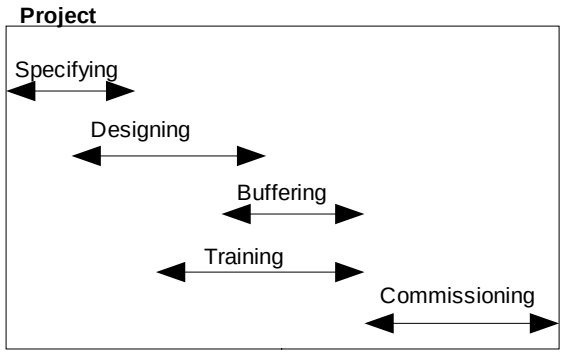
- The planning horizon at any point in the project (i.e., *How far can you safely plan ahead?*).
- The Technical Stages within a project (Refer to 10.7).
- Alignment with program activities (as you might require input from another project at a certain time in the project).
- The level of risk.

11.8 What are Technical Stages?

Technical stages are a way of grouping work. The best way to understand this is to look at how they differ from Management Stages.

- Technical stages can overlap but management stages do not.
- Technical stages are usually linked to specialist skills (e.g., Requirements Analyses and Design Product, while Management Stages are more focused on business justification and authority to spend).
- A technical stage can span a management stage boundary.

There are 3 diagrams below to help explain the difference between Technical and Management Stages. See the diagram Technical and Management Stages, as you will need to look at this diagram to understand the rest of this topic.

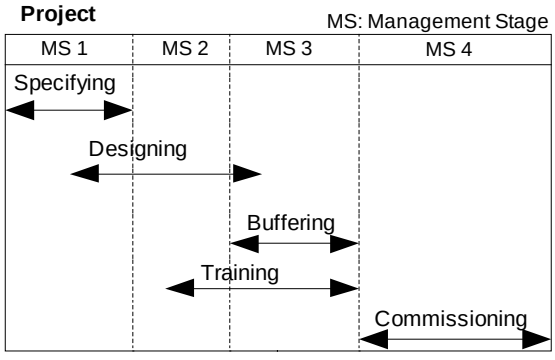


Specialist workdefined in technical stages

These are the Technical Stages.

As you can see, they overlap each other.

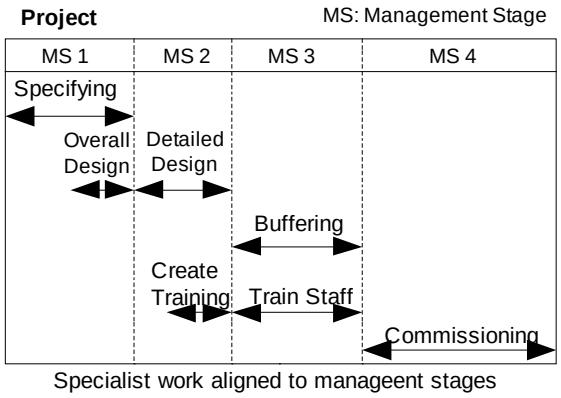
There is no mention of management stages in this diagram.



Specialist work crossing management stage boundaries

This diagram shows how Management Stages compare to Technical Stages.

The design and training technical stages span more than one Management Stage.



This diagram shows that the technical stage of Design has been broken into 2 parts and each part fits within one management stage.

The training technical stage has also been split into two parts.

PRINCE2 advises to mention the products from the technical stage that will be completed in each management stage. (For example, Design is two parts, so Design will deliver separate products in the 1st & 2nd Management Stages)

Fig: 11.3 Technical and Management Stages

11.9 Event-Driven and Time-Driven Controls

All controls can be divided into two parts in PRINCE2: Event-Driven and Time-Driven.

Event-driven controls take place when something happens, in other words when an event happens in the project. (For example, at the end of a stage, at complementation of the PID, when a stage goes out of tolerance, at the end of project and change request. All of these events produce documents like an End Stage Report, Exception Report and Issue Report.

Let me give you an example of an out-of-tolerance event. You are the Project Manager and you have seen that an issue you are evaluating will bring the stage out of tolerance. This is an event and this event will require you to take the following actions:

- Create an Exception Report
- Send Exception Report to the Project Board.

In other words, these two actions were driven by the event of going out of tolerances.

Time-driven controls take place at pre-defined periodic intervals. For example, the Project Board will agree with the Project Manager to send a Highlight Report every 2 weeks to the Project Board, and the Project Manager can agree with the Team Manager to send a Checkpoint Report each week. So time-driven controls don't have to wait for an event to happen.

A question that might be asked in the exam is *"In which management document is the frequency of the Highlight Report first mentioned?"*

It is first mentioned in the Communication Management Strategy, which is written in the Initiation Stage.

Another question could be "Can the Project Board change the frequency of time-driven reports for a new stage?"

Yes, and normally they would advise the Project Manager to change the frequency during the stage boundary process and before approving the next Stage Plan. The Project Manager can even specify a different frequency for the Checkpoint Report when agreeing to the Work Packages with different Team Managers.

11.10 How does the Project Manager review progress?

As there are a number of items to talk about in this topic and I have discussed most of them before, I will introduce most items in the form of a question and then immediately give the answer.

The Project Manager does most of their reviewing progress in the Controlling a Stage process. The information that follows in this section will be same as you will learn in the Controlling a Stage process.

During the stage, the Project Manager will hand out work in Work Packages to Team Managers or directly to the Team Members in the case of a small project. What two management products do you think the Project Manager uses as input to check on how well the Work Packages are progressing and, therefore, to see how the stage is progressing?

They use the Checkpoint Reports, which come from the Team Manager or team members, and they use the Quality Register to see that intended Quality responsible persons have signed off on the products.

As you can now see, the Quality Register acts an important extra check for the Project Manager, as perhaps the Team Manager was not 100% open in the Checkpoint Reports.

Question: Which Management Products does the Project Manager use to keep track of how the project is doing (e.g., where do they keep informal notes, issues, check on product status, quality progress, risk, etc.)?

The Project Manager uses the Daily Log, Issue Register, Product Status Account, Quality Register and Risk Register.

Question: What do you think the Project Manager uses the Daily Log for?

This is the place to record any informal information about the project (e.g., news, telephone calls, meetings, small issues, reminders, observations, tolerance levels and other such information.) The Daily Log is similar to a Daily Journal for the Project Manager.

Question: What does the Project Manager use the Issues Register for?

The Issues Register contains all formal issues raised during the project, which could be:

- Request for Change: This happens when the clients notice something that was not in the original requirement but now wants this included (so it becomes a Request for Change).
- Off-Specification: This happens when the supplier may not be able to complete something exactly as described in the Product Description.
- Problems and Concerns: This is the place to note any other comments, problems and concerns (for example, there is train strike on the same day as our expected demonstration for the major stakeholders, or the cost of a major component we need for the project has increase in price by 50%).

Question: What does the Project Manager use the Product Status Account for?

- At certain times during the project the Project Manager will want to check that all products created so far in the project (1) are in the right place, (2) are the correct version, (3) have the correct identification codes attached, (4) are distributed correctly, (5) have the correct status, and so on.
- Let me give an example to explain how important this is. Consider that you are organizing an event and send out a communication 20 days beforehand that the location has changed to a new conference center due to the demand. But you are using an older registration list and will therefore only notify 70% of the registered users.
- Product Status Accounting could also show that some products have not been updated according to the plan. For example, one product was supposed to be approved 2 weeks earlier but has still not been approved. Product Status Accounting makes sure that the right products are in the right place and that the products are in line with the Project Plan.

Question: What does the Project Manager use the Quality Register for?

The Quality Register is a record of all planned and executed Quality activities. Therefore the Project Manager can see if all planned Quality activities are in line with the plan and if results are as expected or if a number of products are failing quality tests.

What does the Project Manager use the Risk Register for?

The Risk Register is a record of all identified risks and the Project Manager should review it as part of the Reviewing a Stage status in Controlling a Stage. Risk levels can change during the

project. The Project Manager therefore needs to be vigilant during the project as far as Risk is concerned.

11.11 Capturing and reporting lessons

One of the principles in PRINCE2 is that the project team learns from experience. Lessons have to be sought, recorded and actioned during the project. PRINCE2 uses the word “sought” to ensure that everyone in the project checks for previous lessons. Any useful experiences are then recorded into a Lessons Log. Lessons can be about anything that could help the project. These include how best to communicate, how to deal with a supplier, how certain documents should be tailored for this kind of project and which product specialists to get help from when doing the product breakdown structure. The Project Manager continues to add new lessons to the Lesson Log during the project.

What is a Lessons Learned report?

The Lessons Learned report is used to document lessons that might be of value to future projects. If a lesson is of value only to the current project, then it should not be included in the Lessons Learned report. A Lessons Learned report has to be created at the end of the project during the Closing a Project Process. In larger projects, a Lessons Learned report might be created during the project, for example, during the Managing a Stage Boundary Process.

11.12 Reports used to Report Progress

What report does the Team Manager use to report to the Project Manager and when is the frequency decided?

The Team Manager uses the Checkpoint Report to report to the Project Manager. Information on the progress of the work done compared to the agreed Team Plan is also included in it. The Project Manager will agree on the frequency for these reports with the Team Manager when they are accepting the Work Package.

What 3 reports are used by the Project Manager to report to the Project Board and when is the frequency decided for the most-used report?

The three reports are the Highlight Report, the End Stage Report and the End Project Report.

The Highlight Report

The Highlight Report is used by the Project Manager to report on the status of the current stage compared to the Stage Plan. The important word here is ‘highlight’ as a 1- to 2-page report should be sufficient.

The Highlight Report allows the Project Board to manage by exception between each stage end, as they are aware of the tolerances agreed with the Project Manager in the Stage Plan, so the Highlight Report should report the current status of tolerances of Time, Cost, Quality, Scope, Benefits and Risk.

The frequency of the Highlight Report is first agreed in the Communication Management Strategy and this can be updated during the Managing a Stage Boundary Process.

The End Stage Report

The End Stage Report is created by the Project Manager towards the end of the stage and compares the performance of the stage compared to the Stage Plan.

The End Project Report

The End Project Report is produced by the Project Manager towards the end of the project during the Closing a Project Process and is used by the Project Board to evaluate the project before they take the decision to authorize closure.

11.13 What is Raising Exceptions?

This is quite easy to understand and you will see that it is linked to the principle "Manage by Exception." The best way to explain this is with a question, i.e., *"When is an exception raised and by whom?"*

> An exception is raised when an agreed tolerance is exceeded or is forecast to be. You raise an exception by alerting the level above you.

The Work Package tolerances are agreed between the Team Manager and the Project Manager when the Team Manager accepts the Work Package. If the Team Manager exceeds or has been forecast to exceed a tolerance, then they raise an issue (not an exception). They just tell the Project Manager, and the Project Manager enters the issue in the Issues Register and starts to create an Issue Report if the issue needs to be handled formally. The Team Manager does not need to create an Exception Report. They just need to inform the Project Manager by raising an issue.

Stage Tolerances are agreed between the Project Board and Project Manager. If the stage is forecast to go out of tolerance, then the Project Manager creates an Exception Report to capture and analyze why, and then to provide this information to the Project Board.

The Exception Report can include a number of options with usually one recommend option. The Project Board can do the following:

- Adjust the tolerance level.
- Remove the cause.
- Request more time to consider the issue.
- Request an exception plan.

Project Tolerances are set between the Corporate or Program Management and Project Board. If project tolerances are forecast to be exceeded, then the Project Board will advise the Corporate or Program Management and can provide an Exception Plan to show how the issue can be handled and to complete the current stage.

11.14 Progress Responsibilities

What are Corporate or Program Management responsible for?

- They provide the project tolerances in the project mandate.
- They make decisions on the Exception Plan when Project Tolerances are forecast to be exceeded, as the Project Board cannot do this.

What are the responsibilities of the Executive?

- Providing stage tolerances.
- Making decisions on the Exception Plans when stage tolerances are forecast to be exceeded.
- Ensuring that progress remains consistent from a business point of view.

What are the responsibilities of the Senior User and Senior Supplier?

- Ensuring that progress remains consistent from a **user** and **supplier** point of view

What are the responsibilities of the Project Manager?

- Authorizing Work Packages.
- Monitoring progress of Stage Plans.
- Producing Highlight Reports, End Stage Reports, Lessons Learned reports & End Project Reports.
- Producing Exception Reports for the Project Board when the stage-level tolerances are forecast to be exceeded.
- Maintaining the project registers and logs.

What are Team Managers responsible for?

- Agreeing on Work Packages with Project Manager.
- Producing Checkpoint Reports.
- Notifying the Project Manager of any forecasted deviation from the Work Package tolerances.

What is Project Assurance responsible for?

- Verifying the Business Case against external events and project progress.
- Confirming stage and project progress against agreed tolerances in case the Project Manager is bending the rules.

Project Support responsible for?

- Assisting with the compilation of reports.
- Assisting the Project Manager in maintaining the Issue Register & Risk Register.
- Maintaining the Quality Register on behalf of the Project Manager. (Check that everything is going according to plan.)

11.15 Progress Summary

This is the summary of the Progress Theme and you will have learned the following:

- The purpose of Progress theme and such definitions as *Progress*, *Progress Controls*, *Exceptions* and *Tolerances*.
- The PRINCE2 approach to Progress and the four main controls provided by PRINCE2, which are (1) Delegating Authority, (2) Using Stages, (3) Time- & Event-driven reports, and (4) Raising Exceptions.
- The 3 Project Controls Used by the Project Board and the Project Manager: Authorizations, Progress Updates and Exceptions and Changes and how they differ.
- Management Stages and why Management Stages are used by the Project Board as controls.
- Points to consider when deciding on the number of stages on the project, and how long a stage should be.
- What are technical stages? How do they differ from Management Stages? How is it possible to manage Technical Stages from Management Stages?
- How the Project Manager reviews progress? How they use the different management products, such as the Checkpoint Reports, Daily Log and Issue Register?
- The three reports used by the Project Manager to report progress to the Project Board.
- How the Team Manager and the Project Manager raise exceptions and why.
- And lastly, the Project Roles and Responsibilities.

11.16 Learn Thru Questions

Try and answer the following, these are taken from the Learn Thru Questions audio course. Check the answers in the Learn Thru Questions document available on our site: You can also listen to these questions and answers (use the **LTQ audio course**)

Q01: What do you think is the purpose of Progress (i.e., why do we have a progress theme)? Just name the reasons.

Q02: Name one of the Seven Principles that are represented in the Progress Theme.

Q03: Fill in the blanks. Each time I say “blank,” it represents one word. Control or progress is all about blank-making and is central to project management, ensuring that the project remains viable against its approved blank blank.

Q04: What is an *Exception*? Answer in your own words.

Q05: Tolerance levels can also be set for all the six tolerances areas. Name the six tolerances. (**Tip:** They are the same as the six performance targets. Think **T**e**CQ**uila **S**o**B**e**R**)

Q06: What do you think would be the result if tolerances were not used in a project by the Project Board?

Q07: The PRINCE2 method provides 4 ways to control a project; name two of them. (**Tip:** Think about how the Project Board controls the project and how they communicate with the Project Manager.)

Q08: PRINCE2 delegates authority from one management level to the next; name the 3 levels

Q09: Who sets the Project Tolerance, the Stage Tolerance and Work Package Tolerances?

Q10: What happens if the Project Manager finds out that one of the tolerances might be exceeded? This is only a forecast (e.g., the time to develop a product will take 40% longer and their tolerance level was 20%).

Q11: There are 3 Controls that the Project Board uses to control a project; name 2 of them. (**Tip:** Think about how the Project Board controls the project, what they do in directing a project, and how do they get news.)

Q12: There are 3 Project Controls that the Project Manager uses to control the project. These have the same names as the 3 Project Controls for the Project Board but differ in how they work. What are these three controls?

Q13: List 2 of the control tasks that the Project Board can do at the end of each stage.

Q14: What is the minimum number of stages in a project, for instance, if you only have a project of two days?

Q15: PRINCE2 gives a number of suggestions to help decide on the number of stages in a project. Can you name two of them? (**Tip:** Just think about what could be important when you are trying to plan some weeks or months into the future.)

Q16: How do Technical Stages differ from Management Stages? Name one difference.

Q17: What does PRINCE2 advise to do with Technical Stages so that they can be managed from the project, and how is it best to do this?

Q18: What are Event-Driven Controls? Just answer in your own words and give two examples.

Q19: What are Time-Driven controls? Give an example to illustrate it.

Q20: In which process do you think the Project Manager does most of the work to control a project?

Q21: Which Management Products does the Project Manager use to keep track of how the project is going? (For example, where do they keep informal notes, issues, checks on product status, quality progress, risks, etc.?)

Q22: What does the Project Manager use the Daily Log for?

Q23: What does the Project Manager use the Issues Register for and what are the three types of issues?

Q24: What does the Project Manager use the Product Status Account for?

Q25: What does the Project Manager use the Quality Register for from a control point of view?

Q26: What does the Project Manager use the Risk Register for from a control point of view?

Q27: What in PRINCE2 has to be sought by all project stakeholders, recorded and actioned in a project?

Q28: What report is used by the Team Manager to report on a regular basis to the Project Manager and when is the frequency decided?

Q29: What are the 3 reports used by the Project Manager to report to the Project Board?

Q30: When is the frequency of the Highlight Report decided?

Q31: How big should the highlight report be and what kind of information should be in this report? (**Tip:** Think **T**e**CQ**uila **S**o**B**e**R**)

Q32: Progress Responsibilities: Who provides the project tolerances in the project mandate and who makes decisions on Exception Plans when Project Tolerances are forecast to be exceeded, as the Project Board cannot do this?
Q33: Progress Responsibilities: Who agrees on Work Packages with Project Manager, produces Checkpoint Reports, and notifies the Project Manager of any forecast deviation from Work Package tolerances?

Q34: Progress Responsibilities: Who has the following responsibilities?
- Assisting with the compilation of reports
- Assisting the Project Manager in maintaining the Issue Register & Risk Register
- Maintaining the Quality Register on behalf of the Project Manager (i.e., checks that all is going according to plan)?

Q35: Progress Responsibilities: Who has the following responsibilities?
- Authorizing work packages
- Monitoring progress of stage plans
- Producing Highlight Reports, End Stage Reports, Lesson Reports & End Project Reports
- Producing Exception Reports for the Project Board when the stage-level tolerances are forecast to be exceeded
- Maintaining the project registers and logs

12 Introduction to Processes

12.1 Introduction to Processes

Let us take a look at what you will learn in this Introduction to Processes. You will see I provide a good deal more information than the PRINCE2 manual, as it is important to understand certain information before getting into the PRINCE2 Processes. You will learn the following:

- What is a Process and what is a PRINCE2 process?
- What is a Pre-Project process? What happens here? What are the inputs and outputs?
- What happens in the Initiating a Project Process and what are the inputs and outputs?
- What are the next stages in the project?
- The final delivery stage and what happens here when closing the project.
- Introduction to the PRINCE2 Process Model.
- Introduction to the 7 processes.

12.2 The PRINCE2 Processes

A process is a structured set of activities designed to accomplish a specific objective. PRINCE2 has activities for Starting Up a Project, running a project and many others. It groups these into processes.

PRINCE2 is a process-based approach for project management and there are 7 processes that guide you through the project, and each provides a set of activities. These activities help to direct, manage and deliver a project and are described in the PRINCE2 manual. Like any process, a PRINCE2 process takes one or more inputs, acts on them, and provides defined outputs.

The 7 PRINCE2 process are:

- Starting Up a Project
- Initiating a Project
- Directing a Project
- Controlling a Stage
- Managing Product Delivery
- Managing a Stage Boundary
- Closing a Project

By now you should be familiar with the Process Model Diagram, which clearly shows the seven processes. See section 2.1 The PRINCE2 Process Model for more information.

12.3 Pre-Project

What happens before the project starts? This is known as Pre-Project.

Someone, somewhere, sometime has an idea or a need. This can be a business opportunity or something that is necessary to do for the company (e.g., a change in legislation like CO_2 reduction). This idea or need is the trigger for the project.

The first step that is normally taken is the creation of a project mandate document. This is why we say that the project mandate is the Trigger for the project. A project mandate can be a simple one-page note, an email, or a structured document based on a company project mandate template.

There are a number of Pre-Project activities to be done and these are referred to as the project start-up. PRINCE2 suggests a number of pre-project activities that should be done and all of them are contained in a process, i.e., the *Starting Up a Project* Process.

The main objective of the Starting Up a Project Process is to verify that the project is worthwhile. The project mandate is expanded to a Project Brief, and a plan is created for the Initiation stage. The Starting Up a Project Process is also about preventing poor projects from starting.

After this process is complete, The Project Board reviews the Project Brief and decides whether to initiate the project. This is the first decision that the Project Board makes.

12.4 Initiation Stage

This is the first Stage in a project and the activities to be performed for project initiation are contained in the “Initiating a Project” process. This is also a good point to mention that there is a minimum of two stages for each project: the *Initiation* Stage and the *Next* Stage where the products can be produced. You may now ask, “What about Closing a Project? Is this not another stage too?” Closing a Project is a process and it is part of the last stage of a project. In other words, the Closing a Project Process is the last part of the last stage of a project.

The main objectives of the Initiation Stage are to:

- Create a detailed Business Case, document the benefits and prepare a Benefits Review Plan that will describe how and when Benefits will be reviewed.
- Define the product descriptions, the four strategy documents, project timeline, costs, risk analysis and commitment of resources, and then assemble the PID (Project Initiation Documentation). The PID contains almost all of the project information to date, including the Project Plan.
- The Project Plan is a high-level plan for the whole project. A Stage Plan is also created for the first Stage Plan, which is a lot more detailed.

At the end of the Initiation Stage, the Project Board will receive the PID and decide to authorize the project or not. In simple terms, this means that the Project Board will either decide to allow or not allow the project to start. If *yes*, the PID is baselined so it can be used in the future to compare the project objectives with the current situation.

12.5 Next Stage or Stages after the Initiation Stage

The Project Manager has day-to-day responsibility for the project on a stage-by-stage basis, and reports to the Project Board.

The Project Manager does the following:

- Assigns work to be done.
- Checks that all deliverables have passed the required quality tests.
- Checks that project is in line with Project Plan.
- Checks that forecasts are within project tolerances.

All these activities are done in the Controlling a Stage process.

At the same time the Project Manager maintains a number of documents, such as the Daily Log, Lessons Log, Issue Register, Risk Register, Quality Register and Configuration Items Record. These will be discussed in future chapters.

The Project Manager keeps the Project Board up to date about the progress of the project using the Highlight Report. For example, the Project Board may have agreed to receive a Highlight Report every 2 weeks from the Project Manager.

Work Packages are produced in the Managing Products Delivery process, and the Checkpoint Reports are used to keep the Project Manager up to date on a regular basis.

Towards the end of a stage in the Managing a Stage Boundary Process, the Project Manager will request permission to proceed to the next stage and will have to provide the following information to the Project Board: Updated Business Case, End Stage Report, and Next Stage Plan.

The Project Board will use the information provided by the Project Manager to assess the continued viability of the project and will make the decision to authorize the next stage.

Final Delivery Stage

During the final stage the Project Manager will be accepting and getting approval for the last products to be produced and will focus on decommissioning the project.

The Project Board will check that the recipients of the project's products are in a position to own and use them, and will also check that they will be supported after the project has stopped.

The Closing a Project Process is always the last part of the last stage and it describes a number of activities that should be done, such as:

- Assessing the project by comparing it to the original plan.
- Writing End Project Report.
- Planning post-project benefits reviews.
- Writing and delivering Lessons Learned report

The Project Board will revise the data provided by the Project Manager and then can take the decision to Authorize Project Closure. The Project Manager can then leave the building.

12.6 The PRINCE2 Process Model Introduction

I believe that the Process Model is the best way to start learning about PRINCE2, as it provides an excellent high-level overview of a project and shows how all the process relate to each other and how the outputs from one process are the inputs to another.

Learning the processes one by one will make it hard for you to see how they relate to each other and therefore harder to learn PRINCE2. But if you are familiar with the Process Model, then the processes are easier to understand.

The Process Model overview in the PRINCE2 manual is very short. I suggest that you read our free “The PRINCE2 Process Model.” The podcast and CBT versions of this book are just over an hour. It covers the Process Model in much more detail and I would advise you to keep listening to the Podcast version until you can draw the process model diagram – in other words, until you can explain the PRINCE2 model to another person.

Note: If you understand the process model, it will help you answer 30% of the questions in the Foundation exam and 25% of the questions in the Practitioner exam. It is also a great way to prepare for the classroom training. In fact, if you understand the Process Model, you can take a two-day course instead of a three-day foundation course. This would save you about €350.

12.7 Introduction to the Seven Processes

As mentioned earlier, there are seven management processes in PRINCE2 and each process is the responsibility of one of the management levels in the project organization, meaning the Project Board, Project Manager or Team Manager.

Directing a Project Process

Directing a Project is the responsibility of the Project Board. It runs from the start of the project until its end. Note that the Starting Up a Project Process happens before the project starts. During this process, the Project Board authorizes project stages and manages the overall project by using the management style *Management by Exception*.

The Starting Up a Project Process

This is the responsibility of both the Project Manager and the Executive. This is the very first process and is, in fact, known as the Pre-Project process, referring to the fact that it occurs before the project starts, as the project does not start until the Initiation Stage begins. In this process the reasons for the project are established, the project management team is assigned, and a plan is created to run the Initiation Stage.

The Initiating a Project Process

The Initiating a Project Process is the process that defines the Project Product, product quality, project timeline and costs, risk analysis, commitment of resources and assembles the PID (Project

Initiation Documentation). This is also the process where the Project Plan is created and the Business Case for the project is finalized. All of this information is assembled into the Project Initiation Documentation.

The Controlling a Stage Process

The Controlling a Stage Process is where the Project Manager does most of their work. The Project Manager watches over the work, takes corrective action, observes changes, and communicates with stakeholders, which includes reporting. Each action can be repeated many times by the Project Manager until the stage is complete. The project is divided into stages for management and control efficiency. The Controlling a Stage process monitors each stage and is repeated for each stage in the project.

The Managing Product Delivery Process

Managing Product Delivery is the process where the planned products are created and it comes under the responsibility of the Team Manager. It is where the Work Packages are executed, the products get created, and work gets done. The Team Manager receives the Work Packages (which are a list of tasks) from the Project Manager, and delivers the completed and tested Work Packages back to the Project Manager.

The Managing a Stage Boundary Process

The Managing a Stage Boundary Process is the reporting process for a stage, so the Project Board can check on how well the stage has done against the plans. In other words, this process evaluates the stage and prepares the plan for the next stage. The End Stage Report and next Stage Plan are submitted to the Project Board.

The Closing a Project Process

The Closing a Project process covers the work of wrapping up the project and this process is the last part of the last stage. PRINCE2 suggests a number of activities to be done to prepare the project for closure, such as End Project Report, Lessons Learned Report and Acceptance Record.

The output of this process will be the basis for the Project Board's confirmation for closure, as the project is closed by the Project Board in the Directing a Project Process and not by the Project Manager.

12.8 Learn Thru Questions

Try and answer the following, these are taken from the Learn Thru Questions audio course. Check the answers in the Learn Thru Questions document available on our site: You can also listen to these questions and answers (use the **LTQ audio course**)

Q01: What is a process? Answer in your own words. There are a number of ways to answer this, so don't worry about giving the exact answer.

Q02: How does PRINCE2 group activities?

Q03: Name 4 of the 7 PRINCE2 Processes. (**Tip:** *Think of the first 2; the Project Board; where the Project Manager does most of their work; what happens at the end of the stage; where the products get produced; and the last process to be done.*) Don't worry about using the exact names.

Q04: What happens during the Closing a Project process and who is responsible? Just name two tasks that are done.

Q05: As far as a PRINCE2 project is concerned, what is the Trigger to start a project? (**Tip:** What document must be produced?)

Q06: PRINCE2 recommends a number of Pre-Project Activities – activities that should be done before the project starts up. In which process are these activities done?

Q07: What is the main objective of the Starting Up a Project Process?

Q08: The project mandate is expanded into another document that is created during the Starting Up a Project process. What document is this?

Q09: What is the minimum number of stages that a project can have?

Q10: What are the main objectives of the Initiation Stage? (**Tip:** Just think of some of the documents that are part of the PID.)

Q11: What **decision** does the Project Board consider at the end of the Initiation Stage?

Q12: What is the name of the report that the Project Manager creates on regular basis to keep the Project Board up to date on the progress of the stage?

Q13: Name two of the reports that the Project Manager creates in the Closing a Project process. What does the Project Board do after this process?

Q14: Who has the responsibility for the Directing a Project Process? When does it start and end?

Q15: What do you think the Project Board does in the Directing a Project process? Just name one or two things they do.

Q16: Who is responsible for the activities for the Starting Up a Project Process and what is meant by a pre-project process?

Q17: What are the two main outputs of the Starting Up a Project Process?

Q18: In which process are the following documents created: The Project Plan, The Business Case, and the Benefits Review Plan, and when is the PID is assembled?

Q19: Who does most of the work in the Controlling a Stage process? Name two things that they do.

Q20: What happens in the Managing Product Delivery process and who is responsible?

Q21: What happens during the Closing a Project process and who is responsible?

13 Starting Up a Project

13.1 Introduction

Let us take a look at what you will learn in this Starting Up a Project process. You will be learning about the six activities, which are:

- Appointing the Executive & Project Manager.
- Capturing Previous Lessons, meaning lessons from other projects.
- Designing and appointing the Project Management Team, including description of roles and responsibilities.
- Preparing the outline Business Case & Writing Project Product Description.
- Selecting the Project Approach & Assembling the Project Brief, and
- Planning the Initiation Stage.

13.2 Purpose & Objective of the Starting Up a Project Process

Purpose of the Starting Up a Project Process

The purpose of this process is to answer the question, *"Do we have a worthwhile and viable project?"* The project mandate is usually the only document that exists when this process starts, and this is not enough information for the Project Board to make the decision to start the Initiation Stage.

Therefore, the purpose of this process is to provide the Project Board with the necessary information to judge if the project is worthwhile. They use the Project Brief, which will contain information on the Business Case. Another important purpose of the Starting Up a Project process is to prevent poor projects from starting up.

This process should be brief; perhaps that's where we get the name Project Brief. In fact, the aim is to do the minimum necessary just to see if the project is worthwhile doing the Initiation stage.

The Objectives of the Starting Up a Project Process

The objectives of the Starting Up a Project process are to prepare and make sure that the following is done during and by the end of this process:

- There is a Business Case or a business reason and this should be documented in the outline Business Case. The Business Case document will not be completed until the Initiation Stage.
- Look at the project approach, which examines the best way to go about doing this project and obtaining advice from other projects in the form of lessons learned, specialists or even outside knowledge.
- Choose the people who will do the work to initialize the project, and other roles in the project team.
- Create the Project Brief, which provides information on the scope of the project and most of the information collected to date in this process.
- Create a detailed Stage Plan to plan the work to be done in the Initiation Stage.

So as you can see, the Starting Up a Project process objectives are to provide the Project Board with certain information and to prepare the Initiation Stage.

13.3 Activities Introduction

This is a high-level overview of the Activities and it is good to understand this before we begin with the Activities in more detail.

- The Trigger to start the project is the project mandate, which is provided by a high-level person within the company or a Program.

- During this process, the project mandate will be expanded into in the Project Brief. Keep in mind that the Project Brief will be used by the Project Board to decide whether to Initiate the project or not.
- **Note:** If the project is part of a program, then the Project Brief could be provided by the program. In fact, most of the work in this process could already be done by the program.
- Assembling the Project Brief and refining the outline Business Case require close cooperation between the Project Manager, Project Board and some of the Stakeholders.
- The work on the Project Brief and the outline Business Case is an iterative activity, i.e., there is a constant cycle of discussions and improvements to these documents.
- PRINCE2 points out that the more time spent on clearly defining the requirements in this process, the more time that will be saved during the project, as some of the following situations can be avoided:
    - Meetings and detailed discussions trying to define certain products;
    - Re-planning due to creating the wrong sub-products; and
    - Avoiding costly exceptions during the Stages.
- In many companies, projects are started too quickly, as upper management needs to see that some action is taken, so the result is the creation of a poorly defined Project Product.

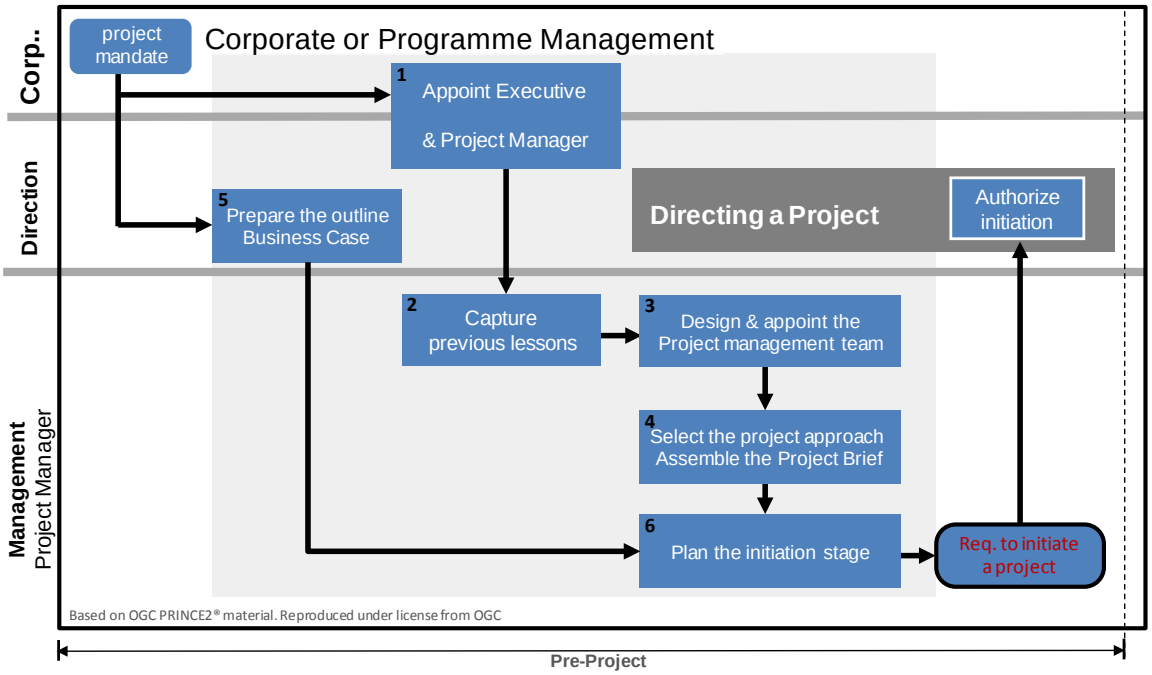


Fig 12.1 Overview of Starting Up a Project

The following Activities are to be done in the Starting Up a Project Process:

- Appointing the Executive and the Project Board (by Corporate or Program Management & Executive).
- Capturing Previous Lessons.
- Designing & appointing the project management team.
- Preparing the outline Business Case.
- Selecting the project approach and assembling the Project Brief.
- Planning the initiation stage.

Activities 2 through 6 will be done by the Project Manager with some support from the Executive for specific tasks.

13.4 Appoint the Executive and the Project Manager

The Executive is appointed by the Corporate/Program Management and the Project Manager is appointed by the Executive. Bear in mind that the Executive is the main person responsible for the project, the main decision maker, and they represent the interests of the business stakeholders, while the Project Manager will manage the project on a day-to-day basis for the Executive.

Both of these appointments follow the same steps, which are:

- Establishing the responsibilities and preparing a role description. (For more information, see the role description example in Appendix C of the PRINCE2 Manual.)
- Identifying candidates and selecting most appropriate person.
- Estimating the time & effort and confirming the person's availability, acceptance of the role, and commitment, and
- Finally, assigning the selected person to the role.

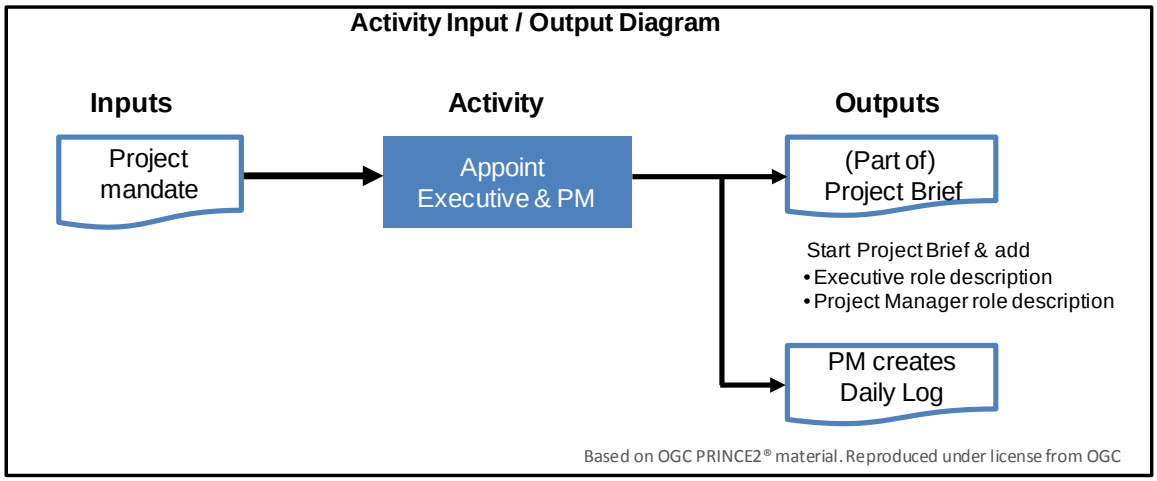


Fig 13.2 Activity 1: Appoint the Executive and Project Manager

The last task that is done is the creation of the Daily Log. This is used by the Project Manager as a repository to track information that is not captured elsewhere and later is only for informal information (e.g., overview of discussions, links to email about the project, comments from stakeholders, etc). Look at the Daily Log as a Diary for the Project Manager.

13.5 Capture Previous Lessons

You can learn a lot from previous projects about tools used, suppliers, gathering requirements, best practices, things to watch out for, why another project may have failed, etc. When you do this, you are making sure you won't make the same mistakes.

One good approach is to find out whom to learn from within the organization and invite them to a workshop, and if necessary, invite external persons. Good communication and facilitation skills are important here. Get access to the Lessons Learned reports from similar projects, examine them and talk about them with other Project Managers and other people from these projects.

Start a new Lessons Learned Log for your project and start to add the useful lessons that you come across. You will continually update this during the project.

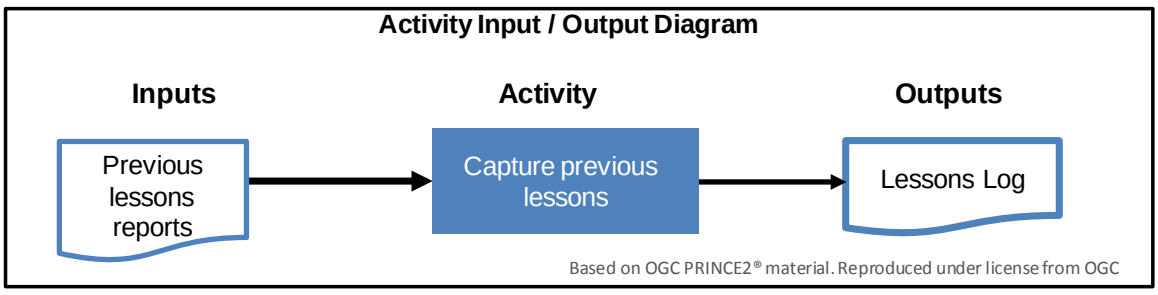


Fig 13.3: Activity 2: Capture previous lessons

Remember, capturing Lessons from previous projects is one of the principles of PRINCE2 and it's worth spending as much time on this as possible. The Project Manager is responsible for producing the Lessons Learned Log; the Executive should review it.

13.6 Design and appoint the Project Management Team

Usually the Project Manager will start by looking at the structure of previous projects and the Roles descriptions used, and they will learn from this. The tasks for this activity are very similar to the tasks for appointing the Executive and Project Manager; they are:

- Create Role descriptions for the project and examine the need for Team Managers, Project Support, and how best to organize communication between the Roles.
- Estimate the time and effort required for these Roles. Once again, you can get a lot of information from other projects.
- Identify the Candidates for each of the Roles and select the best person suited. It is necessary to check if training is required, their availability, and if they are willing to accept the role.

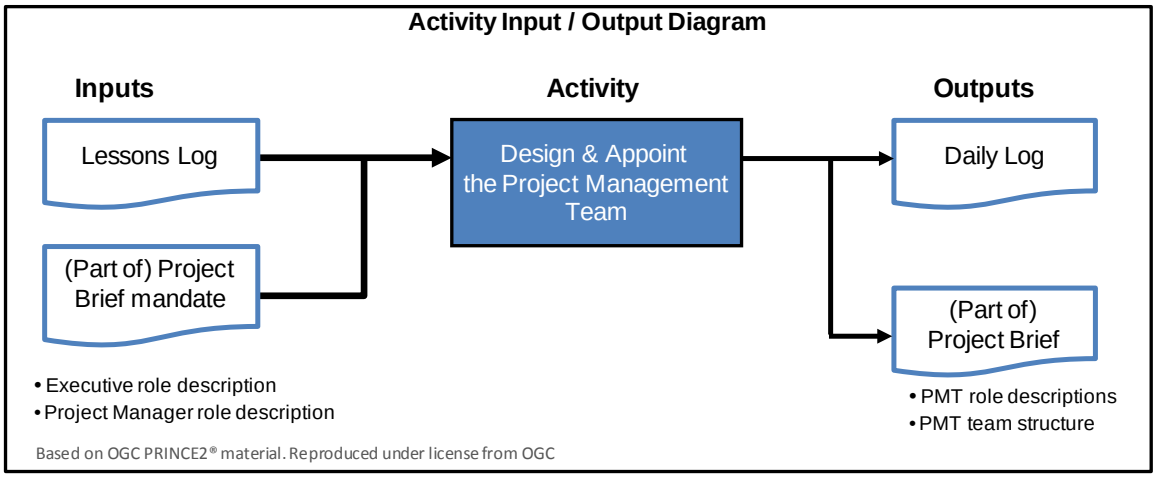


Fig 13.4 Activity 3: Design and appoint the project management team

The Executive is responsible for appointing the Project Management Team, while the Project Manager is responsible for the Project Team Structure and Project Role Descriptions. The Project Manager will keep track of the progress of this activity in the Daily Log.

13.7 Outline Business Case

This activity is called Prepare the Outline Business Case, which is very misleading, as the Project Product Description is also created here. It should be called Prepare the Outline Business Case and Project Product Description. It is important for all project stakeholders to know why this project exists, and what the reasons and benefits are for doing this project; this is answered in the Business Case. In fact, the Business Case is the main driver for all decisions in the project; therefore, it is important to have an outline of the Business Case as soon as possible in the project.

This outline of the Business Case is usually very high-level and is created by the Executive. The inputs to the outline of the Business Case are just the information in the project mandate and the Lessons Log. So the Executive expands what is written in the project mandate and considers the following:

- How the project will contribute to company or program objectives.
- How the project will be funded.
- How to best format the Business Case.

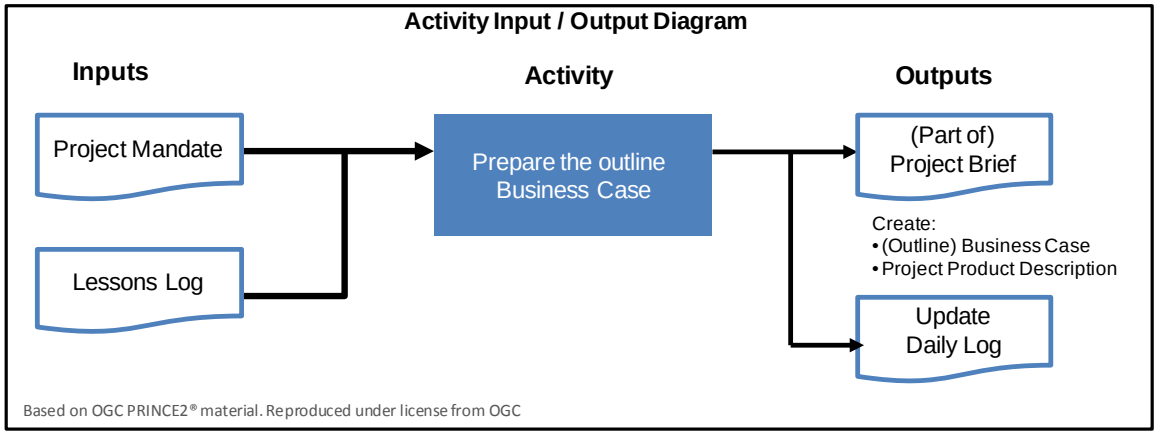


Fig 13.5 Activity 4: Prepare the outline Business Case

At this point, the Project Manager looks at what the project is going to deliver by talking with the Executive and the Senior User, as they create the Project Product Description. This includes considering the following:

- Customers Quality Expectations
- Acceptance criteria

He then captures any known risks in the Daily Log. These risks will then be reviewed and placed in the outline of the Business Case.

13.8 Select Project Approach and Assemble Project Brief

As with any task, one of the first things to consider is how best to do it. For projects, this is known as the Project Approach or how best to approach this project. You will ask questions like, *"Should we create product from scratch, update existing product, or use off-the-shelf solutions?" "Should we use internal or external people in the project?" "What can you learn from other projects?" "Are there other information sources, both internal and external?"*

You will also have to consider the company standards, skills required, future maintenance, security, and training needs.

The project approach will form part of the Project Brief and the Project Manager is responsible for this Project Approach Activity.

Assemble Project Brief

- The 2nd part of this activity is called Assemble the Project Brief, meaning that you'll use information from other documents to create the Project Brief document.
  a) The outline of the Business Case, which includes a summary of the known risks.
  b) The Project Product Description, which includes quality information.
  c) Project Approach, Overview of Project Team Structure. and Roles Descriptions.

The Project Manager is responsible for assembling the Project Brief, while the Senior Users will Review it and the Executive will approve it.

The Project Brief also updates & confirms the Project Objectives and desired outcomes, as well as confirms the Project Scope. This information originally comes from the project mandate.

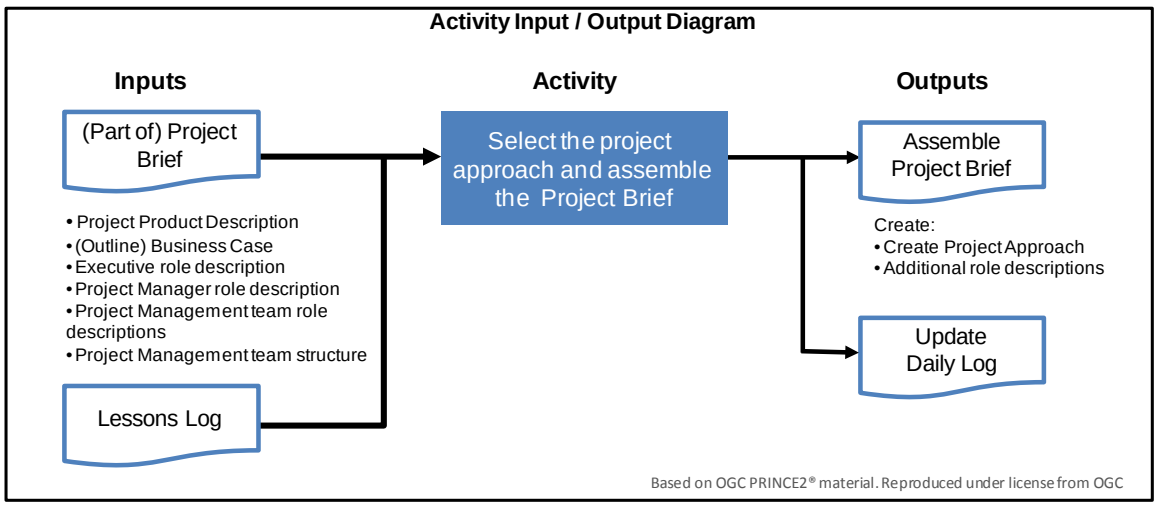


Fig 13.6 Activity 5: Select the project approach and assemble the Project Brief

13.9 Plan the Initiation Stage

Plan the Initiation Stage: This is the last activity in the Starting Up a Project Process. The SU process is just to check if there is a business reason to the project, while the Initiation Stage will Plan the project, create all Product and Sub-Product descriptions, and provide a detailed Business Case document, and the final output will be the PID or Project Initiation document.

The SU process can be rather quick but the Initiation Stage can take some time. This Activity will create a plan to run the Initiation Stage.

PRINCE2 recommends the following tasks in this activity:

Define Reporting and Control Arrangements for the Initiation stage.

Produce Stage Plan, and include time and cost data.

Review the Risks in the Daily Log to assess their impact on the Initiation Stage.

And lastly, Request Authorization to initiate the Project – which is to make a request to the Project Board to continue.

The Stage Plan is created by the Project Manager, Reviewed by the Senior User and approved by the Executive.

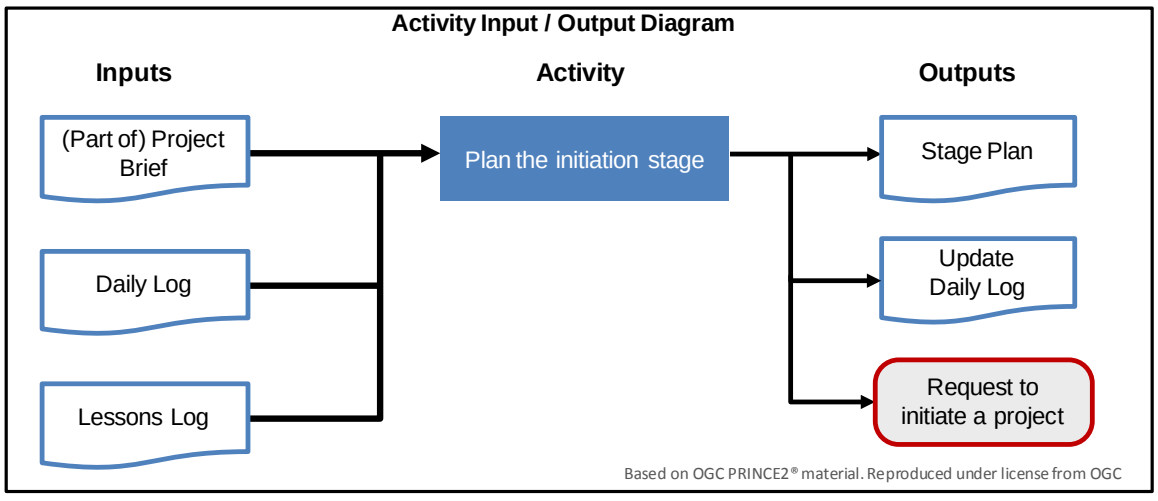


Fig 13.7 Activity 6: Plan the initiation stage

13.10 Summary of Activities

Here is an overview of the six activities in the Starting Up a Project Process, and therefore, is a summary of what you have learned.

- Appoint the Executive & Project Manager.
- Capture Previous Lessons (i.e., learn from previous projects) and the Lessons Log is created.
- Design and appoint the Project Management Team (this includes Roles descriptions).
- Prepare the Outline Business Case & Write Project Product Description.
- Select the Project Approach & Assemble the Project Brief; and.
- Plan the Initiation Stage.

The Executive is responsible for Appointing the Project Manager, the Project Management Team and creating the outline Business Case.

The Project Manager is responsible for Roles descriptions, capturing previous lessons, project approach, assembling the Project Brief, creating and updating the Daily Log, and creating the Initiation Stage Plan.

13.11 Learn Thru Questions

Try and answer the following, these are taken from the Learn Thru Questions audio course. Check the answers in the Learn Thru Questions document available on our site: You can also listen to these questions and answers (use the **LTQ audio course**)

Q01: What is the main question that is answered by the Starting Up a Project Process?

Q02: Name two or three of the objectives of Starting Up a Project Process (i.e., mention some of the things that are done).

Q03: Which document is the project mandate expanded into during the SU Project process?

Q04: Name some of the activities that are done in the Starting Up a Project process.

Q05: Who appoints the Executive and the Project Manager?

Q06: What tasks does PRINCE2 recommend when appointing people to the project?

Q07: What is the first Log file that is created by the Project Manager and what is it used for?

Q08: What are the advantages of Capturing Lessons from Previous projects?

Q09: What happens to the information gathered by the Project Manager during the Capture Previous Lessons Activity?

Q10: Who is responsible for appointing the Project Management Team and what does the Project Manager do?

Q11: What kind of information is entered into the outline Business Case document and who writes it?

Q12: What kind of questions would you ask or consider during the Project Approach? Answer in your own words.

Q13: Name two of the documents that are used as inputs to the Project Brief. Who is responsible for this?

Q14: What is the main output of the Activity “Plan an Initiation Stage” and what is it used for?

Q15: Who creates the Initiation Stage Plan and who approves it?

Q16: Name 4 or more documents or logs that can be created during the Starting Up a Project Process.

Q17: Which document is the trigger to start the project?

14 Initiating a Project

14.1 Introduction

Let us take a look at what you will learn in the Initiating a Project Process. You will learn about the eight activities which are:

- Preparing the Risk Management Strategy, which will answer how to manage risk during the project, in other words, manage the *rules of engagement* for risk.
- Preparing the Configuration Management Strategy, which will give information on how to manage the products produced during the project.
- Preparing the Quality Management Strategy, which will answer the question on how to ensure quality.
- Communication Management Strategy, which will answer questions related to communication with stakeholders.
- Setup of Project Controls, which will provide information on how the Project Board can control the project.
- Creating the Project Plan, which covers costs, timescales, risks, quality plan.
- Refining the Business Case, which means to complete the Business Case.
- Lastly, assembling the Project Initiation Documentation, which is to collect and assemble documents & information from most of the documents created to date.

14.2 Purpose & Objective

The purpose of the IP process is to understand the work that needs to be done to deliver the required products. This understanding is needed before deciding to continue with the project. Like any project there are a number of important items to discover and so there are a number of questions to ask about the project:

- What are the reasons for doing the project and the Benefits and Risks?
- Scope: What is to be done and what will not be included?
- When can the products be delivered?
- How to ensure that quality will be achieved?
- How risks, issues and changes will be identified and followed up?
- How project progress will be monitored, who needs to be informed and how often do they need to be informed?
- And lastly how PRINCE2 will be tailored to suit the project?

The objective is to find an answer to these questions.

Let us put Initiating a Project into context and look at what it really does for the project. The Starting Up a Project Process checks if the project is viable, while Initiating a Project is about building a correct foundation for the project so that all stakeholders are clear on what the project will achieve.

The alternative would be to allow projects to start after the “Starting Up a Project” process without knowing and of the following: planning, milestones, cost and level of quality. It is a bit like building a foundation for a house without knowing what type of building will go on top.

Initiating a Project can be a big investment for a company but it’s a necessary investment to plan and run the rest of the project and ensure a correct project. During Initiating a project, the Project Manager will be creating a collection of management products to show how the project will be managed, the cost, how quality will be checked, planning and communications.

14.3 Activities

PRINCE2 recommends 8 activities which are

- Preparing the Risk Management Strategy, which will answer how to manage risk during the project, in other words, manage the *rules of engagement* for risk.
- Preparing the Configuration Management Strategy, which will give information on how to manage the products produced during the project.
- Preparing the Quality Management Strategy, which will answer the question on how to ensure quality.
- Communication Management Strategy, which will answer questions related to communication with stakeholders.
- Setup of Project Controls, which will provide information on how the Project Board can control the project.
- Creating the Project Plan, which covers costs, timescales, risks, quality plan.
- Refining the Business Case, which means to complete the Business Case.
- Lastly, assembling the Project Initiation Documentation, which is to collect and assemble documents & information from most of the documents created to date.

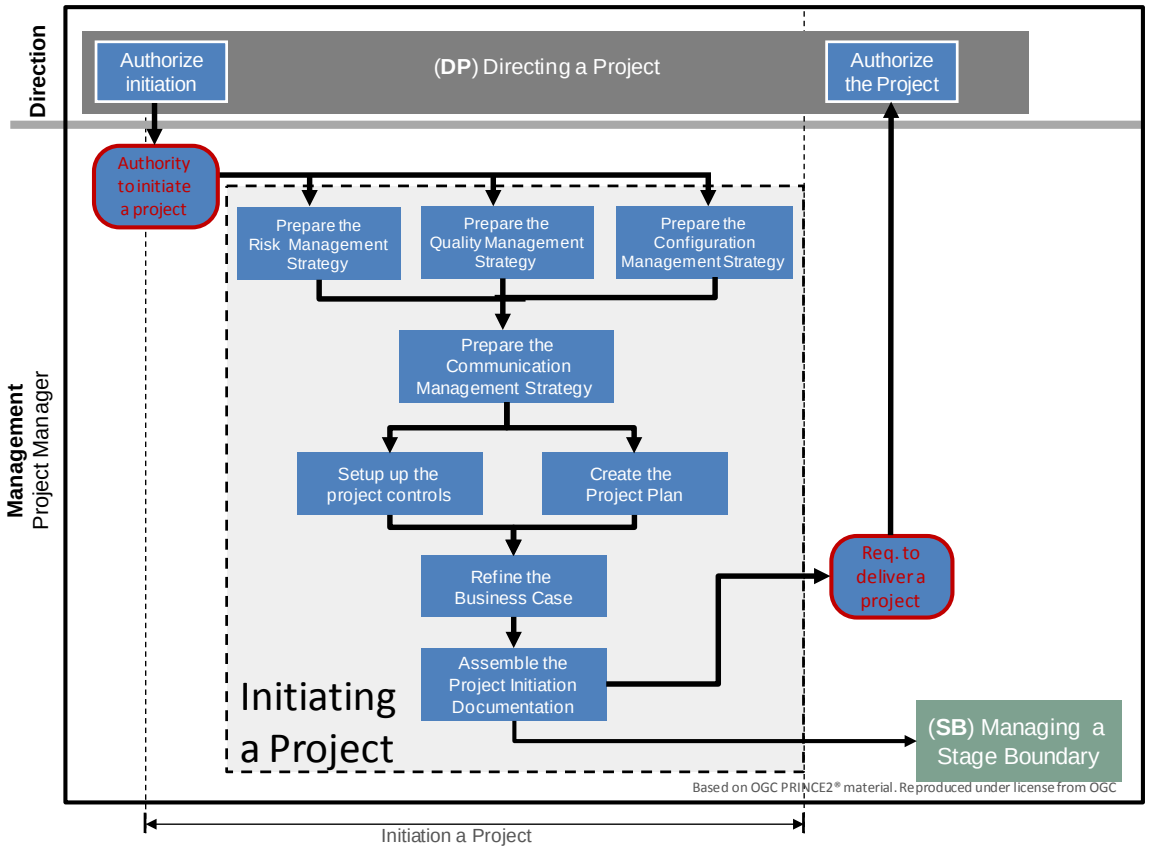


Fig 14.1 Overview of Initiating a Project

The Project Manager will begin with the 4 strategy documents, and then he will create Project Controls and Project Plan. These are iterative activities so they will continue to be updated during the Initiation Stage. The Business Case can then be completed after the Project Plan as the Project Plan provides information required by the Business Case (time and cost information). The final activity is to assemble the Project Initiation Documentation.

14.3.1 Prepare the Risk Management Strategy

As expected, the Risk Management Strategy is about how the project will handle risk, and it will contain information on how to document it and manage it, the procedures to follow, the roles and responsibilities, the risk tolerances, how to measure probability and impact, techniques to use and how to report risks. Like all the strategy documents, the Project Manager will most likely use an existing template that will already have been tailored to how the company works with risk.

Risk is also one of the Themes in PRINCE2. See this theme for more information.

There are 3 Inputs that the Project Manager will use to prepare the Risk Strategy:

- Project Brief: This can mention any standards that should be followed. It will also provide a summary of the known risks.
- Lessons Log: This can have lessons on risk from previous or similar projects.
- Daily Log: Perhaps someone has mentioned something to the Project Manager and they added this to the Daily Log. This should be reviewed. The Daily Log can also contain risk information that is gathered in the SU process, as it is the only place to put detailed risk information in the SU process.

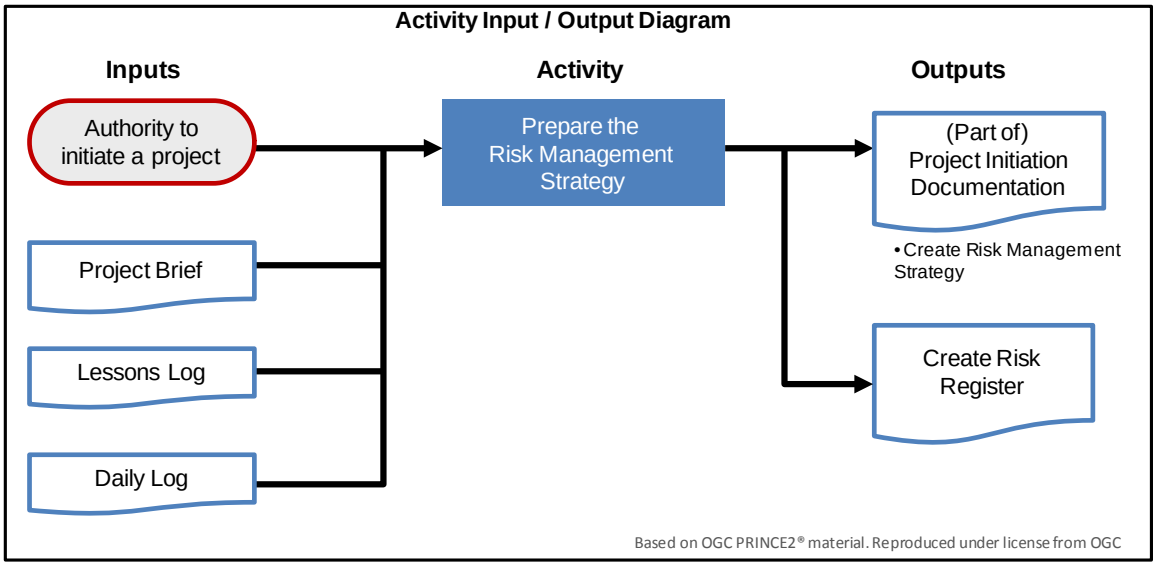


Fig 14.2 Activity 1: Prepare the Risk Management Strategy

There are 2 main outputs to this Activity:

- The Risk Register: This is a record of all risks, their current status and history. (See page 260 of the PRINCE2 manual for a description of this document.)
- The Risk Management Strategy document. (See the Risk Management Strategy product description for more information in this PRINCE2 manual Appendix A.)

The Project Manager creates the Risk Management Strategy document while Project Support may setup the Risk Register, but the Project Manager remains responsible.

14.3.2 Prepare the Configuration Management Strategy

The objective of Configuration Management is to manage all products that are part of the project. This includes having a product description, configuration item record and other information and maintaining these products during the project.

The Configuration Management Strategy is a description of how to protect the products and who will manage and protect them. Like all the strategy documents, the Project Manager can use an existing template that will already have been tailored to how the company works.

A quick reminder: There are two kinds of products that are produced in a PRINCE2 Project: Management & Specialist products.

- Management Products, like the Project Brief, Business Case and Project Plan, are produced to help manage the project. These products are created for each product.
- Specialist Products are the products that the project is set up to create. These are the products the users want from the project (e.g., House, IT Application and Event).

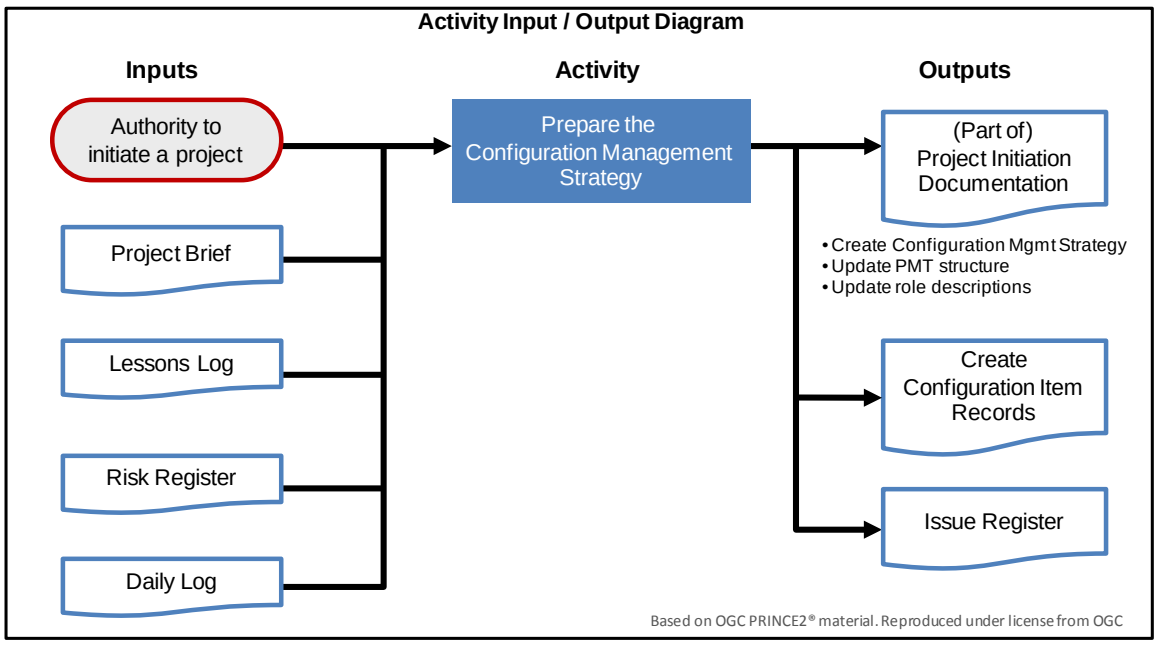


Fig 4.3 Activity 2: Prepare the Configuration Management Strategy

The outputs for this activity are:

- The Configuration Item Record is a one-page summary for each product See the Configuration Item Records product description in Appendix A for more information, e.g., Document Name, Owner and Version. It is just for the first Management Products at the moment, as there is not much information about the specialist products that will be created.
- The Configuration Management Strategy is produced by the Project Manager.
- The Issue Register is used to capture and maintain information on each issue and is monitored regularly by the Project Manager.

The Configuration Management Strategy document includes some of the following information:

- The Configuration Management control procedure: – how to plan, identify, control and status accounting.
- The procedure used for issues and change control.
- Roles and Responsibilities.

14.3.3 Prepare the Quality Management Strategy

The Quality Management Strategy defines the quality techniques and standards to be applied and the roles and responsibilities to achieve the required level of quality.

Like the other Strategy documents, the Project Manager can use an existing Quality Management Strategy template that may have been already tailored to suit the quality requirements. This does not have to be too much work. The Project Manager will also review the Project Product Description, Project Brief, Lessons Log and Risk Register to check for any information that can affect quality.

Quality is one of the Themes in PRINCE2. See this theme for more information.

The two outputs for this activity are:

- Quality Management Strategy, which is created by the Project Manager.
- Quality Register. This contains a summary of the details of all planned and completed Quality activities.

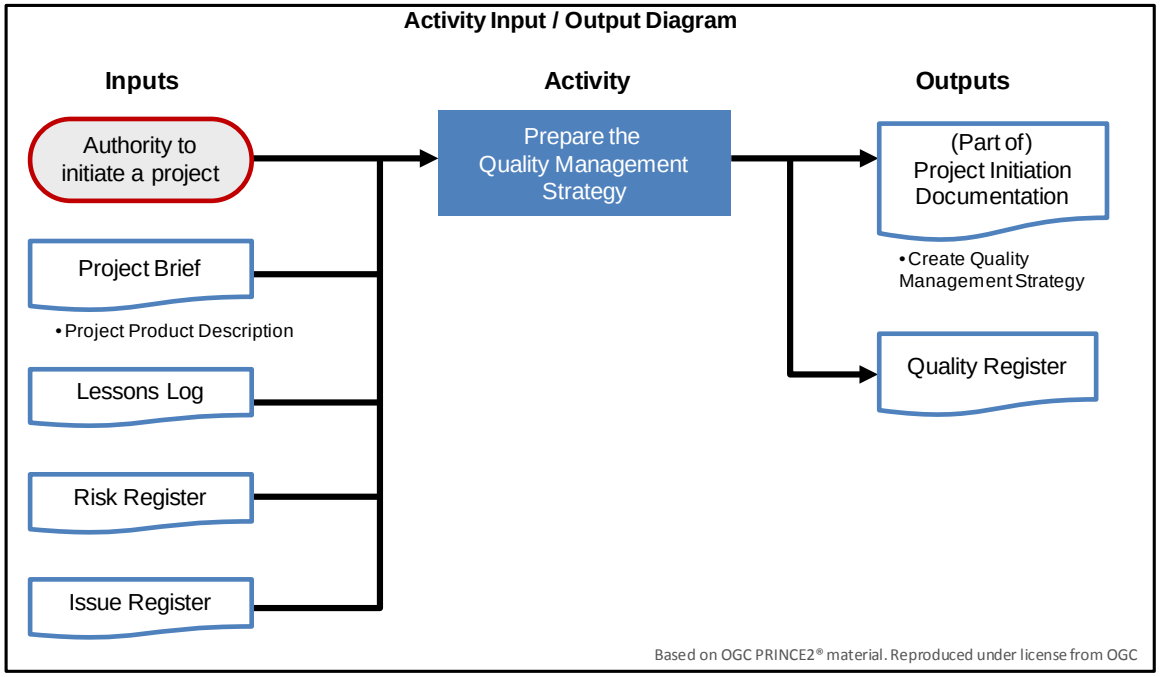


Fig 14.4 Activity 3: Prepare the Quality Management Strategy

The Quality Management Strategy contains the following information:

- Quality Management procedure (e.g., Procedure for planning, quality control and quality assurance).
- Tools and techniques that will be used.
- Timing of quality Management activities.
- Roles and Responsibilities.

Product Assurance has to approve the Quality Management Strategy document and make sure it is in line with company quality standards.

14.3.4 Prepare the Communication Management Strategy

The Communication Management Strategy document provides procedures for communication during the project, such as how communication will be done, the frequency of communication, who will communicate, the format of the communication, and so on.

Like the other Strategy documents, the Project Manager can use an existing Communication Management Strategy template that may have been already tailored for the company and will tailor this further to suit the project.

The Project Manager begins with the following tasks:

- Review the Project Brief and check for communication requirements.
- Review Lessons Log for any lessons that can be applied.
- Identify and consult with Stakeholders to discuss their communication needs.

The Project Manager is then ready to define the Communication Management Strategy which covers the communication procedure, the tools & techniques, the timing, and the roles & responsibilities.

The Project Assurance will review the Communication Management Strategy.

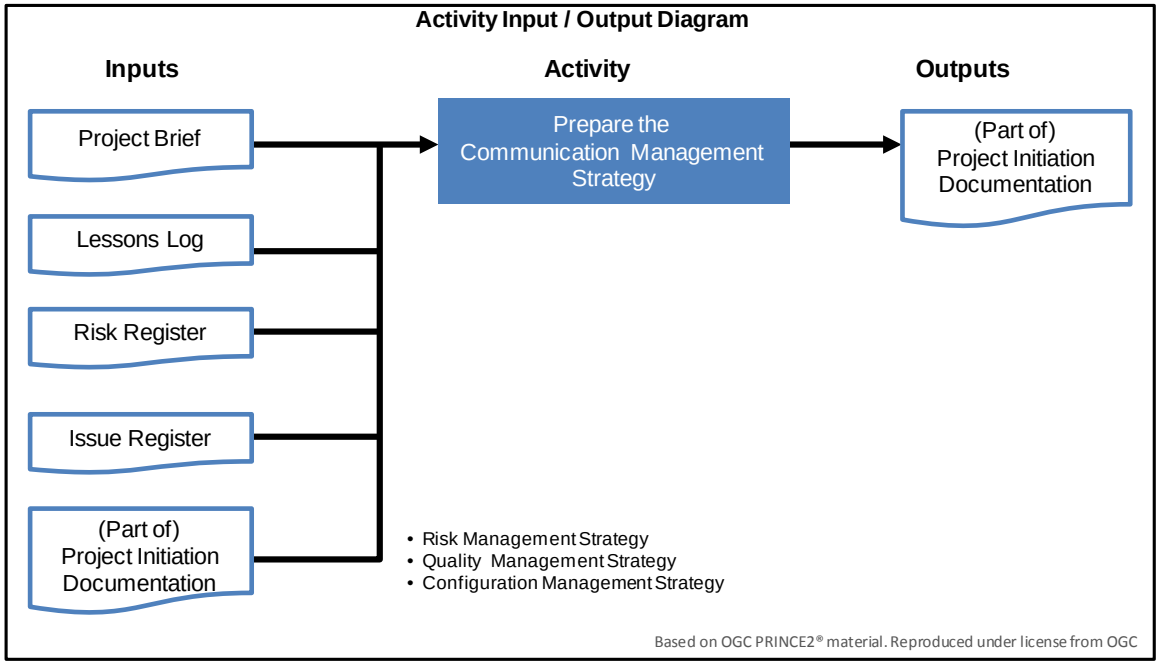


Fig 14.5 Activity 4: Prepare the Communication Management Strategy

14.3.5 Setting Up the Project Controls

Project controls enable the project to be managed both effectively and efficiently. There are two levels of control:

- From the Project Board to the Project Manager.
- From the Project Manager to the work carried out by the Team Managers and their teams.

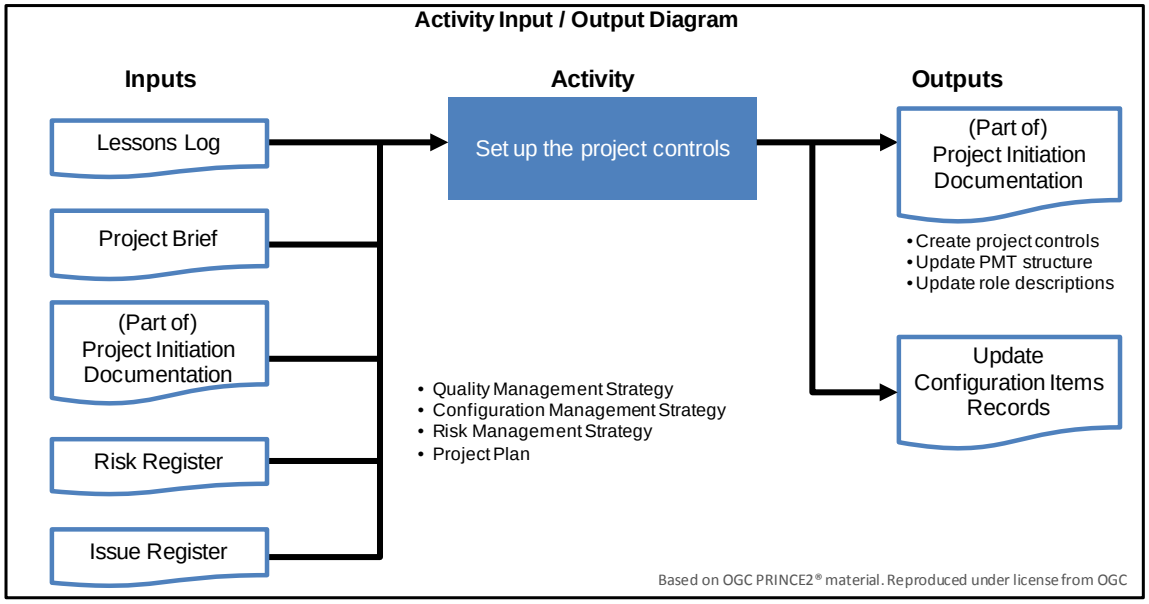


Fig 14.6: Activity 5: Setup the project controls

The main output of this activity is the Project Controls document. This Project Controls document will become part of the Project Initiation Documentation and is produced by the Project Manager.

The number of stages will also be decided here. This will also include the number of end stage assessments that will be done by the Project Board.

The Theme Change (chapter 10) provides information on how to capture and analyze issues and the Theme Progress (chapter 11) provides information of escalation, setting tolerances and monitor progress.

PRINCE2 recommends the following actions for this activity:

- Review Project Brief, Quality Management Strategy, Lessons Learned and Risk Register for any information that may have an influence on Project Controls.
- Confirm the number of stages and, therefore, stage boundaries to be done to provide the appropriate level of control.
- Seek lessons from similar and other projects on how best to control the project.
- Outline the decision-making process so that the Project Manager knows where to direct different levels of issues and who will be responsible. This will be also incorporated into the Project Team Structure.
- Confirm the Tolerances between the Project Board and Project Manager and between the Project Manager and the Team Manager.

The Project Assurance will review the main output document which is the Project Controls document.

14.3.6 Create the Project Plan

The Project plan contains information on timescale, costs, resource requirements, products that will be produced, risks, tolerances, controls and quality. See the Plan Product Description for more information on this document. Also see the Theme Plans for more information on planning as this is used to create the Project Plan.

PRINCE2 recommends the following tasks in this activity:

- Review the Project Brief to understand milestones, standards, constraints, external dependencies and assumptions.
- Review the Lessons Log and the Risk and Issue Registers.
- Decide on the format of the Project Plan if a standard format is not available.
- Choose the method for estimating if there is no standard for this.
- Review the 4 strategy documents that have been created, and incorporate some of this information into the Project Plan.
- Create the Product Breakdown Structure, Product Flow Diagram and Product Descriptions for the major products in the plan. This can be done using workshops with experts facilitated by the Project Manager. This might be just one of the tasks mentioned in this activity but it can take more time to do than all the other tasks put together.
- Evaluate the maintenance required for these products.
- Consider if the Project Product Description needs to be updated, as there is a lot more information now on the main product, including Acceptance Criteria.
- You can now create the Configuration Item Records for each product.
- Identify and confirm the resources required.
- Identify the Project Controls activities and timings so that these can be added to the Project Plan.

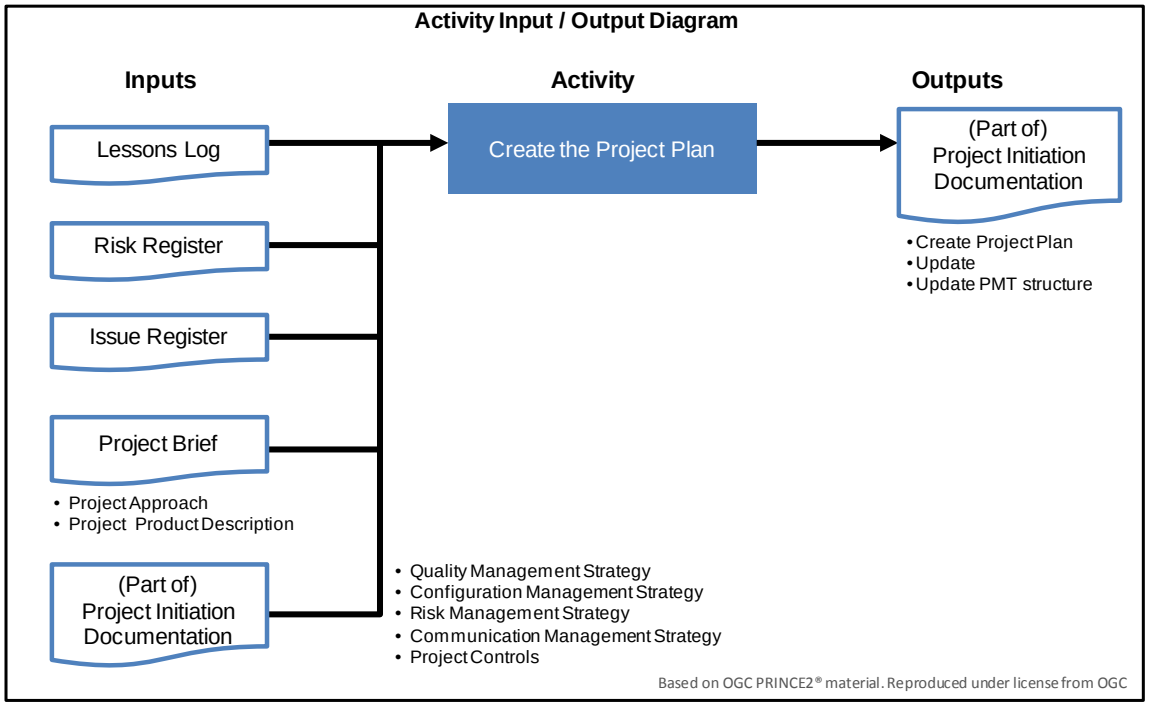


Fig 14.7: Activity 6: Create the Project Plan

The plan can now be completed using this information. It is very important that this activity is not rushed and the Project Manager has the authority to do this correctly and get access to the correct people.

Project Assurance will review the Project Plan to check that it meets the needs of the Project Board and stakeholders

14.3.7 Refining the Business Case

The outline Business Case document which was written in the Starting Up a Project Process can now be updated by the Executive and the Project Manager with the information gathered so far in the Initiation Stage. The main input documents will be the Project Plan, as it contains time and cost information, the outline Business Case, the Project Brief and the Risk Register.

PRINCE2 recommends the following actions in the “Refining the Business Case” activity:

- Review the Project Brief, as it may provide certain information about the Business Case.
- Continue to seek lessons and review the Lessons Log, as there may be lessons on refining the Business Case from other projects (e.g., how to define Benefits or do an Investment Appraisal).
- Include the Cost & Timescale information from the Project Plan.
- Include the major risks from the Risk Register.
- Include benefits information and tolerances allowed for each benefit.

Remember that the Executive is responsible for the Business Case and the Project Manager is there to assist the Executive. The Executive can also get help from other people. For example, they can ask a person from the financial department to help with the calculations for the investment appraisal. For more information on the structure of the Business Case, you can refer to the Business Case template in the PRINCE2 manual.

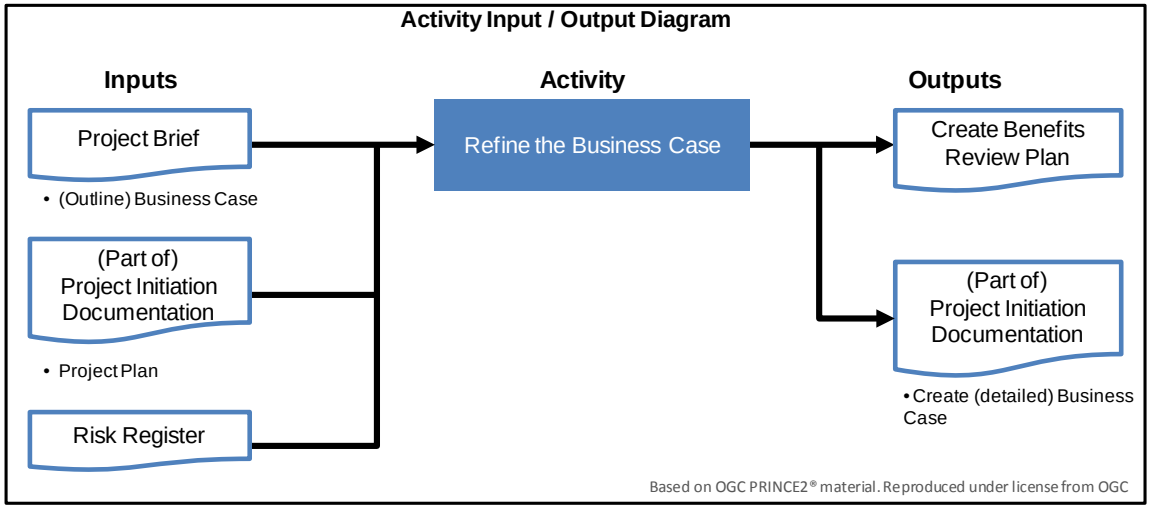


Fig 14.8 Activity 7: Refine the Business Case

Benefits Review Plan

Another document created during this activity by the Project Manager is the Benefits Review Plan. This is a plan that describes each benefit and defines how and when a benefit will be realized and how to measure it. Benefits that have been forecast to be realized during the project will be checked during the Stage Boundary process and the Benefits Review Plan will be updated.

Project Assurance will check both the Refined Business Case and the Benefits Review Plan documents.

14.3.8 Assemble the Project Initiation Documentation

The Project Initiation Documentation (PID) is a collection of documents that provide the key information needed to start the project. The PID provides the what, why, who, how, when and cost of the project.

The Project Initiation Documentation will be baselined, meaning it will be dated so that it can be used in the future to check project performance compared to the original forecasts.

The Project Manager assembles the Project Initiation Documentation and includes the following information and documents:

- Project Brief
- Project Management Team Structure and Roles Descriptions
- Business Case
- Four Management Strategy documents: Quality, Configuration Management, Risk and Communications
- Project Plan
- Project Approach, Project Controls and how PRINCE2 was tailored to suit the project

Project Assurance will check that it contains the necessary information and can be put forward to the Project Board

The last task done by the Project Manager is the request to deliver a project. This request is made to the Project Board and they will decide if the project can continue or stop. This request can be formal or informal and depends on the culture of the company and size of the project.

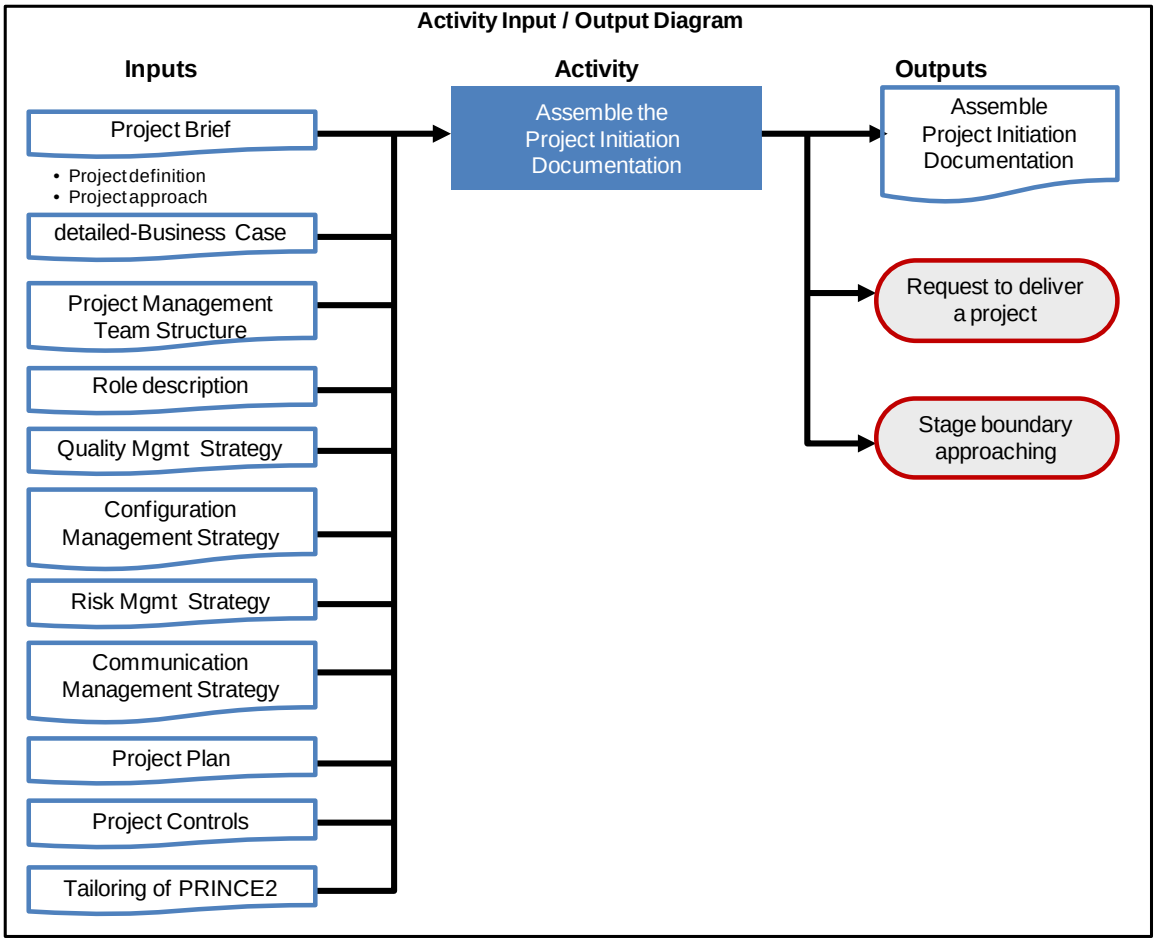


Fig 14.9 Activity 8: Assemble the Project Initiation Documentation

14.4 Learn Thru Questions

Try and answer the following, these are taken from the Learn Thru Questions audio course. Check the answers in the Learn Thru Questions document available on our site: You can also listen to these questions and answers (use the **LTQ audio course**)

Q01: What is the purpose of the Initiation Process? Answer in your own words.

Q02: List a few of the questions that will be asked during the Initiation Process. (**Tip:** Think of the documents that will be created during this process.)

Q03: What are the first 4 activities in the IP process? (**Tip:** These all have to do with creating the strategy documents and they all begin with the word "Prepare".)

Q04: What are the 2 next activities that are done after the 4 strategy documents' activities and can they be done in parallel? (**Tip:** One of these activities looks at how the Project will be controlled, and the other activity will probably take longer that all other activities put together.)

Q05: What Activity is done after Create the Project Plan and why does it have to wait for the Project Plan to be completed?

Q06: What is the final activity, who is responsible for it, and what is the main output?

Q07: What kind of information will be in the Risk Management Strategy Document? Name the 2 types of information found.

Q08: Name one of the three inputs and the two outputs of the Prepare Risk Management Strategy activity.

Q09: Name 2 types of information that you would expect to find in the Configuration Management Strategy Document.

Q10: What are the two main outputs produced during the Prepare Configuration Management Strategy activity? (**Tip:** One of these is a register.)

Q11: Name 2 types of information that you would expect to find in the Quality Management Strategy Document.

Q12: What are the two main outputs of the Prepare the Quality Management Strategy activity?

Q13: Name 2 types of information that you would expect to find in a Communication Management Strategy Document.

Q14: What is the main output of the Prepare the Communication Management Strategy activity & who creates it?

Q15: Name the 2 levels of Project Control.

Q16: List some of the items that are discussed and set up in the Setup Project Controls activity. (**Tip:** This is about the information in the 4 strategy documents for Quality, Configuration Management, Communication and Risks.)

Q17: What is the purpose of the Setting Up Project Controls activity? (**Tip:** Think of the 4 strategy documents and the Themes: *Change* and *Progress*)

Q18: List some of the tasks carried out in the activity: Create the Project Plan. (Try to list 4)

Q19: What are the main inputs and outputs to the Refining the Business Case activity?

Q20: Name 4 items that should be included in the Business Case.

Q21: What is the Benefits Review plan and when are Benefits mostly available?

Q22: Name some of the documents and information that are included in the Project Initiation Documentation that is assembled by the project manager.

Q23: Why is the Project Initiation Documentation baselined?

15 Directing a Project

15.1 Introduction

Let us take a look at what you will learn in the Directing a Project Process. You will learn about the 5 activities which are:

- Authorizing Initiation – which is to allow the Initiation Stage to start
- Authorizing the project – which is to allow the project to start and produce products
- Authorizing a Stage or Exception Plan – which is to review the existing stage and authorize the next stage to begin, or to authorize exception plan to complete the current stage.
- Giving *ad hoc* direction - The Project Board provides guidance to the Project Manager throughout the project.
- Authorizing project closure – Shut down the project after a number of checks.

15.2 Introduction to the Directing a Project

Purpose: What is the purpose of Directing a Project?

The purpose of the Directing a Project Process is to enable the Project Board to be accountable for the project by making key decisions, and to have overall control

Objective: What are the objectives of Directing a Project?

The objectives of Directing a Project Process are to:

- Provide authority to initiate the project.
- Provide authority to deliver the project's products. The products are the reason to do the project.
- Provide direction and control during the project.
- Be the interface to Corporate or Program Management.
- Provide authority to close the project.
- Ensure that post-project benefits will be reviewed.

Context:

Let us put the Directing a Project Process into context. What does Directing a Project Process really do for the project, how is the project triggered, how does the Project Board control the project, when do they give advice, and how do they communicate and check business justification.

It is a good idea to look at the Process Model Diagram to see how the Directing a Project Process interacts with the other processes.

What is the trigger for the Directing a Project Process to start?

It is the Request to Initiate a Project that is done by the Project Manager at the end of the Starting Up a Project Process. As you know, day-to-day management of the project is done by the Project Manager, while the Project Board looks down from above. They manage by exception, receive regular reports, exercise their control and make decisions.

Where is it decided how often the Project Manager communicates to the Project Board?

The Communication Management Strategy covers how communication should be done between the Project Board and the Project Manager.

What about advice?

The Project Board provides guidance to the Project Manager throughout the project and the Project Manager can seek advice at any time.

Business Justification

The Project Board is responsible for ensuring that there is continued business justification and can decide to shut down the project if the Business Case becomes no longer viable. .

15.3 Introduction to Activities

There are 5 activities within the Directing a Project Process; they are:

- Authorizing Initiation – which is to allow the Initiation Stage to start
- Authorizing the project – which is to allow the project to start and produce products
- Authorizing a Stage or Exception Plan – which is to review the existing stage and authorize the next stage to begin, or to authorize exception plan to complete the current stage.
- Giving *ad hoc* direction - The Project Board provides guidance to the Project Manager throughout the project.
- Authorizing project closure – Shut down the project after a number of checks.

The best ways to show the Directing a Process activities is by using the Process Model Diagram.

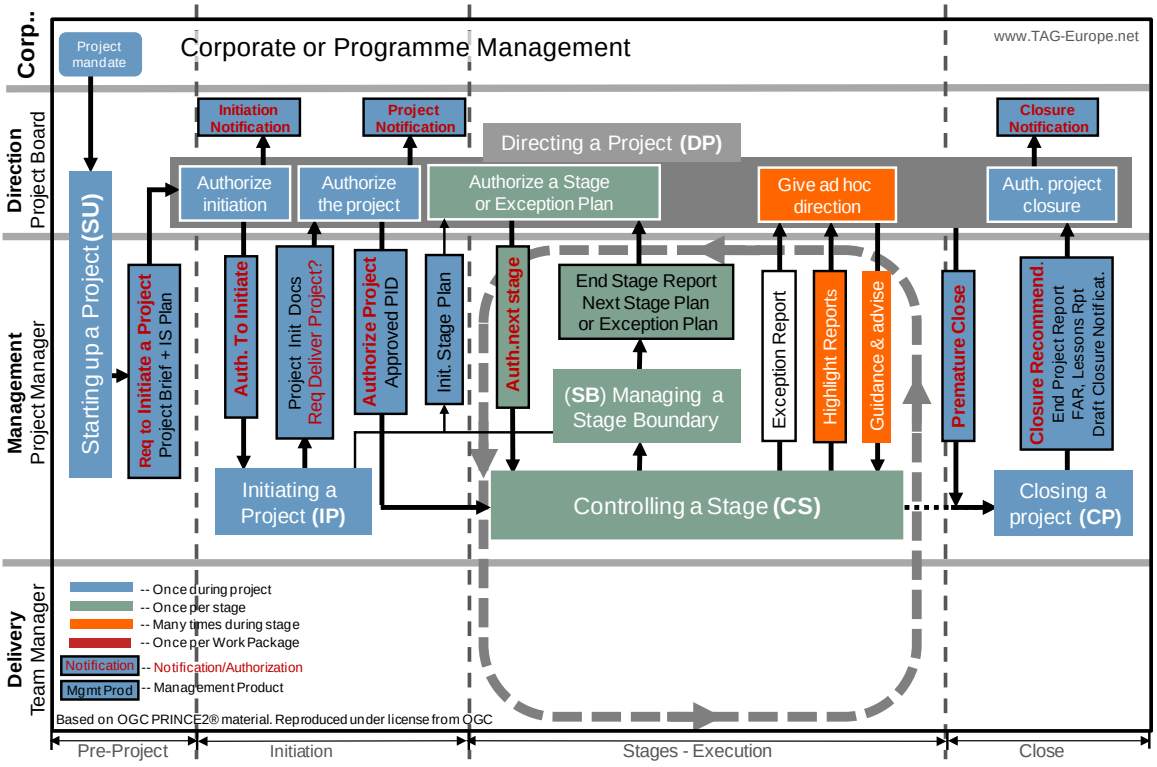


Fig 15.1 The 5 activities in Directing a Project

The following diagram is taken from the Timeline diagram and gives another view of the five activities.

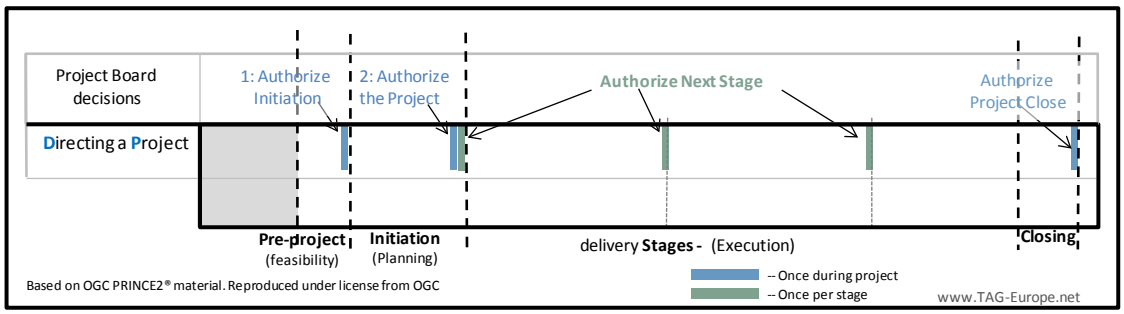


Fig 15.2 The 5 activities in Directing a Project – Timeline overview

15.3.1 Activity 1: Authorize initiation

This is the very first decision the Project Board makes in the project and the first time the Project Board gets together.

What decision does the Project Board have to make?

The Project Board decides to allow the Initiation Stage to start and therefore to make an investment on behalf of the company. The cost of the Initiation Stage will be detailed in the Stage Plan, which will also include the expected deliverables and planning information.

The Project Brief document provides the business justification information.

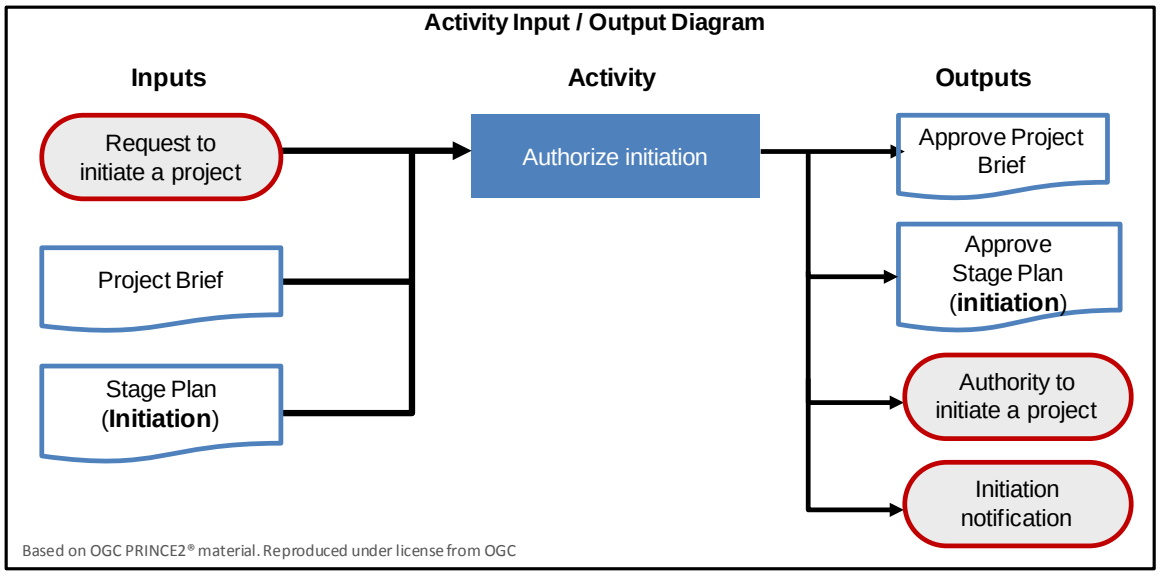


Fig 15.3 Activity 1: Authorize initiation

PRINCE2 recommends the following actions during this Activity:

1. Review and approve the Project Brief which contains the project definition, project approach & project management team.
   - o The Project Brief is the only document about the project that the Project Board receives from the Project Manager.
2. Review and approve the Project Product Description.
   - o This also includes the Quality and Acceptance Criteria.
   - o Verify that the outline Business Case is viable.
3. Review and approve the Stage Plan for the Initiation Stage.
4. Inform all stakeholders that the project is being initiated if the project is allowed to proceed.
5. Lastly, authorize the Project Manager to proceed with the Initiation Stage.

The inputs are the Project Brief and Initiation Stage Plan, which are both provided by the Project Manager. The outputs are the approved Project Brief and Approved Initiation Stage Plan.

15.3.2 Activity 2: Authorize the project

The trigger to start the activity “Authorize the project” is a request from the Project Manager. In PRINCE2-speak this is called “Authorization to deliver the project.”

Up to now the only decision the Project Board have taken is to allow the Initiation Stage to start. Now they will decide to allow the project to continue.

The Project Board will confirm the following:

- That the Business Case is viable and achievable.
- That the Project Plan can deliver products.

- That they can monitor and control the project.

The main input is the Project Initiation Documentation, and the Project Board will confirm the following:

- Project Definition is accurate and Lessons have been incorporated.
- The four Strategy documents which are Quality, Risk, Configuration Management and Communications will work for the project.
- Also check roles and responsibilities, Product Descriptions, Tolerances, Project Controls, and check to see how PRINCE2 has been tailored to suit the project.

The final task that is done by the Project Board is to review and approve the Benefits Review Plan.

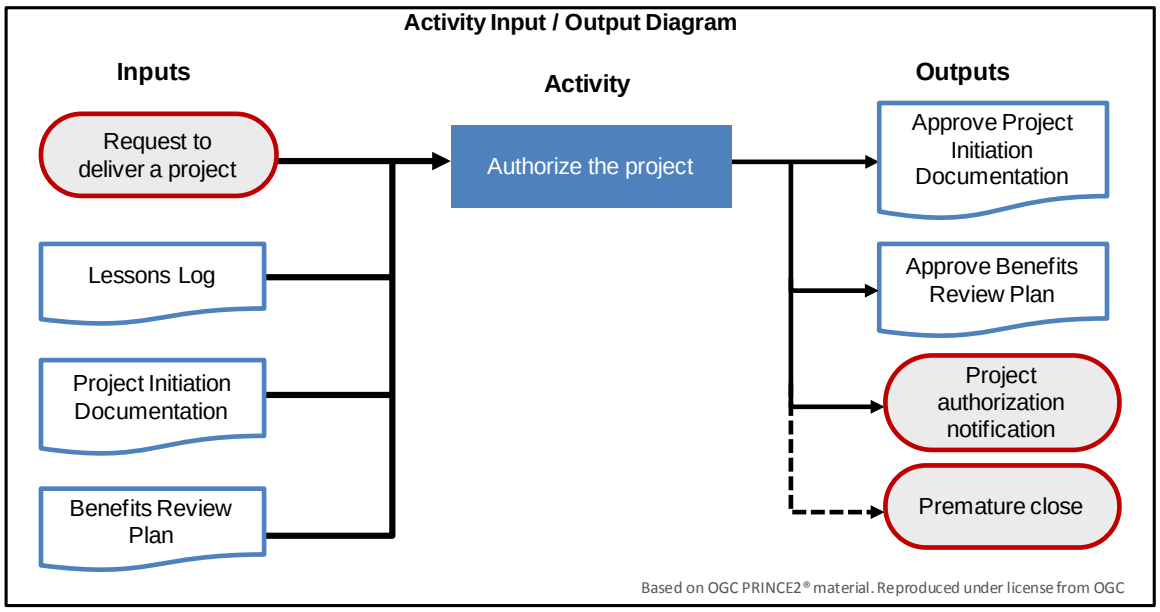


Fig 15.4: Activity 2: Authorize the project

The 3 outputs from the Authorize the Project Activity are:

- Approved Project Initiation Documentation
- Approved Benefits Review Plan
- A Project Authorization Notification, if all going well, or a Premature Close Notification to the Project Manager.

15.3.3 Activity 3: Authorize a Stage or Exception Plan

After each stage and before the next stage the Project Board has a chance to review the work and decide whether to allow the next stage to continue, to ask for more information or to request the project to be closed prematurely.

As a double-check on the Project Manager, the Project Board may require assistance from Project Assurance to review the stage. For example, checking that products have been delivered and ensuring that quality of the products is as described in the End Stage Report.

PRINCE2 recommends the following actions for the Project Board in this activity:

- Check performance of project to date. The baselined Project Plan can be used.
- Check that Lessons are being learned so that they can be used in future stages.
- Check Risk Summary.
- Check work that was done in current stage (e.g., products have been handed over).
- Review and Approve the Stage Plan, so that the next Stage can start. Or Review and Approve the Exception Plan, which will allow the current stage to be completed.
  - o You will learn more about the Exception Plan in the Controlling a Stage Process

- Also check that the Business Case is still valid, and that tolerances are alright for the next stage.

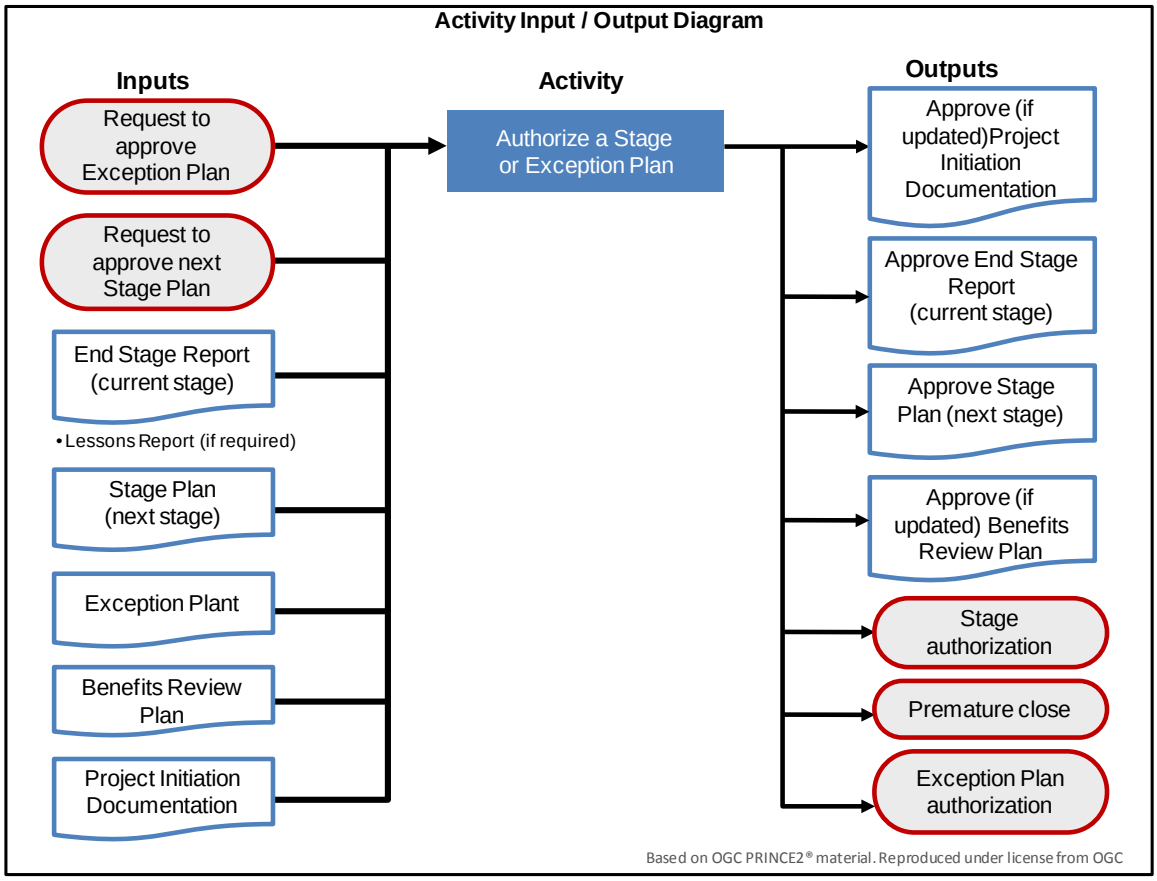


Fig 15.5: Activity 3: Authorize a Stage or Exception Plan

Inputs & Outputs

Normally the main inputs are the End Stage Report, Next Stage Plan & Request to Approve the Next Stage Plan. The outputs are: Stage Authorization and a number of Approved documents.

If there is an exception, then the inputs are the Exception Plan and a Request to Approve the Exception Plan, so that the Project Manager can complete the current stage.

Keep in mind that the Project Board can also decide to stop the project, for example, if the Business Case is no longer viable.

15.3.4 Activity 4: Give *ad hoc* Direction

There is a need for the Project Manager to seek advice from the Project Board and this is what Giving *ad hoc* Direction is all about.

Here are some reasons for *ad hoc* direction. This will help you see the importance of this activity

- Project Manager may need clarification on some points. This is known as an informal request.
- Board Member may have a concern and may want to advise the Project Manager.
- Board wants to respond to a Highlight report that they received from the Project Manager.
- Board wants to advise the Project Manager due to External influences, such as news from a competitor.

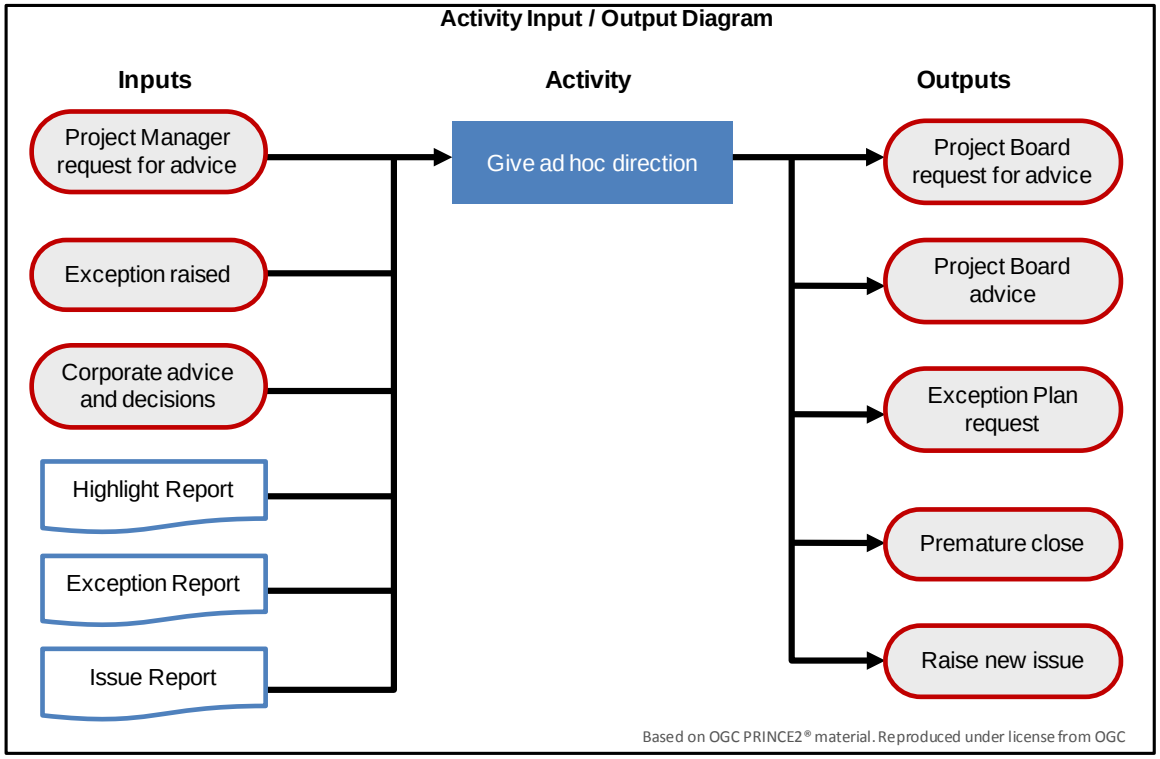


Fig 15.6: Activity 4: Give *ad hoc* direction

The Project Board can receive 3 different reports from the Project Manager during a Stage; they are the Issue Report, Exception Report and Highlight Report. I will outline possible responses to these reports from the Project Board.

- Response to an Issue Report:
  - This is a report on an issue that exceeds the Project Manager's tolerances. As we have already seen, issues can be of three types: Change request, Off-specification and Problem or concern.
  - If the issue is a big problem or concern, the Project Board can ask for an Exception Plan. If the issue is a change request or an off-specification, they can decide to accept it or not.

  Response to an Exception Report:
  - Remember that an Exception Report is used by the Project Manager to advise the Project Board that they believe the stage will go out of one or more of its tolerances, mostly Cost or Time.
  - The Project Board has 3 ways to respond:
    a) Increase the tolerances for the Project Manager so that the stage can be completed.
    b) Ask to Produce an Exception Plan so that the existing stage can be completed.
    c) Instruct the Project Manager to close the project prematurely.
- Response to a Highlight Report:
  - This is the regular report delivered to the Board by the Project Manager during the Controlling a Stage process.
  - The Board will review it and may decide to make comment.

You will understand this much better once you know more about the Controlling a Stage Process.

15.3.5 Activity 5: Authorize Project Closure

Closing a project correctly is the responsibility of the Project Board, while the Project Manager will prepare and provide the Project Board with the majority of the information required.

One common question is, "What about some IT projects that never end, as they have to start phase II and do maintenance?" The PRINCE2 answer to this is that this Phase II is a new project, as all tasks in the current plan have been completed.

PRINCE2 recommends the following actions for the Project Board:

- Compare the Original Project Initiation Documentation with the current version.
- Review the End Project Report, and compare to the original plan.
- Confirm who should receive the Follow on the Action Recommendations. This document contains information for maintenance.
- Review the Lessons Learned report and pass it on so that it can benefit future projects. E.g.: Pass it to Project Support or center of excellence team.
- Confirm that products have been handed over. Confirm user acceptance and maintenance for each product.
- Review and Approve the Benefits Review Plan, as this will continue to be done after the project shuts down.
- Confirm that the project has met the Business Case by comparing the current Business Case to the original Business Case, and especially comparing Benefits, Costs, Risks.

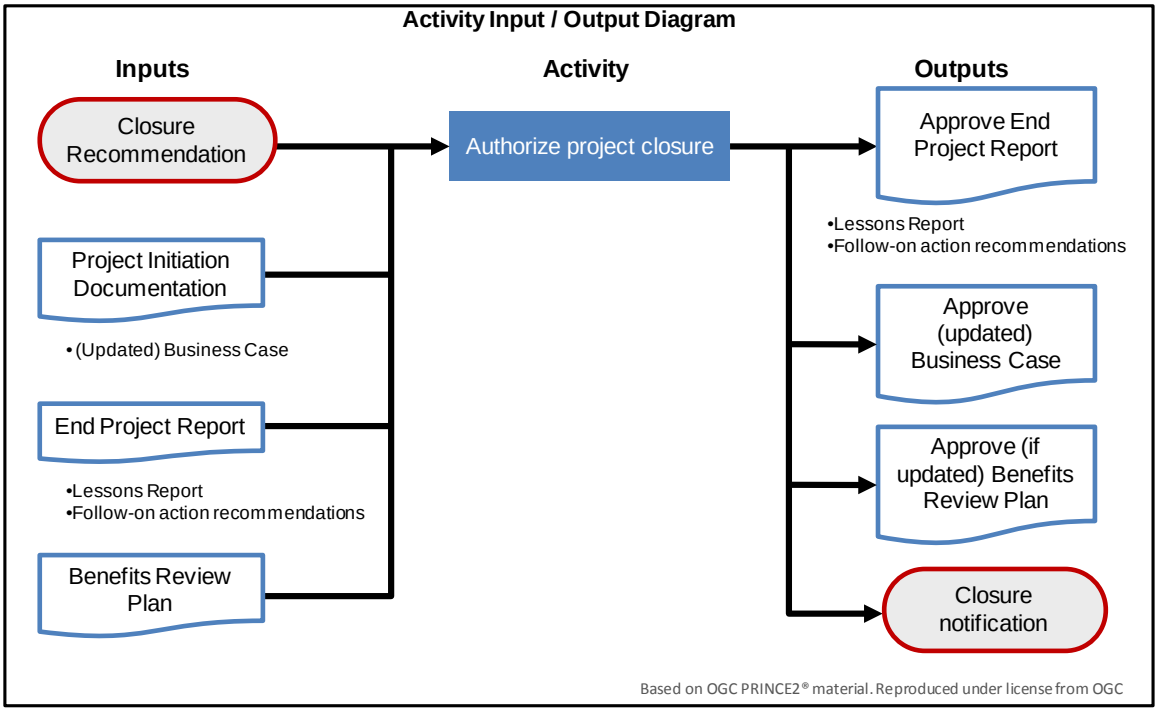


Fig 15.7: Activity 5: Authorize project closure

The last thing the Project Board does is to Issue a Project Closure Notification, which will announce to all stakeholders that the project will end on a certain date.

So, again, the outputs of this Activity are:

- Approved End Project Report & Benefits Review Plan.
- Distribute the Follow-Up Actions Recommendations and the Lessons Learned report documents.
- Issue a Project Closure Notification.

15.4 Learn Thru Questions

Try and answer the following, these are taken from the Learn Thru Questions audio course. Check the answers in the Learn Thru Questions document available on our site: You can also listen to these questions and answers (use the **LTQ audio course**)

Q01: What is the purpose of the Directing a Project process? (**Tip:** Accountability, decisions and control)

Q02: List 3 of the objectives of Directing a Project or, in other words, why does the Project Board exist, who do they report to, and also think of the activities they do.

Q03: Who is responsible for assuring that there is continued business justification and can decide to shut down the project if the Business Case is no longer viable?

Q04: Who manages the project on a day-to-day basis?

Q05: List the 5 Activities in the Directing a Project process. (**Tip:** 4 of them begin with the word "Authorize")

Q06: What are the two main inputs to the Authorize Initiation process and who creates them?

Q07: Name 3 of the topics included in the Project Brief. (**Tip:** Think of the information produced in the SU process.)

Q08: What are the 2 Approved Outputs from the Authorization Initiation Activity?

Q09: What is the main input to the Authorize the Project activity and who compiles this documentation?

Q10: Name some of the documents and information that the Project Board will review and confirm in the Project Initiation Documentation during the Authorize the Project activity. (**Tip:** Just think of some of the information contained in the Project Initiation Documentation.)

Q11: What are the names of the two Approved documents and the Notification from the Authorize the Project Activity if the project goes ahead?

Q12: Why would the input to the Activity "Authorize a Stage or Exception Plan" be an Exception Plan and what happens after an exception plan is approved by the Project Board?

Q13: Name 3 of the actions the Project Board will do during the Activity "Authorize a Stage or Exception Plan". (**Tip:** Just think of some of the documents they will review.)

Q14: What are normally the 2 main input documents to the Activity "Authorize a Stage or Exception Plan" if there is no Exception Plan.

Q15: What is the name of the Activity in Directing a Project where the Project Manager can ask questions and the Project Board can give feedback and advice to the Project Manager.

Q16: Give 2 examples of reasons for *ad hoc* direction

Q17: What is the name of the report that is created by the Project Manager and sent on a regular basis to the Project Board?

Q18: Which of the 7 processes works mostly with the Activity "Give *ad hoc* Direction"? I am not looking for Directing a Project as an answer.)

Q19: What are the 3 responses that the Project Board can give to an Exception Report during the Activity "Give *ad hoc* Direction"? (**Tip:** Think tolerances; more information and project are no longer viable.)

Q20: Who prepares most of the documents and information to get ready to close a project and who has the authority to Close a Project?

Q21: What are the two documents that are approved by the Project Board during the Activity "Authorize Project Closure"? (**Tip:** A report and a plan)

Q22: In the activity “Authorize Project Closure,” what two documents are first reviewed by the Project Board and then distributed, i.e., they are handed out so they can be used in the future.

Q23: What is the name of the notification that the Project Board issues at the end of the “Authorize Project Closure” Activity?

16 Controlling a Stage

16.1 Introduction

Let us take a look at what you will learn in the Controlling a Stage process. You will be learning about the 8 activities, which are divided in three Work Package activities, 2 Monitoring and Reporting activities, and three Issues activities.

- The Work Package Activities are:
  - Authorize a Work Package – Assign a Work Package
  - Review Work Package Status – Check on Work Package progress
  - Receive completed Work Package – Check if Work Package is complete and signed for
- The Monitoring and Reporting activities are:
  - Review the stage status – Continually check how the stage is going
  - Report Highlights – Send Highlight Reports to the Project Board
- The Issues activities are:
  - Capture and examine issues and risks
  - Escalate issues and risks – Escalate to the Project Board
  - Take corrective action – take action to solve small issues or risks

16.2 Purpose & Objective

Purpose

The purpose of the Controlling a Stage process is for the Project Manager to assign the work to be done, monitor this work, deal with issues, report progress to the Project Board and take corrective action to ensure that the stage remains within tolerance.

Objective:

The objective of the Controlling a Stage process is to ensure that:

- Attention is focused on the delivery of the products.
- Keep Risks and Issues under control.
- Keep the Business Case under review.
- Deliver the products for the stage to the agreed quality within agreed cost and time & achieve the defined benefits.

16.3 Context

It will help to understand the following text if you look at the Process Model diagram.

The Controlling a Stage process describes the work of the Project Manager as they do their day-to-day management of a stage, and it is where the Project Manager does most of their work.

During a stage the Project Manager will repeat the following tasks:

- Authorize the work to be done.
- Monitor progress information about this work using Checkpoint Reports and the Quality Register.
- Review the current situation in relation to the Stage Plan, sign off completed work and issue new Work Packages.
- Report to the Project Board using the Highlight Report.
- Watch for issues, assess issues and deal with issues and risks; and
- Take any necessary correct action.

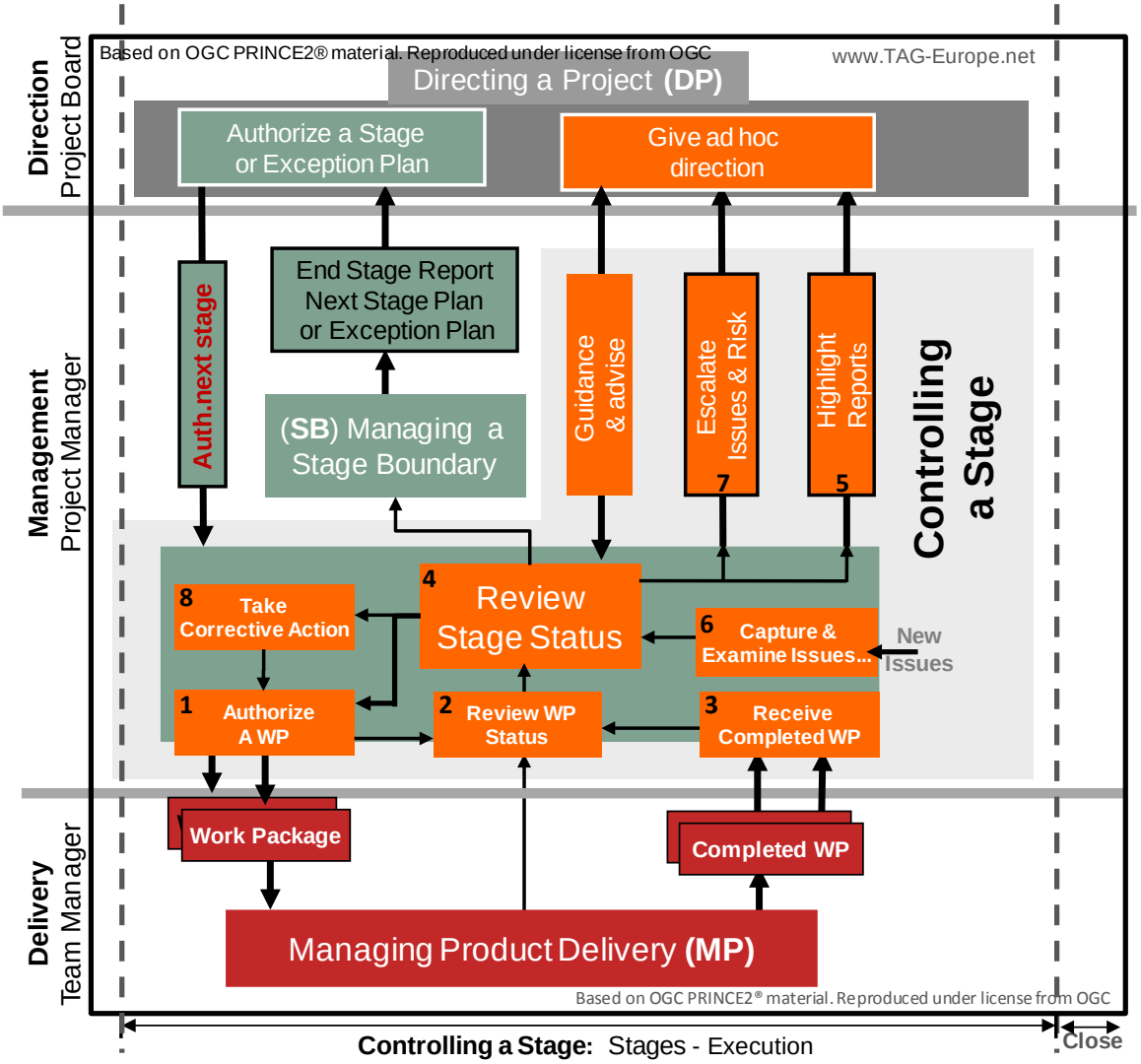
As mentioned above, the Project Manager will keep repeating these tasks until all the planned products for the stage have been completed and then start to prepare for the Stage Boundary

process. This whole sequence of activities is again repeated for each stage in the Project. At the end of the last stage, the Closing a Project will be invoked and therefore, the Project Manager will start to prepare the project for closure.

16.4 Introduction to Activities

There are 8 activities within the Controlling a Stage process and they are divided into 3 parts that also describe what the Project Manager does:

- Work Packages
- Monitoring and Report
- Issues



Controlling a Stage: Stages - Execution

Fig 16.1 Controlling a Stage activities

The Work Packages Activities are:

1. Authorize a Work Package – assign and agree with the Team Manager
2. Review Work Package Status – check on Work Package progress
3. Receive completed Work Package – check quality & Configuration Management

The Monitoring and Reporting activities are:

1. Review the stage status – continually compare status to Stage Plan
2. Report Highlights – regular reports to the Project Board

The Issues activities are:

1. Capture and examine issues and risks – categorizing and assess impact
2. Escalate issues and risks – create Exception Report & send to the Project Board
3. Take corrective action – solve issue or risk while keeping stage within tolerance

Exercise: As an exercise, try to list some of the 8 activities. Make this easy on yourself by listing the three Work Package activities, the two monitoring and reporting activities and the three Issue Activities. Don't be worried about getting the names 100% correct.

16.4.1 Activity 1: Authorize a Work Package

Work Packages provide a way for the Project Manager to group tasks and control how these are assigned, executed, followed up and delivered. A Work Package contains the work required to create one or more products or sub-products.

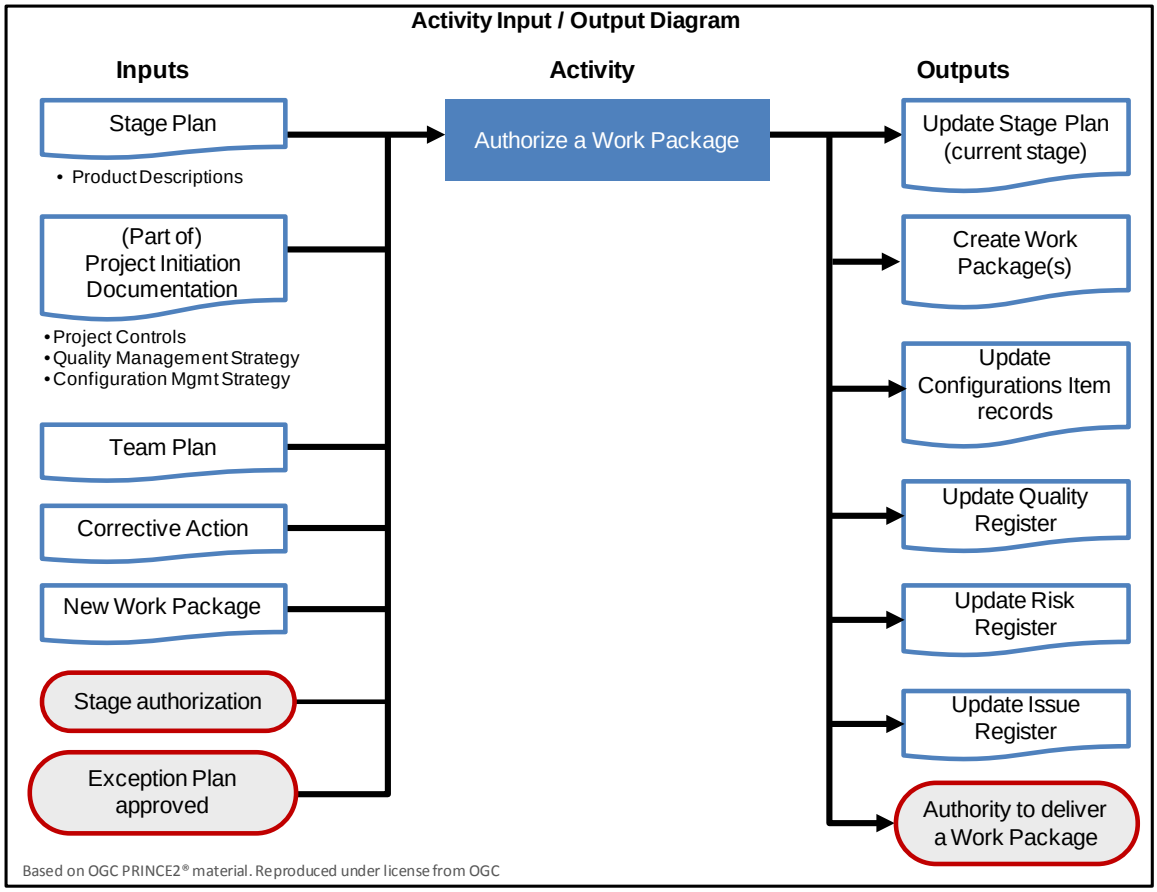


Fig 16.2 Authorize a Work Package

PRINCE2 recommends the following actions in this Activity for the Project Manager:

- Check the Stage Plan for the next products to create and the effort required.
- The Project Manager will have already examined the PID to understand project controls, quality standards required and how products should be handed over when complete.
- Defining a Work Package involves gathering the product descriptions and providing other relevant information to the Team Manager, such as techniques to use, Configuration Management requirements, maintenance, tolerances, key milestones, reporting, and escalation arrangements.
- All future Work Packages in the stage or in the project can use a similar definition of a Work Package. Just change the format as needed.
- The Project Manager can then review the Work Package with the Team Manager, so they understand what needs to be done and accept it. Then they can be authorized to start.

- Team Manager will create a Team Plan that can be reviewed by the Project Manager.
- The Project Manager will also update the Quality Register to note any agreed planned quality checks.

The main outputs in this activity by the Project Manager are to:

- Create a Work Package
- Update Quality, Risk & Issue Registers where needed
- Update or create Configuration Item Records
- Update the Stage Plan to show that WP has been authorized

16.4.2 Activity 2: Review Work Package Status

This is where the Project Manager reviews the work being performed by the teams. The name of this activity is Review Work Package Status, so the Project Managers review the work that has been assigned in the Work Packages.

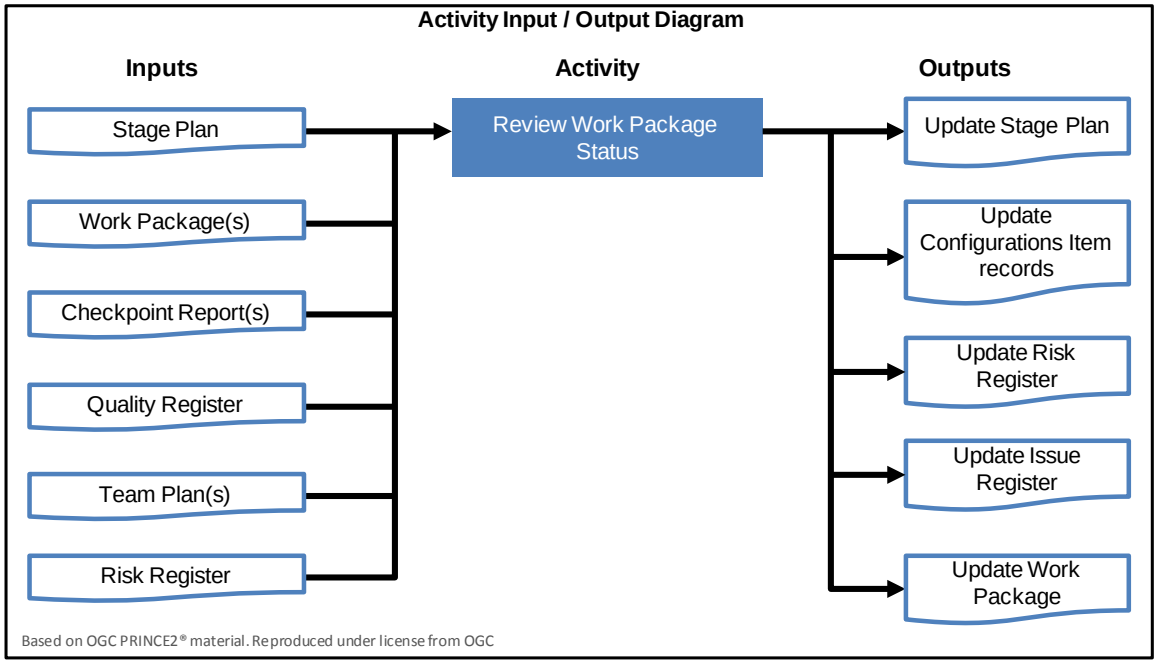


Fig 16.3 Review Work Package Status

The main input file for the Project Manager will be the Checkpoint Report created by the Team Manager on a regular basis. The Project Manager will review the Checkpoint Report and can compare it with the Team Plan. They will also review entries in the Quality Register to see if products have passed quality tests and to update the Configuration Items Record where necessary – that is, to show that a product has been developed, tested and accepted. The Project Manager will also update the Stage Plan to show that products have been delivered, or perhaps to show a delay.

16.4.3 Activity 3: Receive complete Work Packages

The Project Manager ensures that the Teams have completed the work defined in the Work Packages by checking the Quality Register and seeing if products have been checked & approved.

The Project Manager can then update the Configuration Item Records for each approved product and update the Stage Plan to show the Work Package has been completed. Then the Stage Plan is updated to show that products in the Work Package are complete.

Once these products have been approved, they cannot be changed without using the change control process. This is normal, as the products have been created, tested, approved and accepted.

The completed products are stored as described in the Configuration Management Document.

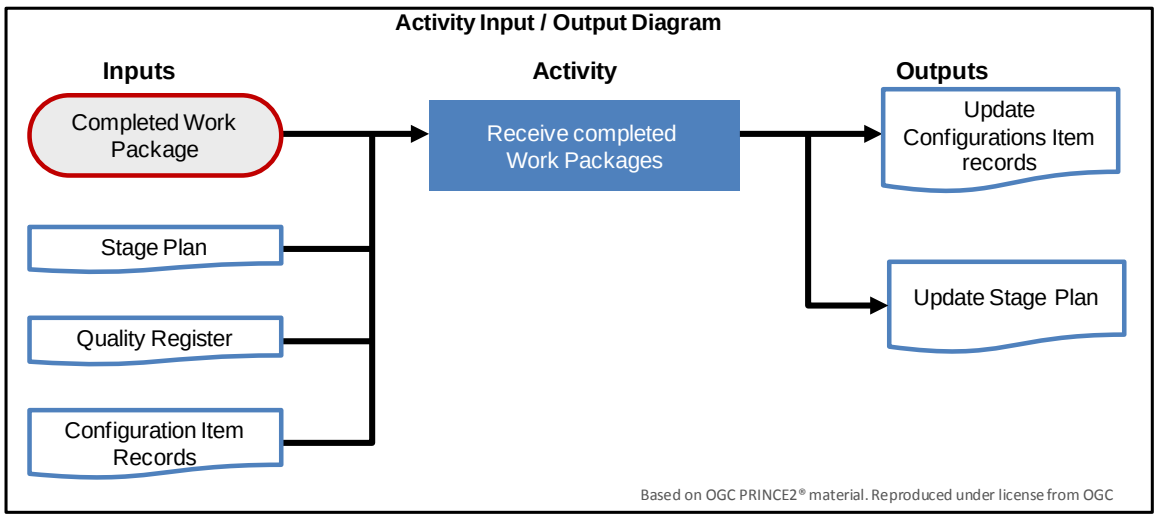


Fig 16.4 Receive completed Work Package

16.4.4 Activity 4: Review the stage status

In this activity, the Project Manager reviews what has happened so far and compares it with what is likely to happen. This gives an accurate picture of the current progress.

To make it easy to remember what happens in this activity, just imagine yourself sitting in a big PRINCE2 sports car that has a huge cockpit with a display for each item that you wish to monitor (i.e., Risk, Quality, Stage Progress, Issues, Tolerances, and Benefits) and you keep returning to this seat to check how the stage is progressing.

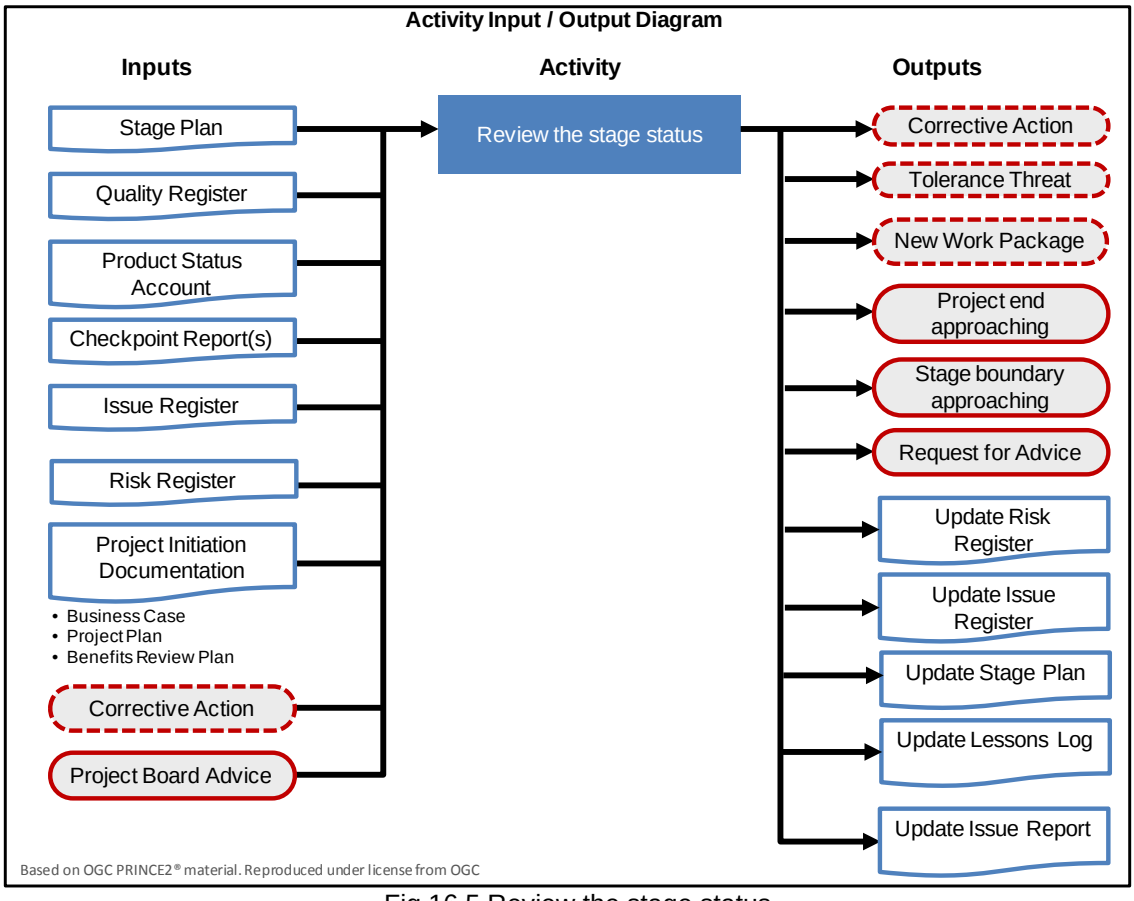


Fig 16.5 Review the stage status

So what does the Project Manager do in this Monitoring Activity? They do the following:

- Review current stage, check Configuration Management information, check Quality Register for issues, check Risk Register for new or revised risks, capture and examine issues using the issues register, and check status of corrective actions if in progress.
- If there is an issue or risk that needs to be escalated, or a corrective action that needs to be taken, the Project Manager will use other activities in the Controlling s Stage Process to do this.
- The Project Manager will also check the Benefits Review Plan to see if it needs to be updated and if the products have been correctly handed over.
- Due to the range of tasks carried out in this Activity, the Project Manager can update the Risk Register, Issue Register, Stage Plan, Lessons Log and Issue Report.

16.4.5 Activity 5: Report Highlights

The name of this activity is Report Highlights and as you can imagine, this is where the Project Manager creates the Highlight Report for the Project Board.

The Communication Strategy document will dedicate how often the Project Manager must create and send a Highlight report to the Project Board, for instance, every 2 weeks by Friday 8:30AM.

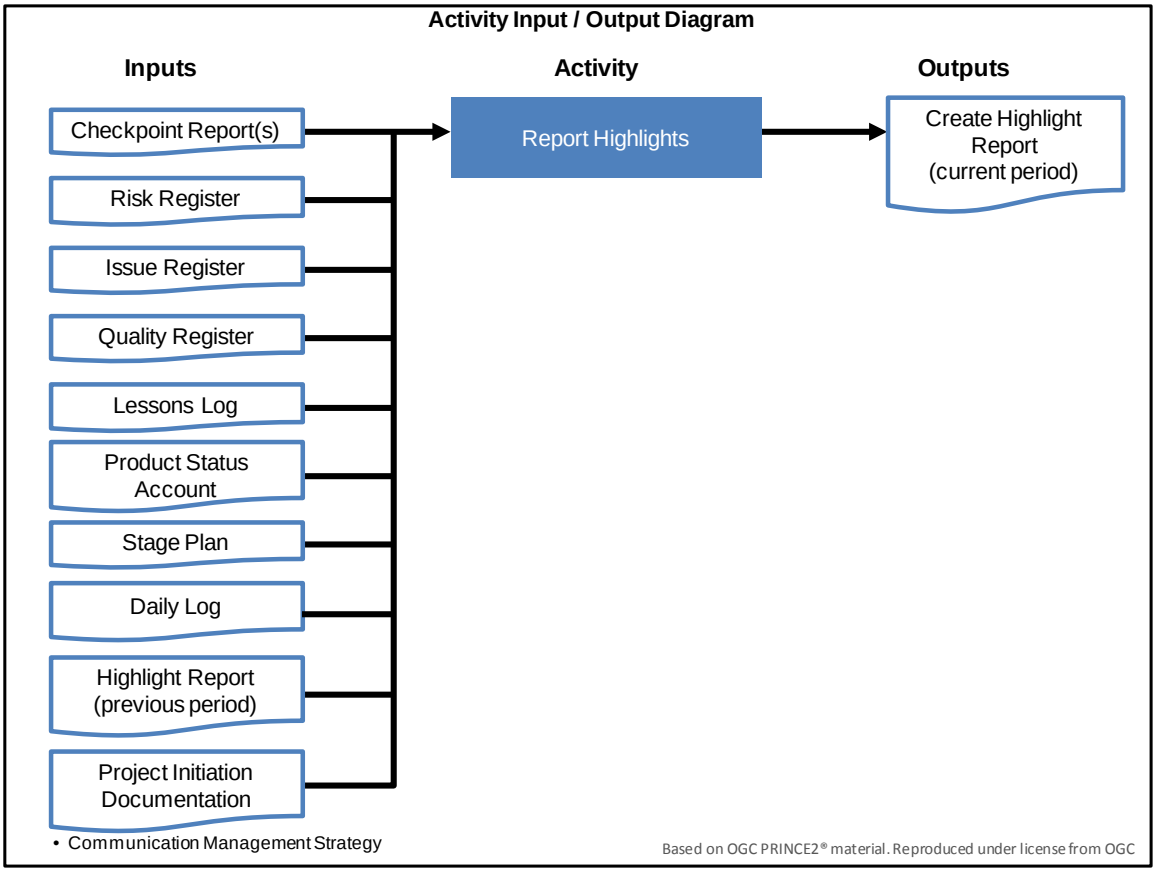


Fig 16.6 Report Highlights

A Highlight Report is used to provide the Project Board with a summary of the stage status and informs of any potential problems where the Project Board could help. The Project Board uses the report to monitor the stage and project process. The Highlight Report just has to be 2 or 3 pages.

Tip: Always think of the tip of an iceberg when you think of a Highlight Report, as this is all the information that should be included.

The Highlight Report will contain the following information:

- Date & Project Period (for instance, Stage 4, Highlight Report 4).
- Status Summary: A few lines to give an overview of the status of the stage.

- Current Reporting Period: Information on Current Work Packages, products completed, products being executed, and corrective action taken, if any.
- Next Reporting Period: Work Packages currently in execution, New Work Packages that will be authorized, products to be completed in next period, and any corrective actions that will be completed.

Information on Stage Tolerances: How well the stage is doing with Time & Costs.

A summary of any risks or issues that the Project Board might need to know about (for instance, Risk 034 – Raw Materials has changed status).

Once complete, the Project Manager will send the Highlight report to the Project Board and others if mentioned in the communications plan.

16.4.6 Activity 6: Capture and Examine Issues & Risks

The clue as to what happens in this activity is in the name: Capture & Examine Issues and Risk. During the project new risks and issues will arise and any stakeholder may raise an issue or risk. If an issue can be dealt with by the Project Manager – for example, if the Team Manager has a question about a product and the Project Manager can & did solve this, then there is no need to place it in the Issues Register. This can be entered in the Daily Log.

For issues that need to be managed formally, the following needs to be done. **Note:** We have already discussed this in the Change Theme and documented in the Configuration Management Document.

- Enter the issue in the Issues Register as soon as it is captured.
- Categorize it: Is it a Change, Off-Specification, Problem, or Concern.
- Assess the Severity and Priority of the issue.
- Assess the Impact of the issue on the Stage plan, Project plan & Business Case.
- Create Issues Report – See Issues Report product description for more information.
- Report the issue in accordance with the Configuration Management Strategy and the Communication Strategy documents.

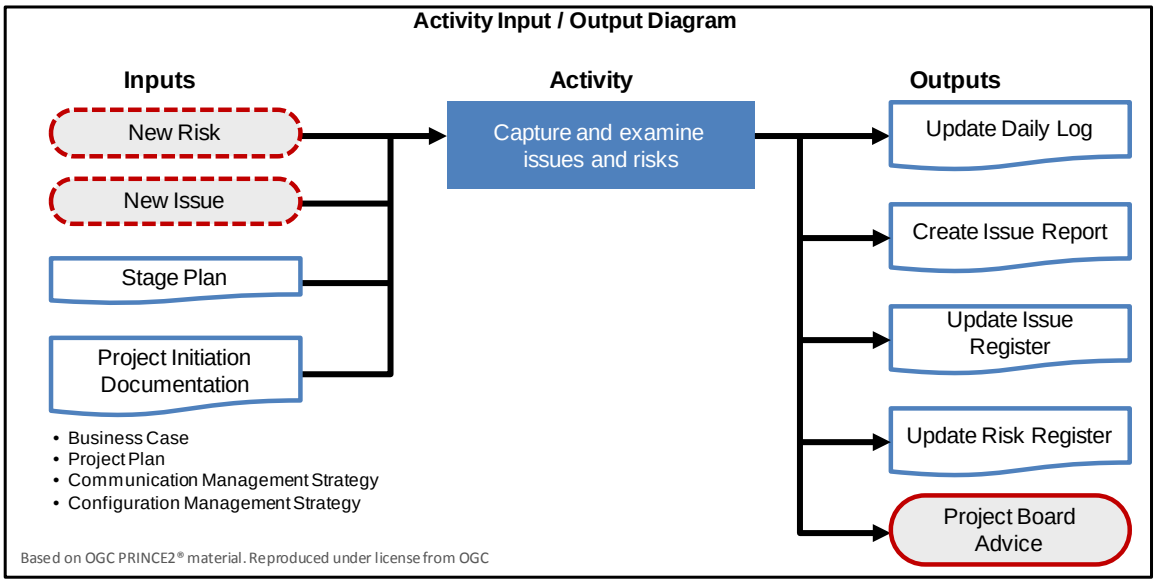


Fig 16.7 Capture and examine issues and risks

Let us look at the process for handling Risk. The process is similar. See the Risk theme for more information and the procedure to follow will be in the Risk Management Document.

- Enter the Risk in the Risk Register as soon as it is captured.
- Identify the Risk and describe it – *Cause and Effect* information.

- Assess the Risk against the Stage Plan, Project Plan and Business Case, and then
- Report in accordance with the Risk Management Strategy and Communication Strategy documents.

Once the Risks and Issues have been documented and assessed, the Project Manager has 3 options:

- Take Corrective Action –the Project Manager creates a Work Package to address this and keeps the stage within tolerance.
- Seek advice from the Project Board, or
- Escalate to Project Board using the next Activity "Escalate issues and risks."

16.4.7 Activity 7: Escalate issues and risks

Why do you think a Project Manager would escalate an issue or risk to the Project Board?

> They should escalate an Issue or Risk if they believe that the Issue or the Risk will take the stage out of tolerance.

Normally an "Exception Report" is used to document the Issue or Risk, but it could take some time to investigate and gather the required information; therefore, there are two steps: the Project Manager will first send an Early Notification to the Project Board which will be followed by the Exception Report. The early notification can be an email.

In some companies, reporting risks or issues may not be the cool executive thing to do for the Project Manager, especially if you work in an environment where they like to shoot the messenger. However remember the earlier you escalate, the more time is available to implement corrective actions.

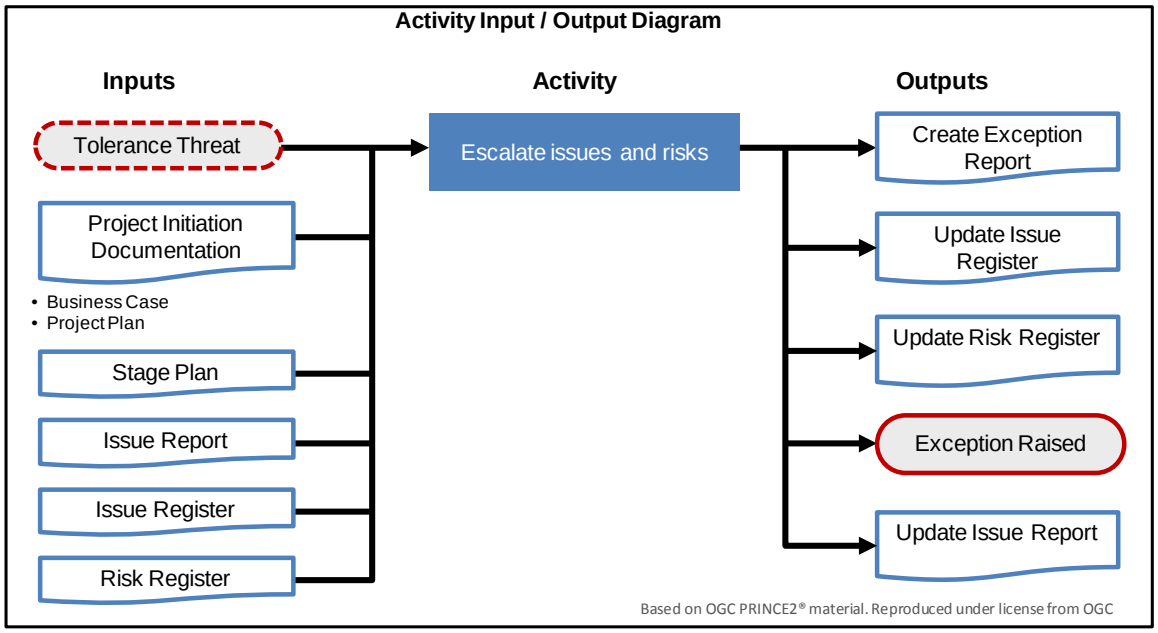


Fig 16.8 Escalate issues and risks

PRINCE2 recommends the following actions to create the Exception Report:

- The Project Manager begins with examining the effects of the issue or risk on the Stage Plan & Project Plan.
- Then determine different options to get the stage back on plan and assess against the Business Case, as these options are bound to cost more.
- Assess the impact on the project for each option.
- Put this information into the Exception Report and recommend one of the options.

The Project Board will read the Exception Report & then decide. They can respond in a few ways; they could:

- Ask for more information so the Project Manager may update the Exception Report.
- Choose the option recommended by the Project Manager or another option.
- Raise the tolerances so the stage can proceed.
- Instruct the Project Manager to create an Exception Plan.
- Advise the Project Manager to close the project prematurely.

16.4.8 Activity 8: Take Corrective Action

Why would the Project Manager take corrective action and what does this mean?

The Project Manager is able to solve some minor issues and risks on their own and that doesn't put the stage out of tolerance. So they take action to correct small issues and risks.

According to the PRINCE2 manual, taking corrective action is managed by the Project Manager, as they implement the advice usually given by the Project Board to correct the issue or risk while keeping the stage within tolerance. The Project Manager may also create a new Work Package or update an existing one and assign it to Team Manager if required.

Once the corrective actions have been taken, the Project Manager checks the work and updates the normal documents:

- Issues Register and Issues Report if there is an Issue or update the Risk Register if there is a Risk.
- They could also update the Stage Plan to show extra work done and Configuration Item Records to show what has changed in a product.

A good thing to remember is that, taking Corrective Action is used when extra work has to be done and the stage stays within tolerance. An Exception Plan is used when the Stage will go out of tolerance, so the stage can take much longer than originally planned.

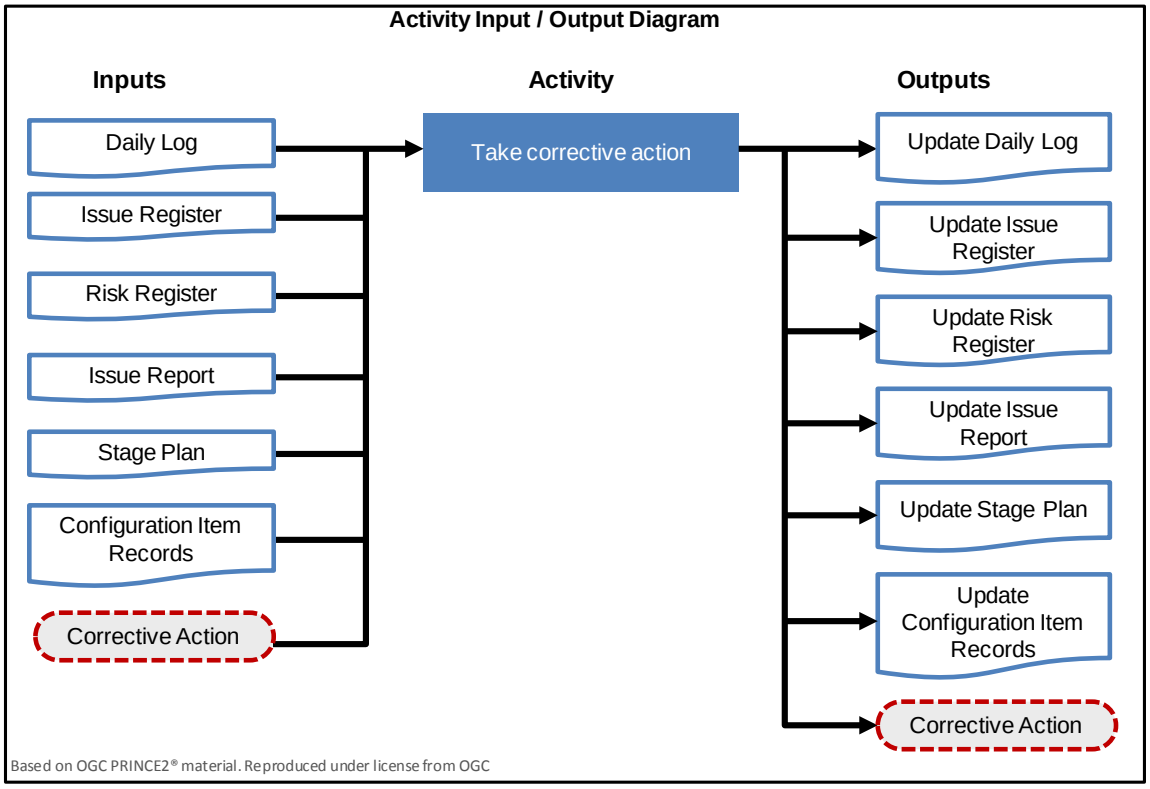


Fig 16.9 Take corrective action

16.5 Learn Thru Questions

Try and answer the following, these are taken from the Learn Thru Questions audio course. Check the answers in the Learn Thru Questions document available on our site: You can also listen to these questions and answers (use the **LTQ audio course**)

Q01: What is the purpose of the Controlling a Stage process? (**Tip:** Just describe the main actions that the Project Manager does in this process.)

Q02: List 2 of the Objectives of Controlling a Stage. In other words, what does the PRINCE2 manual say are the important things to keep in mind for the Project Manager during this stage?

Q03: How many times does the Project Manager carry out each activity in the Controlling a Stage process?

Q04: Name two of the three groups that you can divide the 8 Controlling a Stage Activities into?

Q05: Name two of the three Work Package-related Activities in Controlling a Stage.

Q06: Name one of the **two** Monitoring & Reporting activities in the Controlling a Stage process.

Q07: Name two of the Issues Activities in the Controlling a Stage process (**Tip:** Think about the different steps for issues)

Q08: What does a Project Manager use to group tasks together and assign to the Team Manager?

Q09: Name 3 different kinds of information considered by the Project Manager when defining or creating a Work Package? (**Tip:** Think how the Project Manager will control the work done by the Team)

Q10: What document will the Project Manager update to note that a Work Package has been assigned to a Team Manager and to note the expected delivery date?

Q11: Who creates the Team Plan, and when is it created, who reviews it?

Q12: What is the name of the report produced by the Team Manager and given to the Project Manager?

Q13: What document does the Project Manager update for each product when the product changes status, e.g., has developed, passed quality testing, was delivered & accepted?

Q14: During the Activity “Receive complete Work Packages,” where would the Project Manager look to check that the products have been quality-checked and approved?

Q15: Once the products have been produced, quality-checked and approved, can they be easily changed?

Q16: What does the Project Manager do during the Review the Stage Status Activity? (**Tip:** Just think about some of the things they do.)

Q17: Name 3 documents that are updated during the Review Stage Status activity by the Project Manager.

Q18: The frequency for the Project Manager to create the Highlight Report is listed in which document?

Q19: What kind of information is the Highlight Report and should this be a detailed report? (**Tip:** Just list some of the topics.)

Q20: Which activity in Controlling a Stage does the Project Manager use to investigate new Risks & Issues?

Q21: Who can raise an issue or risk?

Q22: In which documents will it describe how risks and issues should be handled?

Q23: Name two more steps for the Project Manager when capturing and examining issues. The first step is to enter the issue into the Issues Register.

Q24: Name one of the steps for handling, capturing, and examining risks.

Q25: What 3 options does the Project Manager have after capturing and assessing a risk or issue than needs further attention? (**Tip:** Action, Advice & Escalate)

Q26: What is the connection between Tolerance and Escalating Issues & Risk?

Q27: What is the name of the report that the Project Manager uses to Escalate an issue or risk to the Project Board, and what is the name of the notification they sometimes use to alert the Project Board that they are working on this document?

Q28: List some of the information contained in the Exception Report that is sent to the Project Board.

Q29: List two of the ways in which the Project Board can respond to an Exception Report.

17 Managing Product Delivery

17.1 Introduction

Let us take a look at what you will learn in this Managing Product Delivery Process. In this process, you will learn about the 3 activities which are:

- Accepting a Work Package
- Executing a Work Package
- Delivering a Work Package

These Activities outline the actions for the Team Manager, not the Project Manager.

Before we go any further, it is important that you understand what a Work Package is. A Work Packages is a way for the Project Manager to group work activities together and assign it to a team or Team Manager to produce one or more products. So a Work Package is a document; it is a set of information about one or more required products.

A Work Package can contain the following: Work Package description, product descriptions, techniques to be used, tolerances, date of agreement between Project Manager and Team Manager, how the Team Manager will report to the Project Manager, and Quality information.

Note: Look at a Work Package as a document that does not include the products themselves, just information about the work to be done and how to do it. Later, it will show what has been done and information on the Quality checks.

17.2 Purpose & Objective

Purpose

The purpose of the Managing Product Delivery Process is to manage and control the work between the Project Manager and the Team Manager by placing certain formal requirements on the accepting, executing, and delivery of products.

Objective:

The objective of the Managing Product Delivery Process is to ensure that:

- Products assigned to the team are authorized and agreed.
- The team is clear about what has to be produced & understands the effort, time and cost.
- The planned products are delivered to the expectations and within tolerance.
- Accurate progress information is provided to the Project Manager by the Team Manager.

The Managing Product Delivery Process views the project from the Team Manager's point of view in the same way the Controlling a Project process is from the point of view of the Project Manager. As you can see from the Process Model Diagram, the Managing Product Delivery Process only interacts with the Controlling a Stage process.

The Team Manager does the following to ensure that products contained in the Work Packages are created and delivered:

- Accepts and checks Work Packages from the Project Manager
- Creates a Team Plan to show how these products will be developed.
- Gets the products developed.
- Demonstrates that each product meets its quality criteria (**Tip:** Use the Quality Review Meeting.)
- Obtains approval for each product.
- Delivers the completed products to the Project Manager.

17.3 Managing Product Delivery Activities

There are just three activities in Managing Product Delivery, and they are:

- Accepting a Work Package

- Executing a Work Package
- Delivering a Work Package

You could also think of this as Accept, Do and Deliver.

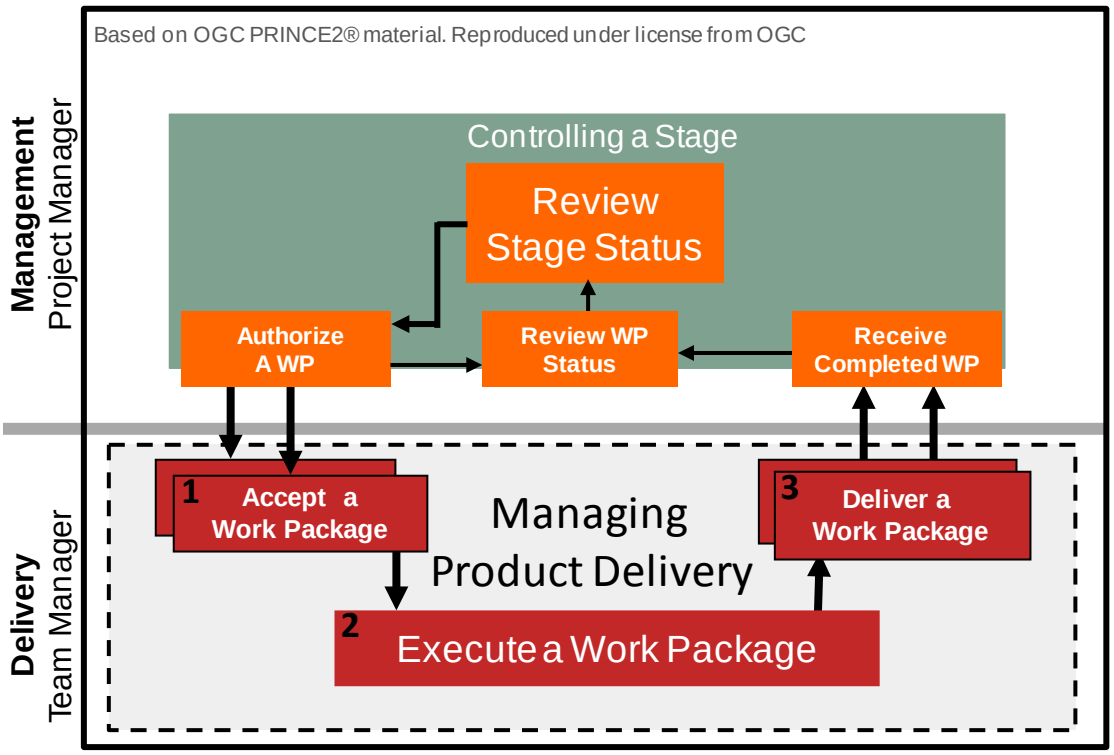


Fig 17.1 Overview of Managing Product Delivery

Remember that the Managing Product Delivery Process views the project from the Team Managers.

- Accepting a Work Package:
  - The Team Manager accepts the Work Package from the Project Manager and creates the Team Plan to manage the development of the products.
- Executing a Work Package:
  - The team produces the products, carries out quality checks, obtains approval, and reports to the Project Manager using the Checkpoint Report.
- Delivering a Work Package:
  - Deliver a Work Package is delivering proof that the products are complete (e.g. results of test, acceptance) to Project Manager.
  - This involves ensuring that the Quality Register is updated, that approvals are done, that products are delivered as described in the Configuration Management Document, and that the Project Manager is notified

17.3.1 Activity: Accept a Work Package

Accepting a Work Package is about getting an agreement between the Project Manager and the Team Manager on what has to be delivered, and on reporting requirements and other work. The Team Manager will do the following when reviewing the Work Package to ensure they understand what has to be done before committing to the Work Package:

- Clarify with the Project Manager what has to be delivered.
- Negotiate the constraints with the Project Manager for time, effort and cost to make sure they can work within these limits.
- Understand the reporting requirements, i.e., the format & frequency of the Checkpoint Report.

- Understand how and from whom approval for the products is to be obtained, i.e., who has to sign off on each product.
- Understand how the approved products are to be handed over (e.g., hand over to product owner or to the person responsible for Configuration Management).
- Confirm how the Project Manager would like to be informed when the Work Package is complete (e.g., via an email with a list of all products, their quality checks and approval information).

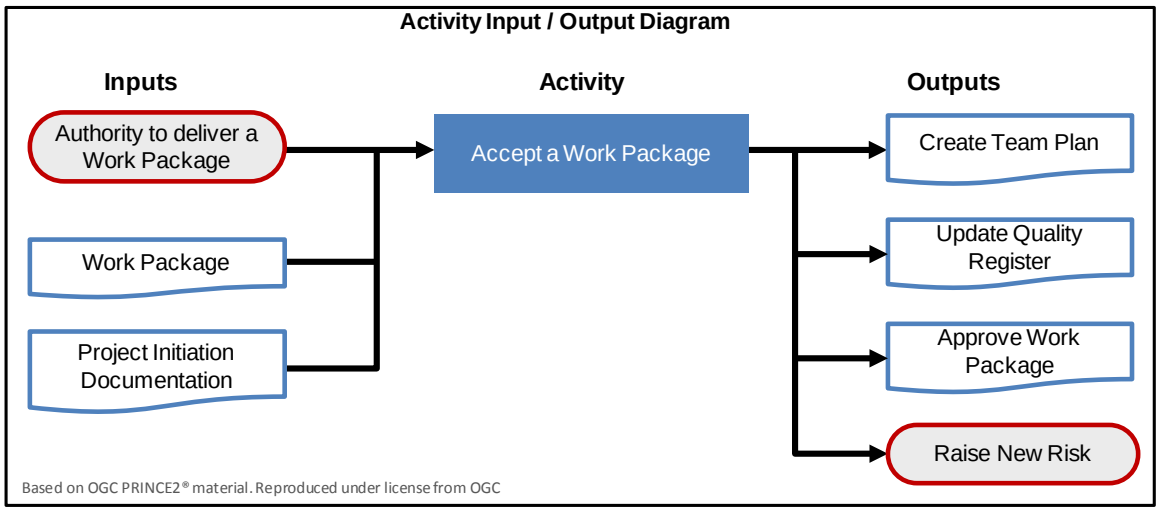


Fig 17.2 Accept a Work Package

The Team Manager creates the Team Plan to show how the products will be produced. This Team Plan can be reviewed by the Project Manager. The Team Manager will also:

- update the Quality Register to add planned quality reviews
- agree with the Project Manager to deliver the Work Package

What documents are usually updated during this activity?

The documents that are usually created and updated during this activity are:

- the Team Plan
- the Quality Register
- the Configuration Item Records to show how the status of the products that have changed

17.3.2 Activity: Execute a Work Package

The Team Manager will manage the production of the products and keep within the tolerances that have been agreed with the Project Manager. If the Team Manager believes that a tolerance will be exceeded, they must inform the Project Manager.

The first and third activities deal with administration, i.e., accepting and delivering back a Work Package. This activity is where the products get produced and the real work gets done. Therefore the first and third activities can be very short compared to this activity.

PRINCE2 recommends the following actions for the Team Manager:

- Develop products to the required quality criteria. This information comes from the Product Descriptions.
- Ensure that work is done using the required techniques and processes.
- Update the Quality Register to record Quality activities.
- Record the effort expended (e.g., how the resources are being used); and
- Monitor for risks and issues.

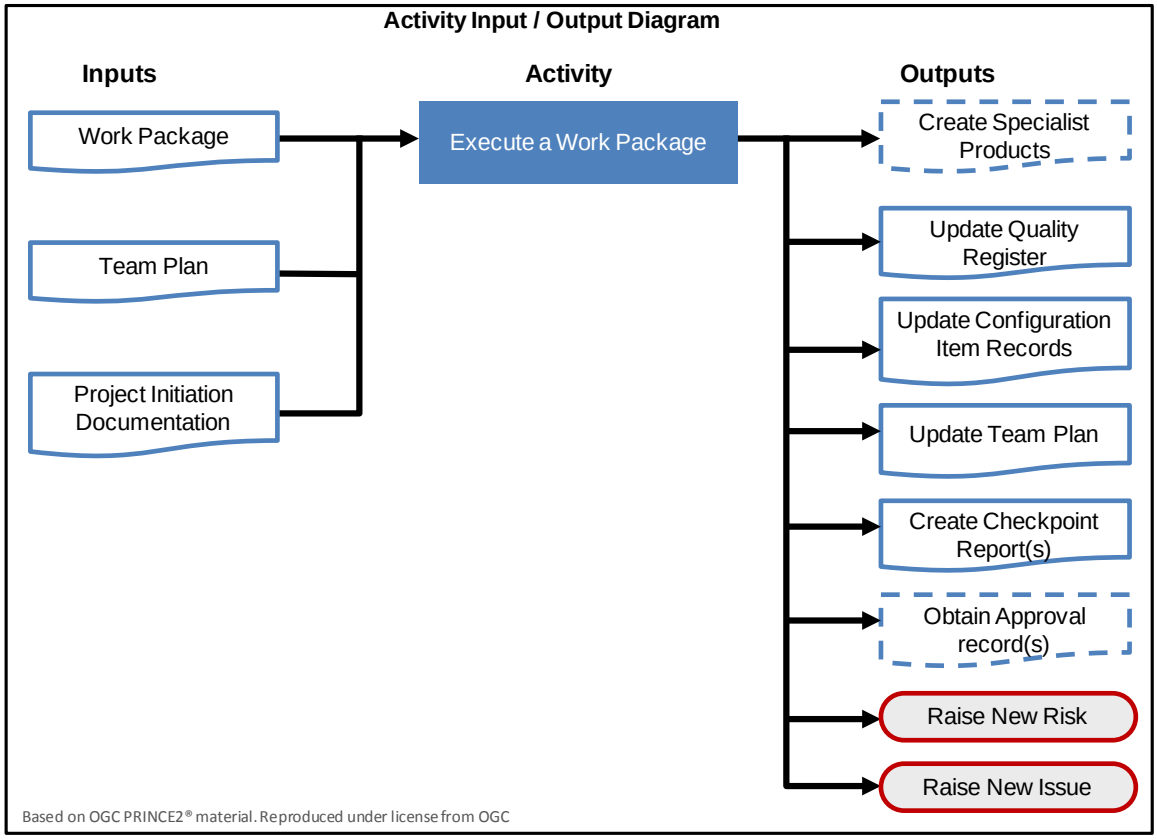


Fig 17.2 Accept a Work Package

Other actions recommend by PRINCE2 are:

- Notifying the Project Manager of any issues or risks that they need to be made aware off.
- Obtaining approvals for completed products and updating the necessary Configuration Item Records, as the status of products will have changed (been developed, Quality-Checked and Approved).
- Reviewing the progress of the work, updating the Team Plan and creating the Checkpoint Reports, which will be sent to the Project Manager.
- If at any time the Team Manager believes that the agreed tolerances will be exceeded, then they should notify the Project Manager by raising an issue.

Another important point to be noted is:

- The Team used to develop the products may not be aware of the full PRINCE2 process and this is fine, as long as they follow this process outlined in these three activities.
- The Team can also use such methods as SCRUM to develop the products, and this can work very well with PRINCE2.

17.3.3 Activity: Deliver a Work Package

The activity name “Deliver a Work Package” is perhaps confusing, especially when you hear the following statement, “Deliver a Work Package to the Project Manager.” This activity is about returning a list of work to the Project Manager, which is a paper document and does not include the products. The produced products are delivered to a specific person as agreed in the Work Package.

PRINCE2 recommends the following actions for the Team Manager:

- Checking the Quality Register to verify that all the Quality activities associated with the Work Package are complete.
- Checking that all products have been approved correctly. Checking with approval records.
- Updating Team Plan to show that work has been completed.

- Following the procedure in the Work Package to deliver the completed products, e.g.: hand them over to a specific person or this could be the person responsible for Configuration Management.

The final steps include the notification of the Project Manager that the Work Package is complete. As already mentioned, this could be an email to the Project Manager with a copy to the Product Owner. The Project Manager should always check that products have been correctly handed over.

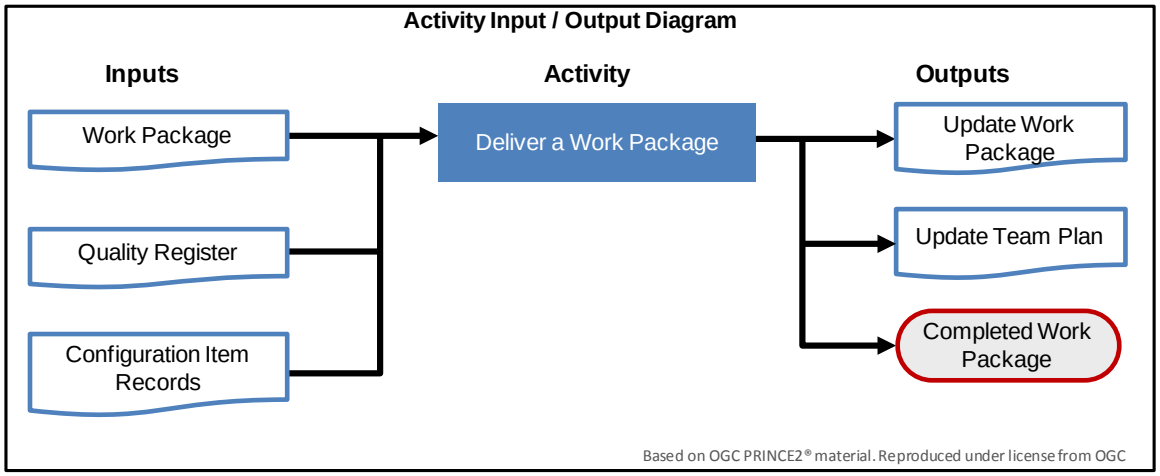


Fig 17.4 Deliver a Work Package

17.4 Learn Thru Questions

Try and answer the following, these are taken from the Learn Thru Questions audio course. Check the answers in the Learn Thru Questions document available on our site: You can also listen to these questions and answers (use the **LTQ audio course**)

Q01: Finish the sentence: "The **purpose** of the Managing Product Delivery process is to manage and control the work between the _____."

Q02: Who does most of the work outlined in the 3 activities in Managing Product Delivery, the Project Manager or the Team Manager?

Q03: What are the three Activities in Managing Product Delivery?

Q04: List two of the things that the Team Manager will do when reviewing the Work Package with the Project Manager in the Accept a Work Package activity.

Q05: Who creates the Team Plan, when is it created and who approves it?

Q06: Why do the Quality Register and Configuration Items Records get updated during the Accepting a Work Package?

Q07: What should the Team Manager do if they believe that the Team Plan will go out of Tolerance?

Q08: List two things that the Team Manager should do when the products have been produced (i.e., *after* the products have been produced)?

Q09: Who creates the Checkpoint Report, who reviews it and what kind of information does it contain?

Q10: Why should the Configuration Items Record be updated during the "Execute a Work Package Activity"?

Q11: If the Team Manager believes the Team Plan will go out of tolerance, what should they do?
Q12: List two of the actions the Team Manager will do in the **Deliver a Work Package** Activity. Their objective is to check and confirm that all work has been done correctly. What will they check & confirm and also update to show that the work has been done?

Q13: What is the last step that the Team Manager will do in the “Deliver a Work Package” Activity? (**Tip:** This is done after they have confirmed for themselves that all the work has been done.)

Q14: Does Deliver a Work Package to the Project Manager mean the products will be delivered to the Project Manager? Explain your answer.

Q15: What is a Work Package?

18 Managing a Stage Boundary

18.1 Introduction

Let us take a look at what you will learn in the Managing a Stage Boundary Process. There are 5 activities within the Managing a Stage Boundary and they are:

- Planning the next stage, i.e., creating a Stage Plan for the Next Stage.
- Update the Project Plan, with information from current & next stage.
- Update the Business Case, since cost, time and risk will most likely have changed.
- Reporting Stage End and Creating the End Stage Report, which is a report on the performance of the current Stage.
- "Producing an Exception Plan". This is an optional activity and only needs to be done if the current stage is out of tolerance or forecast to be.

All of the activities here are performed by the Project Manager and they might get some help from the Executive when updating the Business Case.

18.2 Purpose & Objective

Purpose

The purpose of Managing a Stage Boundary Process has two parts:

- The Project Manager has to provide the Project Board with certain information. The outputs of the Stage Boundary process are all for the Project Board.
- This information will enable the Project Board to review the current stage, approve the next stage, review updated Project Plan, and confirm continued business justification.

Objective

The objective of the Managing a Stage Boundary Process gives an overview of the main work that the Project Manager must do, which is:

- Assure the Project Board that all products in the current stage are produced & approved.
- Review and update, if necessary, the usual documents, which are the Project Initiation Documentation, Business Case, Project Plan, and Risk Register.
- Record any lessons in the Lessons Log that can help in later stages or in future projects.
- Prepare the Stage Plan for next stage and Request Authorization to start the next stage.

Remember that Managing a Stage Boundary begins near the end of the current stage and before the next stage. If the current stage is forecast to go out of tolerance, then the Project Manager will create an Exception Plan instead of a next Stage Plan, and the Project Manager will request to complete the current stage instead of asking to continue with the next stage, Don't worry if you don't understand this at the moment, as you will by the end of this process.

18.3 Context

Again, it is best to look at the Process Model Diagram to see the relationship between the Managing a Stage Boundary process and the other processes, especially Controlling a Stage and Directing a Project. The Managing a Stage Boundary Process provides the information for the Project Board to evaluate the project at strategic points so they can decide to stop or continue to the next stage and check how the project is going according to the original plan.

Remember the Project Board is the one that controls the project, and the stage Boundary process provides them with the necessary information to do this.

So the question to ask is what the Project Board will consider.

- They will consider the continued business justification of the project.
- They will wish to confirm that the current stage has delivered all its planned products and benefits.

- They will consider the next Stage Plan.
- The last thing that they will consider would be to allow the project to continue or shut the project down.

It is important to remember, that a decision to shut down the project should not be seen as a failure. It is the correct thing to do if the project becomes too costly or too risky and is therefore not justifiable any more.

18.4 Managing a Stage Boundary Activities

There are 5 activities within the Managing a Stage Boundary, and they are:

- Planning the next stage
- Update the Project Plan
- Update the Business Case
- Report Stage End
- Or do the “Produce an Exception Plan” activity in this process

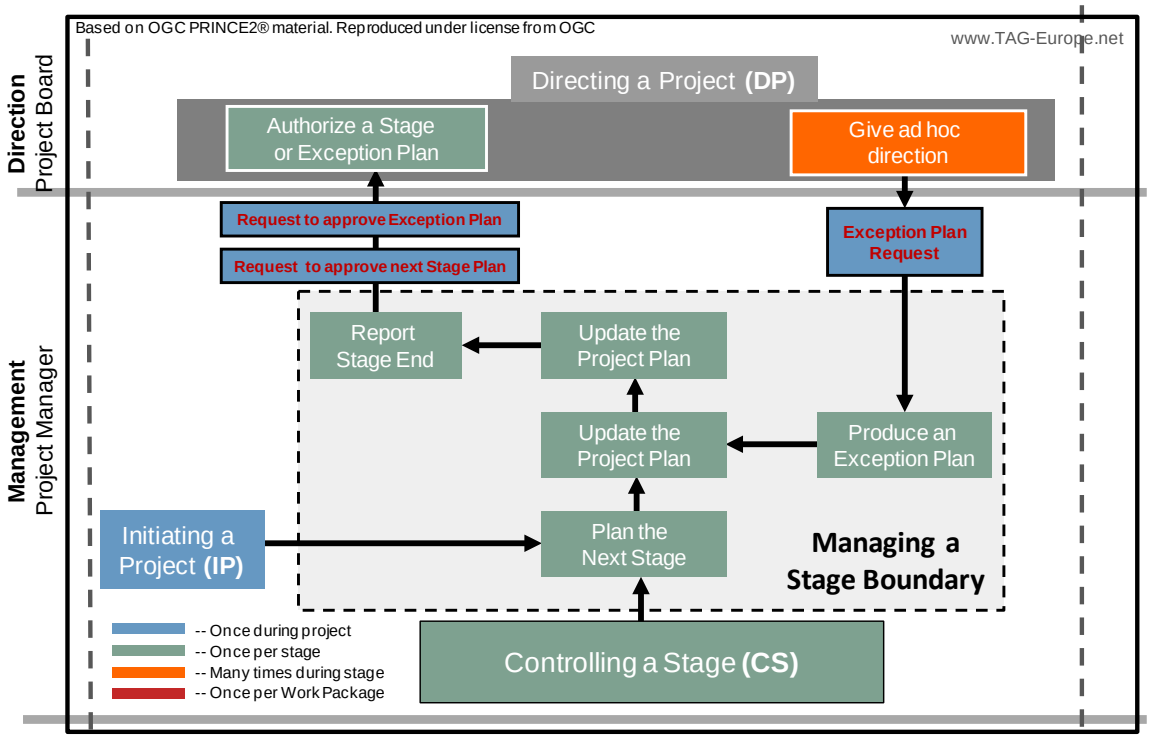


Fig 18.1 Overview of Managing s Stage Boundary

Plan the next stage:

This involves creating a Stage Plan for the next stage and incorporating lessons from previous stages.

Update the Project Plan:

- This is done to confirm what has been done and to forecast planning for the next stage.
- Remember that the Project Plan is a living document that is updated with actuals during each stage boundary process.

Update the Business Case:

This is important as the performance of the current stage will impact the Business Case. This can either be positive or negative; therefore, the Business Case should be updated at each stage boundary process.

Report Stage End:

Create the End Stage Report to show what has been completed in the current stage compared to the Stage Plan.

Or do the "Produce an Exception Plan" activity in this process:

This plan will replace the current Stage Plan if this is approved by the Project Board, and the Project Manager will return to the Controlling a Stage Process to complete the stage.

Remember, the Managing a Stage Boundary happens after the last stage, as this is followed by the "Closing a Project" process, which becomes part of the last stage.

18.4.1 Activity 1: Plan the next Stage

The Stage Plan for the next stage is created near the end of the current stage. Just like when creating the Project Plan, here too the Project Manager will involve other people like the Team Managers and subject matter experts to create a robust Stage Plan.

PRINCE2 recommends the following actions when creating the Next Stage Plan:

- Review the Project Initiation Documentation for any changes in Quality Expectations, Acceptance Criteria, Project Approach, current strategies, and team roles.
- Review the Lessons Log to see which useful lessons can be used in the next Stage Plan.
- The Product Initiation Documentation also includes the Project Plan, which lists the products that have to be created next.
- If products still need to be defined, follow the product-based planning technique.
- Create or update the Configuration Item Records for products that will be created in the next stage, as you will have new information on these (e.g., expected delivery date, version number and current status).
- The Quality Register will also be updated with planned Quality activities that will be done after the products are available.

The Stage Plan will be detailed enough to be used on a day-to-day basis by the Project Manager.
Note: This activity will not be done if an Exception Plan is created in the Stage Boundary process.

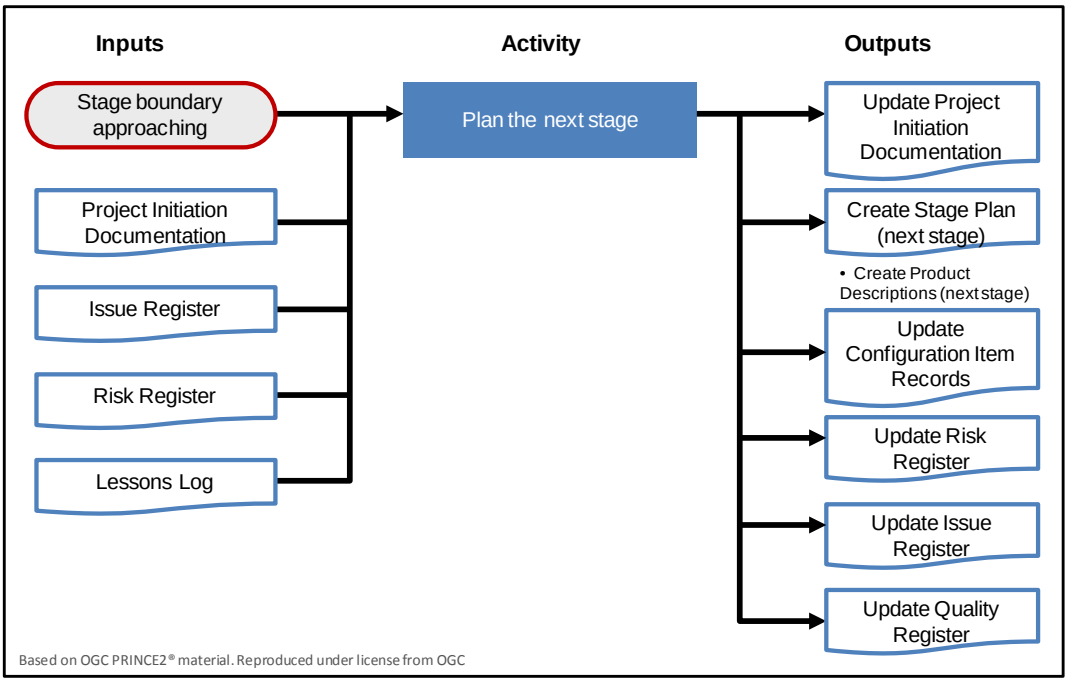


Fig 18.2 Plan the next stage

18.4.2 Activity 2: Update the Project Plan

The Project Plan is updated to incorporate actual progress from the current stage, and it should also include the forecast for the next stage; this includes information on time and cost. This is then

used by the Project Board to compare with the original plan that was baselined and was part of the Project Initiation Documentation.

Changes to the planning (e.g., to cost, risk, duration) will have an effect on the Business Case; this is discussed in the next Activity.

PRINCE2 recommends the following tasks in this activity:

- Revise the Project Plan with actuals from the current Stage Plan to show what has been completed, and add Forecast-planning information from the Next Stage Plan. You can now see that the Project Plan will be fully up to date.
- See if any other changes need to be made to the Project Plan (e.g., changes to Product Descriptions).
  - o Perhaps one of the strategy documents or the project approach has changed and so you have to do things in a different way.
  - o Perhaps the Project Board has approved a new product that needs to be incorporated.
  - o Perhaps when updating the Project Plan you have discovered a new issue or risk and need to update the data for an existing Issue or Risk.

So the main documents that are updated in this activity are the Project Plan and perhaps the Issue & Risk Register.

Keep in mind that the Project Board uses the Project Plan throughout the Project to measure progress. It should therefore be kept up to date to show what has already been done, as well as the latest forecast information for the next stage.

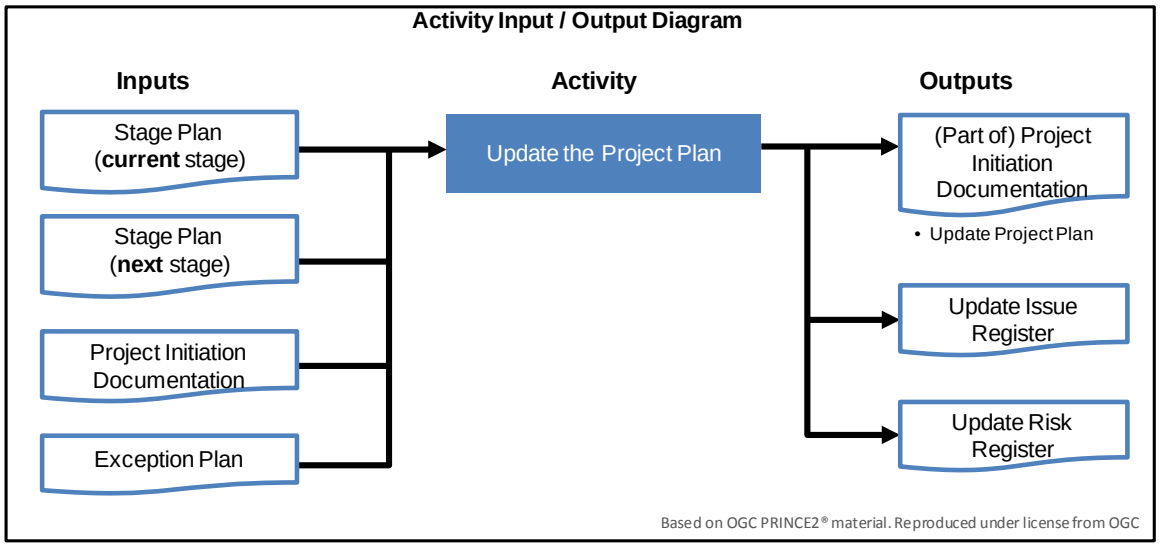


Fig 18.3 Update the Project Plan

18.4.3 Activity 3: Update the Business Case

At the end of a stage it is a good time to update the Business Case and check if the project is still viable and worth doing. The Project Board also wishes to know that the benefits of the project can still be realized within the agreed parameters of time, cost, quality, risk and scope. The Project Manager will consult with the Executive when updating the Business Case and then prepare it for the Project Board.

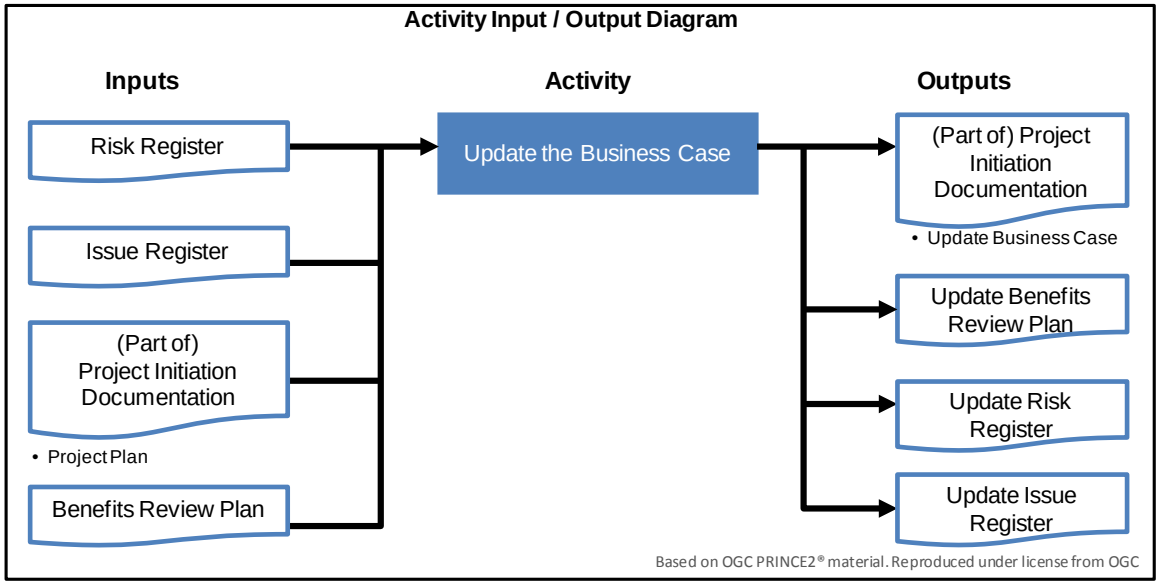


Fig 18.4 Update the Business Case

PRINCE2 recommends the following actions to revise the Business Case:

- Risk Appetite: Check if any changes have been made to the Risk appetite from the organization (e.g.: is the organization prepared to take more or less risk) and does this have an impact on the current risk tolerances in the project.
- Risk Register: Also assess the existing risks which are in the Risk Register.
- Benefits Review Plan: Update the Benefits Review Plan if any benefits reviews have taken place since the last stage.
- Issue Register: Review the Issue Register to see if any issues will have an effect on the Business Case.
- Project Plan: Review the Project Plan to note any changes in cost, duration, quality, benefits and other parameters, as all of these will influence the Business Case.

18.4.4 Activity 4: Report stage end

The Project Board will want to know how the stage performed compared to the Stage Plan, and if the Project Plan can still be achieved. Therefore the Project Manager creates the End Stage Report near the end of the current stage.

PRINCE2 recommends the following actions to create the End Stage Report:

- Benefits: Confirm that planned benefits for the stage have been completed, but most benefits won't be realized until after the project.
- Stage Plan: Review the Stage Plan and check that the work has been done.
- Product Status: Check the products that were produced during the current stage (review Quality Management Activities) and that the products have been approved. The Approval process may require a person confirming via email or signing a form.
- Sometimes products will be handed over during a stage, so the Project Manager will also confirm user acceptance.

The main output from this activity is the End Stage Report, which is given to the Project Board.

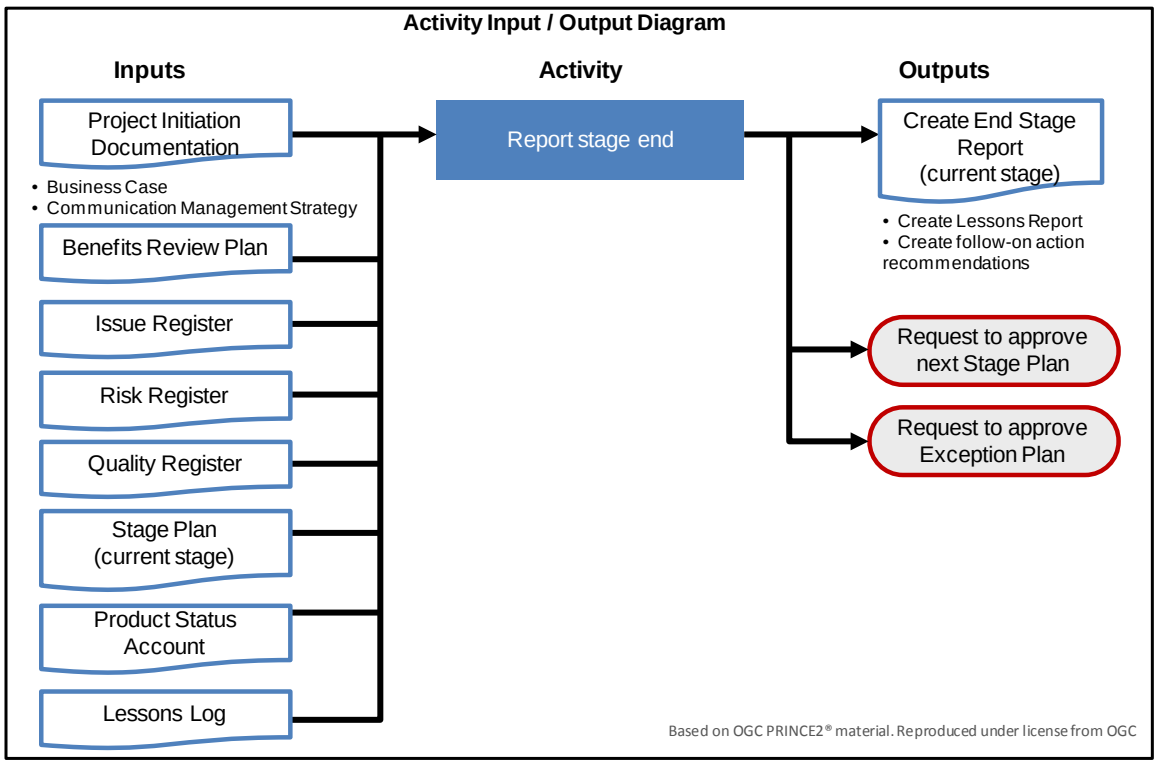


Fig 18.5 Report stage end

18.4.5 Activity 5: Produce an Exception Plan

This activity is optional and only has to be done when the current stage is out of tolerance and an Exception Plan is needed to complete the current stage. Normally an Exception Plan is requested by the Project Board, as they have received an Exception Report that gives an overview of why the stage went out of tolerance and offers a proposal to get the project back on track.

The activity to create an Exception Plan is much the same as creating a Stage Plan, so here, there is only mention of other considerations that have to be taken into account.

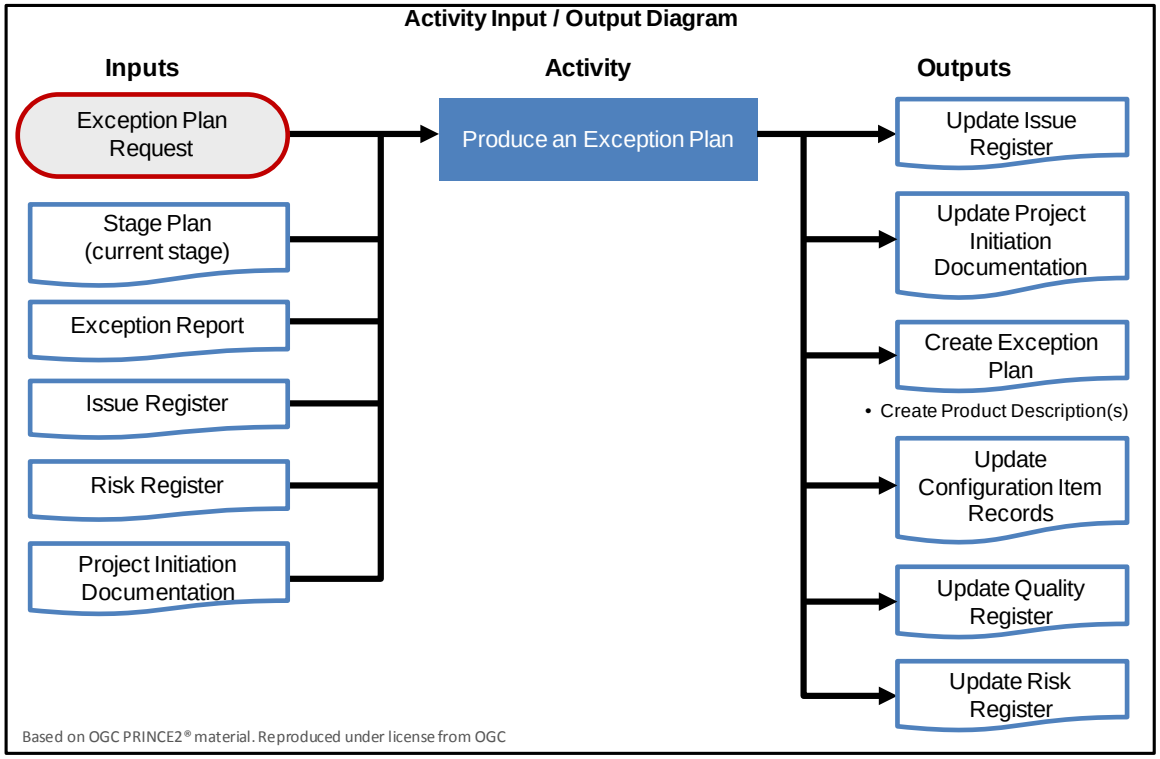


Fig 18.5 Report stage end

The main input files to create an Exception Plan are:

- The Exception Report, as this contains the recommended actions.
- Current Stage Plan, so you know what still needs to be produced.
- Project Initiation Documentation, which contains the Project Plan, as this need to be updated to include the extra activities from the Exception Plan.

Other tasks that may be necessary:

- If there are new products to create, you will use the product-based planning technique.
- Also update the Quality Register to note planned Quality Management Activities, such as Quality Reviews, and create or update the Configuration Item Records for products that will be produced by the exception plan.

So the main outputs will be the Exception Plan and updated Project Initiation Documentation. The Project Manager seeks approval to complete the current stage using the Exception Plan. The Project Board can decide to allow the Project Manager to complete the current stage or shut down the project.

18.5 Learn Thru Questions

Try and answer the following, these are taken from the Learn Thru Questions audio course. Check the answers in the Learn Thru Questions document available on our site: You can also listen to these questions and answers (use the **LTQ audio course**)

Q01: Who does the Project Manager provide information to so that they can review the current stage, approve the next stage, review the updated project plan, and confirm business justification?

Q02: When will the Managing a Stage Boundary process begin – towards the end of the current stage or just after the current stage has ended?

Q03: List the 5 Activities in the Managing a Stage Boundary process. (**Tip:** Two documents are created, two important documents are updated, and there is one optional activity.) Don't worry about getting the names correct.

Q04: If the Project Board requests an Exception Plan, which Managing a Stage Boundary activity will not be done? (**Tip:** Think about the two main documents created.)

Q05: Is the Managing a Stage Boundary normally used after the last stage in a project?

Q06: Who creates the Next Stage Plan and who might they involve and why?

Q07: List some of the actions that the Project Manager will do when creating the Next Stage Plan. (**Tip:** What will be used as an input, to define new products, as main output file, Quality activities and changes to product status?)

Q08: What level of detail is the stage plan? Answer by finishing the following sentence: "The Stage Plan will be detailed enough to be used _____."

Q09: Why do you think the Project Plan is updated in the Managing a Stage Boundary process?

Q10: After the Stage Boundary process, the Project Board reviews the End Stage Report, the Next Stage Plan, and the Business Case. Do they also review the Project Plan?

Q11: What document does the Project Board use throughout the project to measure progress of the project?

Q12: Why do you think the Business Case document is updated in the Managing a Stage Boundary process?

Q13: Name the 3 main input documents that the Project Manager will review when updating the Business Case in the Update Business Case activity. (**Tip:** Think, time & cost, planning, & benefits.)

Q14: Why would the Project Manager check if there are changes to the Risk Appetite during the activity "Updating the Business Case" in the Managing a Stage Boundary process?

Q15: Who may the **Project Manager** seek advice from/consult with when updating the Business Case?

Q16: Which document does the Project Board use to see how well the stage has performed in relation to the Stage Plan, and who is it created by?

Q17: Name two of the tasks that the Project Manager will do in the activity "Report Stage End". (**Tip:** Think about benefits, Stage plan, quality and approvals.)

Q18: Who requests an Exception Plan and which report is usually created beforehand?

Q19: Which other activity in the Managing a Stage Boundary process is similar to "Produce an Exception Plan" activity? Don't worry if you don't get the exact name correct.

Q20: Why are the Exception Report and the current Stage Plan used as inputs to the activity "Produce an Exception Plan"?

Q21: Why do you think the Quality Register is updated in the "Produce an Exception Plan" activity?

Q22: What does the Project Manager do next if the Exception Plan is approved by the Project Board?

19 Closing a Project

19.1 Introduction

Let us take a look at what you will learn in the Closing a Project Process. There are five activities in the Closing a Project Process that are performed by the Project Manager, and they are:

- Preparing planned closure or Prepare premature closure
- Handover of products
- Evaluating the project
- Recommending project closure

Each one of these activities is discussed in more detail in the next topic, and as you may have guessed, this is the last process for the Project Manager but not the end of the project, as the project is closed by the Project Board in the Directing a Project Process.

19.2 Purpose & Objective

Purpose

The purpose of the Closing a Project Process is to provide a fixed point to check that the project has reached its objectives and that the products have been accepted.

Objective:

The objective of the Closing a Project Process is to:

- Verify user acceptance of the project's products.
- Ensure that products can be supported after the project is disbanded.
- Review the performance of the project. This is done by comparing the project to the baselined documents.
- Assess the benefits already realized and plan review of benefits that will be realized after the project is complete.
- Address open issues and risks with follow-up on action recommendations.

This information is then given to the Project Board, as it is the Project Board that closes the project; the Project Manager only prepares the project for closure. As you can guess, it is the Project Manager that does all the activities in the Closing a Project Process.

19.3 Context

Projects can be closed naturally when all the work has been done, or the Project Board can request a Premature Close.

If you look at the Process Model diagram you will see that the Closing a Project Process is the last process on the management level and therefore the last process for the Project Manager to work on. It is good to remember that the Closing a Project Process is the last part of the last stage of the project.

The project should have a clear end with a correct handover of information and responsibility. A clear end to the project means the following:

- Check that the original objectives have been met.
- Transfer ownership of products to the customer.
- Identify all unachieved objectives so that they can be addressed in the future.
- Disband the project team and make certain that costs can no longer be incurred by the project.

The Project Manager prepares for the project to be closed and provides the necessary information to the Project Board. It is the Project Board that then makes the decision to close the project. In fact, they call it "Authorize Project Closure."

19.4 Closing a Project Activities

There are 5 activities in the Closing a Project Process for the Project Manager and they are:

- Preparing planned closure, i.e., confirming the completion of products and their acceptance.
- Preparing premature closure: This is done instead of the “prepare planned closure” activity if requested by the Project Board.
- Handover of products: Hand over products to customer, as described in the Configuration Management Strategy document.
- Evaluating the project, i.e., comparing the project objectives with the actuals and writing the End Project Report.
- Recommending project closure, i.e., sending a notification to the Project Board to close the project.

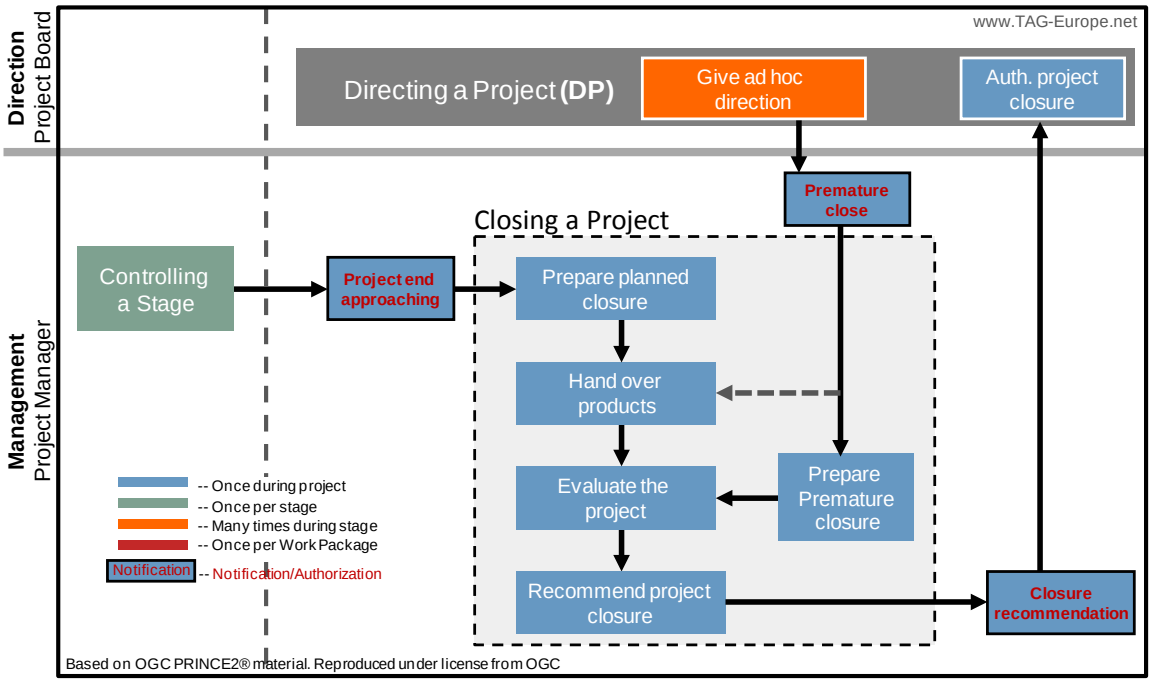


Fig 19.1 Overview of Closing a Project

19.4.1 Activity 1: Prepare planned closure

This activity is about confirming that the products have been produced, delivered & accepted.

The Project Manager does the following:

- Project Plan: Update the Project Plan to show what products have been delivered. For example: Mark delivered or completed and make changes to the Project Plan if the last stage has performed better or worse than what was forecast in it.
- Product Status Account: Request from Project Support a document called “Product Status Account.” This is a short report on the status of all products, such as Product Identifier, Status: Accepted and so on.
- Meet Acceptance Criteria: Confirm that the project has delivered what is defined in the Project Product Description, and that the acceptance criteria defined in the Project Description has been met. The Project Board will also check that all products have been accepted and signed for and the acceptance criteria have been met; and
- Lastly, seek approval that project resources can be released (e.g., equipment used for the project, contractors and rooms) so that these do not continue to be charged to the project.

Once these steps are done, the Project Manager is ready to hand over the products, complete the End Project Report and then recommend project closure.

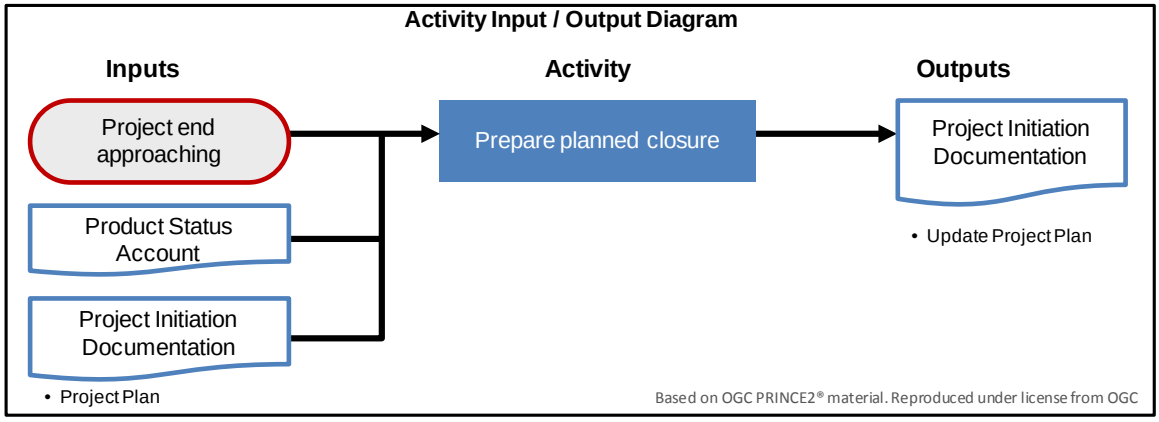


Fig 19.2 Prepare planned closure

19.4.2 Activity 2: Prepare premature closure

Sometimes the Project Board will instruct the Project Manager to close the project. The Project Manager will not just abandon the project but should try to salvage anything of value so it can be used again.

Note: This activity is done instead of the 1st Activity "Prepare Planned Closure" if the Project Board requests to shut the project down early.

PRINCE2 recommends the following actions:

- Record Premature Close: Record the Premature Close Request in the Issues Register.
- Project Plan: Update the Project Plan with actuals from the current stage. The Project Plan will show what was completed when the project was closed.
- Product Status Account: Request from Project Support a Product Status Account so that you can identify:
  - Products developed, currently under development, to start, etc.
  - Products that need to be made safe and may be useful to other projects.
  - **Note:** In smaller projects, the Project Manager will do this.
- Products: Agree what to do with the completed products and products that are currently under development. This might require extra work, as there may be a request to complete one of the products first before shutting down.
- Lastly, seek approval from the Project Board that project resources can be released, so that the project can stop being charged for these resources.

Once this is done, the Project Manager will follow the next activities which are to hand over the products, complete the End Project Report, and recommend project closure.

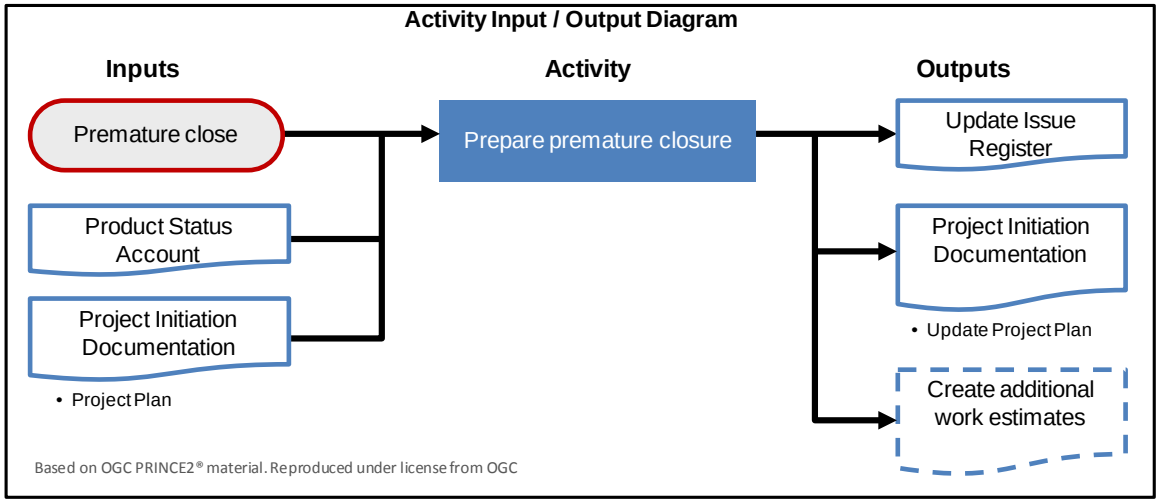


Fig 19.3 Prepare premature closure

19.4.3 Activity 3: Handover products

The products produced by the project must be passed on correctly before the project is closed. Some projects hand over products as they are approved. This is known as *phased delivery*. The Benefits Review Plan may need to be updated to include post-project benefits reviews of the products and also note the persons who will perform these benefits reviews in perhaps 6 months or 2 years. This will not be the Project Manager, as this is after the project has closed.

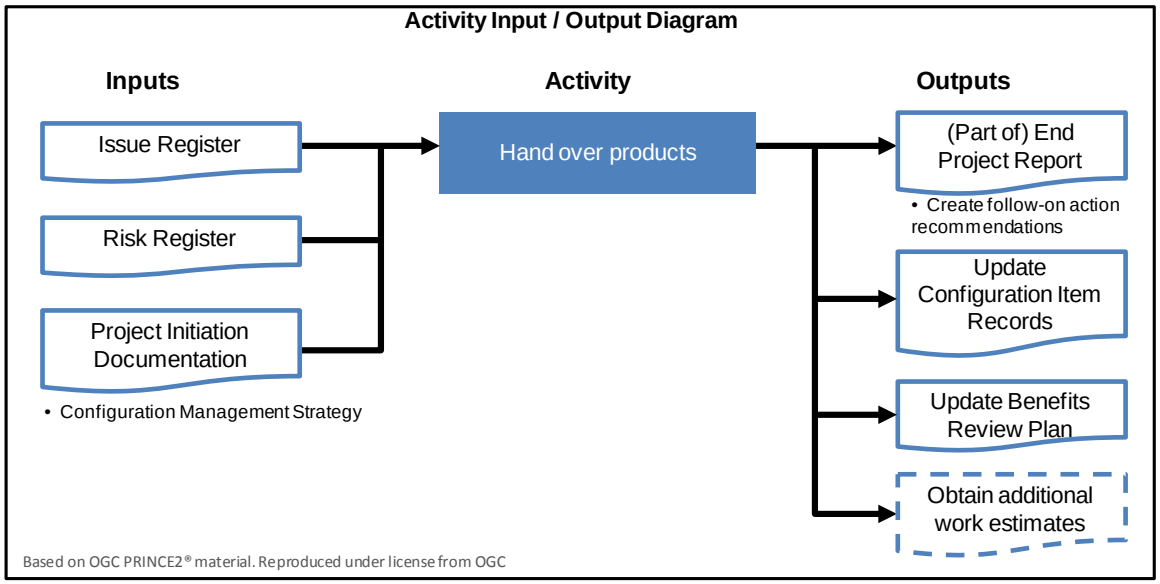


Fig 19.4 Handover products

PRINCE2 recommends the following:

Follow on Action Recommendations

- Prepare the follow-up on action recommendations for the products. These are mostly taken from the Issues and Risk Registers.

Benefits Review Plan

- Check that the Benefits Review Plan includes post-project activities to confirm benefits that cannot be measured until after the products have been in operation for some time.

Configuration Management

- The Configuration Management Strategy document will describe how the products should be handed over. Some common steps here are:
  a) Confirm that correct operation and maintenance environment is in place.
  b) Consider the early life-support requirements of products, as this is often where the most support is needed.
  c) Check if a support contract is required and get it drawn up if necessary.
  d) Confirm acceptance from the operations for the products and obtain acceptance records, as these are required by the Project Board.
  e) Lastly, transfer responsibility to operations for the products and register this in the Configuration Item Records to show who the current owner of the products is.

In short, products are handed over to operations and the Configuration Management strategy document describes this process to follow.

19.4.4 Activity 4: Evaluate the project

The objective of this activity is to assess how successful or unsuccessful the project was and to learn from this project. This is an activity that is often rushed, so it is up to the Project Board to make sure that the Project Manager gets time to do this before being dragged off to a new project.

PRINCE2 recommends the following actions for the Project Manager:

Baselined documents:

Review the baselined documents from the start of the project. This is the Project Initiation Documentation, which includes the Project Plan and the Business Case documents.

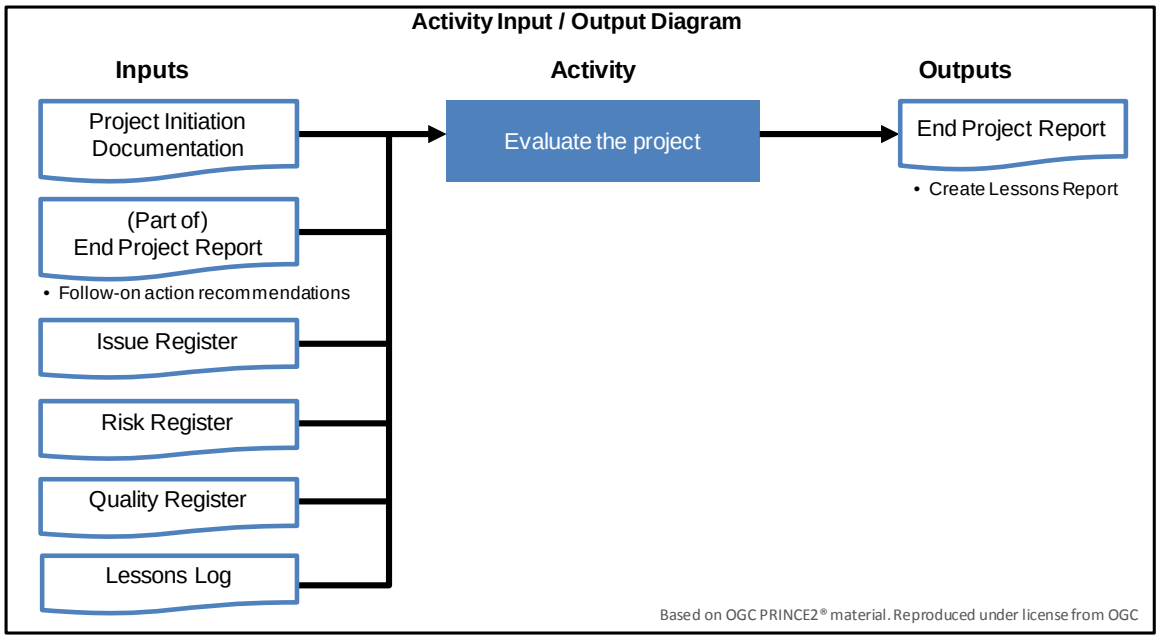


Fig 19.4 Evaluate the project

End Project Report:

- The Project Manager will compare the current documents in the Closing a Project Process such as the Project Plan and the Business Case with the baselined documents.
- The Project Manager will do the following to create the End Project Report:
  - Prepare a summary of how the project performed.
  - Review the project benefits delivered so far compared to the expected benefits.
  - Review how the project performed against its planned targets and tolerances.
  - Review team performance.
  - Review of the Project Products.

Lessons Learned Report:

- The Project Manager will work with the Project Management team to prepare a Lessons Learned report. This will be used to benefit future projects. The Lessons Learned report should include the follow information:
  - A review on how the project went, what went well and what could be improved.
  - How effective the Quality Management Strategy was in designing, developing and delivery for purposed products; and
  - Any useful information gained regarding the tailoring of PRINCE2.

As you can see, the Lessons Learned Report can be very important for future projects and it is one of the documents the Project Board reviews before they close the project.

In summary, the main documents created in this activity are the End Project Report and the Lessons Learned Report, which are both given to the Project Board.

19.4.5 Activity 5: Recommend Project Closure

Once the Project Manager has done their work in the Closing a Project Process, and has confirmed that the project can be closed, they raise a Closure Recommendation to the Project Board.

Remember, it is the Project Manager that prepares the project for closure but it is the Project Board who closes the project or, in PRINCE2 words, “authorizes project closure.”

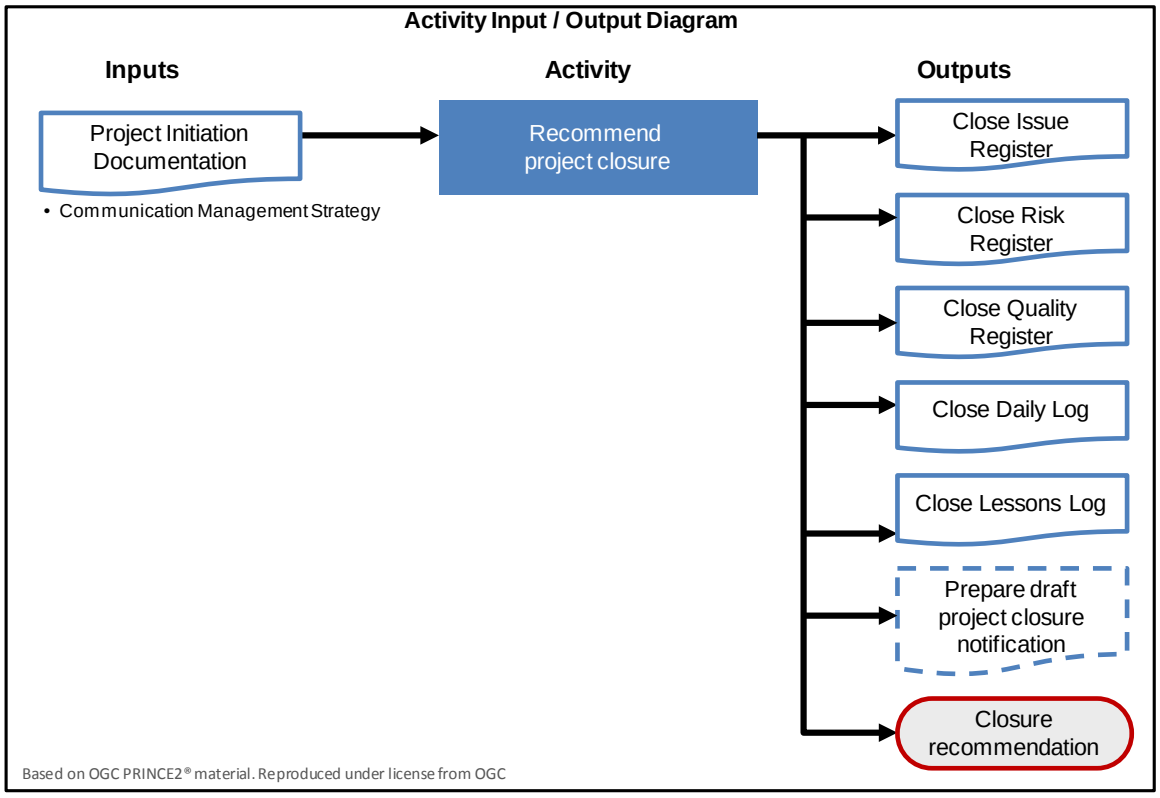


Fig 19.5 Recommend project closure

PRINCE2 recommends the following actions for the Project Manager:

- Communication: Look up the Communication Strategy Document to see who needs to be told that the project is closing. This can be any of the stakeholders.
- Close documents: Close the project Issue Register, Risk Register, Quality Register, Daily Log and Lessons Log (i.e., update the status as “complete” and make them “read only.”
- Configuration Management: Check that all project information is archived and secure. See the Configuration Management Strategy document for advice on this.
- Notification document for the Project Board: The Project Manager also prepares a draft Project Closure Notification that will be used later by the Project Board. This will state that the Project has closed and give other summary information on the main product produced.

You may ask, *“What happens next?”*

- The project returns to the Directing a Project Process and to the last activity “Authorize Project Closure.”
- The Project Board reviews the Project Closure notification document, decides to authorize project closure, and sends this Project Closure Notification out to advise stakeholders that the project is closed.

19.5 Learn Thru Questions

Try and answer the following, these are taken from the Learn Thru Questions audio course. Check the answers in the Learn Thru Questions document available on our site: You can also listen to these questions and answers (use the **LTQ audio course**)

Q01: Who carries out the work in Closing a Project?

Q02: Who Closes the Project, the Project Manager or the Project Board?

Q03: Fill in the blanks: The **purpose** of the Closing a Project process is to provide a fixed point to check that the project has reached its BLANK and that BLANK have been accepted.

Q04: Name the 5 activities in Closing a Project. Don't worry about getting the names correct. (**Tip:** The first 2 are similar, the 3rd is about the products, the 4th is about reports and the 5th is the last thing the Project Manager does.)

Q05: Why does the Project Manager update the Project Plan to show what products have been created, quality-checked and delivered in the "Prepare planned Closure" activity in Closing a Project?

Q06: The Project Manager requests the Project Status Account report from Project Support in the "Prepare Planned Closure" activity in the Closing a Project process. What is this report?

Q07: If the Project Manager is instructed to close the project prematurely, which activity in the Closing a Project process is not done?

Q08: How do you think the activity "**Prepare premature closure"** is different from the activity "**Prepare planned closure**" in the actions performed by the Project Manager? (**Tip:** There is one main difference.)

Q09: If the project is closed prematurely, are the following activities done?

- Activity 3: Handover products
- Activity 4: Evaluate the project,
- Activity 5: Recommend project closure:

Q10: Why is the Benefits Review Plan updated in the Closing a Project process and why not close before the project ends?

Q11: In the Closing a Project process, the Project Manager places recommendations concerning open issues, risks & any incomplete work into which document? This document will be given to the operations people, as they will take over the support.

Q12: In which document does the Project Manager refer to for guidelines on **how to hand over products** in the Closing a Project process?

Q13: Which **report** is created by the Project Manager in the "**Evaluate the Project**" activity that provides important lessons for future projects?

Q14: The Project Manager will do the following actions to create which report in the Evaluate the Project Activity?

- compare the original baselined project Initiation documents with the current versions
- prepare a summary of how the project performed
- review the delivered benefits so far with expected benefits
- review how the project performed against its planned targets and tolerances

Q15: Which **report** is created by the Project Manager in the "**Evaluate the Project**" activity and includes the following information?

- A review on how the project went, what went well, what could be improved.
- How effective was the quality management strategy in designing, developing and delivering fit for purpose products, and
- Any useful information gained regarding the tailoring of PRINCE2.

Q16: What are the main documents from the Project Initiation documentation that the Project Manager uses to compare baselined versions with current versions?

Q17: Who performs the task “Authorize project closure” and in which process?

Q18: Why would the Project Manager look up the Communication Management Strategy Doc in the Recommend Project Closure activity? (**Tip:** They have to create some documentation to give to the Project Board)

Q19: Is the project closed once the Project Manager completes their last task in Closing a Project?

20 Tailoring PRINCE2 to the project environment

20.1 Introduction and What Tailoring Is

Let us take a look at what you will learn in this chapter on Tailoring PRINCE2.

For the Foundation Exam you don't need to know this information, you just need to be aware of tailoring and understand why it is useful. It's really for the Practitioner Course and even then, there is not much attention given to Tailoring in the PRINCE2 Practitioner classroom course or exam.

You will learn the following:

- What tailoring is and the general approach to tailoring.
- The type of information that can be changed in PRINCE2.
- Tailoring the Themes and Processes in a Program Environment.
- An introduction to the project scales and the project scale table proposed in the PRINCE2 manual, which describes 5 levels of projects from a group of tasks to a program containing multiple projects.
- Tailoring themes and processes for simple projects.
- Tailoring themes and processes for projects in a Commercial Customer/Supplier Environment.
- A brief look at how PRINCE2 can be tailored to work with other project lifecycle models, such as Waterfall or SCRUM, and also tailoring for such projects as Feasibility projects.

Again, you don't need to know much about tailoring for the exam but it is important if you want to become a good PRINCE2 Project Manager. For now it is good to be aware of what is meant by tailoring, and I have done my best to simplify this information to make it easier to understand. It is not so easy to read this chapter if you are new to PRINCE2 or Project Management.

20.2 What is Tailoring?

PRINCE2 can be used in any type of project but the common question is how best to apply PRINCE2 to run a specific project. Tailoring refers to the appropriate use of PRINCE2 in any project. So tailoring answers the following question: *What is the correct amount of planning, control, themes and processes to use.*

Embedding focuses on the adoption of PRINCE2 across an organization, so it is concerned with standards, procedures, integration and so on, while Tailoring is done by the Project Manager to adapt the method to each project.

20.3 General Approach to Tailoring

There are many who think that they don't need a project management method because their projects are too small or there is too much overhead in using a method. They don't realize that they could or rather, *should* tailor the project method to suit their project and not increase the complexity in their project to suit PRINCE2.

The example that I give is the TV show *The Apprentice*, where each week there is a new two-day project. Two teams compete with each other and both have a Project Manager. If you were to watch The Apprentice, you would see that most of the same mistakes are repeated by the Project Managers; a project method would help them a lot. Also the administrative overhead does not need to be more than 2 or 3 pages of text, which is very little.

People's first impression of tailoring is to choose bits from the PRINCE2 method and use them to manage a project; however, these bits become isolated and it is not a PRINCE2 project anymore. The objective is to apply a level of project management that does not over burden the project but provides an appropriate level of control.

No Tailoring at all

If the method is not tailored for a project, then the project is not being run efficiently. This is also known as **robotic** project management where the method is followed blindly.

Tailoring is about thinking how best to apply the method to a project to get a good balance of project control and low administration.

Some of the things you will consider are:

- How to adapt the themes?
- Which terms/language should be incorporated?
- Is there a need to revise product descriptions for the administration products (known as “Management Products”) to make more sense to the stakeholders?
- Is there a need to revise the Role descriptions for the PRINCE2 project roles (for example, to match existing standards)?

20.4 What to change when tailoring

Here is a list of all the major parts of PRINCE2. Comment on each regarding what to change when tailoring PRINCE2 to suit the current project:

Principles

This is easy. Since principles are always present, all 7 principles have to be present in each project. There is nothing to change here.

Themes: Adapting the Themes

The various Themes include Quality, Risk, Configuration Management and Communications. The four themes mentioned here have Strategy Documents that are adapted to suit the project in the Initiation stage.

Terms and Language

Each organization can have their specific business language. For example, some companies refer to a Project Brief as a Project Charter, or Business Case as Project Case. It may be a good idea to use these terms during the project instead of the PRINCE2 terms.

Adapting the Management Products

PRINCE2 provides the Management Products to assist in running the project. These may be adjusted to incorporate how a company may work. For instance, a project may need a different Configuration Items Record template, as it deals with different kinds of products.

Adapting the Roles

PRINCE2 provides standard Roles descriptions in Appendix C but these should be adapted for each project. For example, a company might not use a Project Support desk, so the Project Manager will have to find another person to do Configuration Management. Another company might have a Project Management Office and a person responsible for a Benefits Review Plan; therefore, the responsibility should be removed from the Executive.

Adapting the Processes

All processes must be tailored but these can be different for each project. For instance, a Project Management Office may wish to start a project, but instead of starting with a project mandate, it may already be able to supply the Project Brief with an outline of the Business Case. Another project may follow a feasibility study project. The outputs from this project might be the majority of management products that are done in the first two processes.

Level of Experience to Do Tailoring

If you are new to PRINCE2 and project management, then the subject of tailoring can be difficult to understand at first. Just realize that Tailoring does happen. It will be easier to understand as you get more experienced with PRINCE2.

If you already have had the opportunity to work on a project, then a good place to start is by asking what the Project Manager would do different if they were to do the project again.

It becomes much easier to tailor projects for PRINCE2 if you have both good project management and PRINCE2 experience

20.5 Working in a Program Environment

What is a Program?

A program is created to coordinate and direct related projects in order to deliver outcomes and benefits that support a company's strategic objectives. Outcome is the result of change, so the Outcome is the value a program brings to an organization. Example: Raising Quality across the organization may be the desired outcome of a program. Each project will therefore produce products to contribute to this. It is also possible to say that each project helps to contribute to the shared vision defined by the program.

A program is therefore very long term – possibly several years, while projects are much shorter. A good thing to remember is that projects deal with products while programs deal with outcomes. Projects operating in a program environment have a number of advantages, as some of the work will have already been done by the program. Therefore the project should be tailored to work in a program.

Tailoring the Business Case Theme in a Program Environment

The Program will already have defined the standards and template for the creating a Business Case theme, and in some cases the majority of the work in creating a Business Case may be already done by the program. For example, the business reasons for the project will already have been defined by the program. An important part of a Business Case is the Benefits information, i.e., the expected benefits from the project. These Benefits will also be defined by the program.

Tailoring the Organization Theme in a Program Environment

A program has its own organization and the project organization should be adapted to work in a program. For example, the business change manager from the program should take responsibility for the Benefits Review Plan. Project Support and Project Assurance can be provided by the program; therefore the project can use these services. The Executive can also be chosen from the program team.

20.5.1 Tailoring the Themes of Quality, Plans, Risk, Change & Progress

We have already looked at what effect the Program Environment may have on the Business Case and Organization themes. In this topic we will look at some of the effects a Program Environment might have on the themes of Quality, Plans, Change, and Progress.

Quality

The program will have a Quality Management Strategy from which the project's Quality Management Strategy will be derived. This will include guidelines on who does the Quality Assurance, Quality Control Activities and Quality Standards. This means that the Project Manager will not have to create a Quality Management Strategy document from scratch but can just customize the document provided by the program.

Plans

The program may have dedicated planners that can help the Project Manager, as well as provide standards for Project Plans. This will make it easier for the Project Manager to create the Project & Stage Plans.

Risk

Like Quality, the project Risk Management Strategy will be derived from the program's Risk Management Strategy. This will include how to deal with risk, risk categories and risk evaluation. This is another document that the Project Manager does not have to create.

Change

The Configuration Management Strategy document will also be derived from the program and the Project Manager does not have to create it.

Progress

The program may be able to provide projects with a monitoring and control strategy, which can include time & cost tolerances to use, format and frequency of reports, how to define the Management stages and other information.

20.5.2 Tailoring Processes & Management Products

Tailoring Processes in a Project Environment

The program is focused on Starting, Monitoring and Closing a project, as the program is concerned with starting the project and receiving the products from the project when complete. The main process that the program might affect is the Starting Up a Project Process. In fact, this process may be done entirely by the Program and it can provide the outputs, such as the Project Team, Role Descriptions, Project Brief, Business Case Outline and Review of previous lessons.

The one thing the Project Manager will still have to do is to prepare the Initiation Stage Plan, as this cannot be done by the Program. This is because the Project Manager needs to negotiate with the supplier, Team Managers, and others involved in the project.

The program can make it much easier to prepare the Initiating a Project Process, for example, by providing the four strategy documents, which can be customized by the Project Manager to suit the project.

Tailoring Management Products in a Program Environment

A typical Program Environment will have numerous projects. Each project can have its own management documents or management products, some of which can be shared with the program.

Some things to consider for Management Products are:

- Should Management Documents have the same or similar names?
- Is it better to use shared or separate files for Log and Register Files (e.g.: Risk Register)?
- How to share Risk information between project and program if using different management document files?

Similar Names

There are many management products that have the same name between a project and a program, such as the strategy documents. So it is a good idea to try to distinguish them from each other by highlighting the word “project” or “program” in the title page and header or by some other means. For example, “The Program Quality Management Strategy Document.”

Shared Log & Register Files

The Log & Register files can be shared between the projects and program, such as the Risk Register & Issue Register. A decision must be taken to keep them separate from the program, or for the project to use the register and log files from the program.

How to share Risk & other Information

Suppose that the Project and Program use different Risk Register files. Then a question arises: *How are the Risks promoted from the project to the program and vice versa?*

Perhaps the Project Manager decides to add the more serious risks to the shared Risk Register used by the Program Environment and all Risks in the local Risk Register used by the project. A similar approach can also be used for the Issue Register.

20.6 Project Scale – Simple Projects

20.6.1 Tailoring: Project Scale Introduction

PRINCE2 can be used in any type of project of any scale. Scale is related to a number of factors, such as project complexity, size, risk, importance, product complexity, number of resources and cost.

The PRINCE2 manual states that companies should consider calibrating the scale of their projects. In other words, they should decide what makes a small project, a medium project and a big project. It may not be an easy exercise to create your own project scale. However, the PRINCE2 manual provides a great table of different project characteristics that you can try to match with your project to get an idea of the scale.

This table lists 5 scales of projects:

- Level 1: The Lowest level is Tasks. A group of tasks is done by a single person.
- Level 2: Simple Project with low risk involving a few persons. It has just one delivery stage. There are no Team Managers, as team members report to the Project Manager directly.
- Level 3: Normal Project with one or more delivery stages. Team Managers are present. It is an important project.
- Level 4: Daunting Project has multiple organizations with high risk, high cost. It is very important. It has multiple delivery stages and high visibility.
- Level 5: Program: These contain multiple projects.

Here are some good questions for the Project Manager to ask:

- What scale is the project?
- Which elements on the project can I afford to relax or in other words, which information can I use from similar or recent projects? For example, if the project is a similar project to one that was done recently, then it would be somewhat easier to: plan the project team, create roles and responsibilities, list risks, define the quality criteria information, and create product descriptions and plans.

20.6.2 Tailoring for Simple Project: Effect on Themes

The Theme most affected by simple projects is the Organization Theme, as Roles can be combined for small projects. For example, the Executive and the Senior User can be the same person. And, in a small project, Project Boards are also closer to the project, so they can decide to carry out their own Project Assurance. Also for smaller projects, the people who create the products can report directly to the Project Manager. Therefore, there is no need for Team Managers. The Project Manager usually combines the role of Project Manager with Project Support and perhaps also works on some of the specialist products.

The Business Case Theme for Simple Projects

This can be straightforward. The Business Case just requires some information to justify the project and the investment with an overview of expected benefits. This can be just a 2-page document.

The Plans theme for Simple Projects

This will start with a Project Product Description and perhaps Product Descriptions for key deliverables and a Gantt chart. The plan can even look like a product checklist. A product checklist is a simple list of the products that will be produced by the project, with information on expected delivery dates, producer and reviewers, and can also include key milestones.

The Quality theme for simple projects

Simple projects need to have an understanding of the quality required in the project, and this should be described in the Project Product Description and other Project Descriptions. This can include the quality criteria, quality tolerance, quality method, and quality responsibilities.

The Risk theme for simple projects

Simple projects need to analyze the Risks facing the project, take actions to respond to the risks, and communicate Risk information regularly to the Project Board via Highlight reports.

The Change theme for simple projects

Simple projects need a simple method to control and manage the configuration of the products. For example, it is possible to use a simpler Configuration Item Record template, but there is a need to define where products should be stored, the naming conventions to be followed, and other such details. Change-management needs to be done to ensure that the project will remain with its agreed scope and deliver the required products.

The Progress theme for simple projects:

Simple projects will need some form of agreed controls and reporting requirements between the Project Board and Project Manager. It is always better to put these in writing, even if this is an email.

20.6.3 Tailoring: Simple Projects

Tailoring Processes for Simple projects

All processes remain relevant in simple projects and therefore must be done; they can be a bit less formal than in more complex projects, however. The Starting Up a Project process is often done very quickly, and the Project Initiation Documentation is written without first doing a Project Brief. This is possible for simple projects, especially if the project is similar to a previous project.

Tailoring Management Products for Simple Projects

A simpler format to the Management Products will help reduce the effort required by the Project Manager in a simple project. Here are a few examples to explain this:

- Highlight Report: The Project Board may ask for a simple one-page Highlight Report or just a simple structured email.
- All reports can be in the form of an email. This also makes it possible to use a folder in your email system to help manage this information.
- Some of the Project Initiation Documentation can be in slides.
- The Daily Log can include more information such as Risk, Lessons, Quality and Activities. The Project Manager therefore does not have to maintain other files that would hardly be used.

The following Management Products may not be needed:

- Stage Plan: If there are just two stages in a project and one of these is the Initiation stage, then there is no need for a Stage Plan, as the Project Plan will contain the plan for the 2nd stage also.
- Checkpoint Reports: If there are no Team Managers, there is no need for these reports.
- Work Packages: This may not be needed if the Project Manager is in direct contact with the producers, and the products do not need the control of a Work Package.
- End Stage Report: As there is just one delivery stage, there will be no Manage Stage Boundary process, and the End Project Report will be created in the Closing a Project Process.

20.7 Tailoring: Commercial Customer/Supplier Environment

PRINCE2 is based on a customer/supplier environment, even if it is all happening internally in one company. There is always a customer who will benefit from the products and will most likely pay for the project.

Who is a supplier?

A supplier produces and delivers the products. The supplier and customer can also be two different companies, and in such case would see the project from different points of view, for example, a CRM project.

- The customer might want a good CRM system in place to lower costs, better sales information, better reporting, and an overall increase in sales.
- The supplier wants to deliver another successful project, have a reasonable profit margin, and have another good reference.

Corporate Culture: What is Corporate Culture?

The best way to describe this is the company's attitude towards projects. This will be different in each company as each company will have their own attitude to risk, project formality, quality, project control and other factors.

20.7.1 Tailoring: Effect on Business Case

When we think about the Business Case, we think about the Business Case of the customer, but the suppliers could also have their own Business Case. It is easier to imagine this if you think on an external supplier. If the supplier is an internal department, they may still wish to justify why they must do this project, even if there is a demand from the Director of the company to do the project.

The rest of the topic will look at the Business Case from an external supplier's point of view rather that the Business Case from the customer.

The Supplier Business Case should show why they will be involved in the project, and should cover the following points:

- Sales Objectives (expected margin)
- Account Plan Objectives: potential for new products
- Sales territory and Market territory objectives

The supplier may also offer different prices for different projects:

- For example, a supplier might not be prepared to give a discount if they are the only partner with knowledge on an important part of the project.
- They could be prepared to give a discount for a pilot project if they were the preferred partner for the remainder of the project if it went ahead.

20.7.2 Tailoring: Effect on Organization

Choosing the Senior Supplier is important for the project. Normally you would expect to give this to a person from the supplier, but this may not be good idea if there is a wish to discuss closing down the project or if some of the company's sensitive or commercial information is discussed during these Project Board meetings.

There are some options, such as to allow a person from the Customer to have the role of the Senior Supplier. It is possible to give this role to the person responsible for the supplier(s). Another issue that you might have is that there are a number of suppliers and you are not sure which one to choose for the Project Board. One solution would be to give all the suppliers one seat on the board.

Another key appointment is the Project Manager. Usually the Supplier(s) will have their own Project Manager but the Customer will also have their Project Manager. There can only be one Project Manager in a PRINCE2 project, so most often the Customers' Project Manager is the Project Manager and the Supplier Project Manager is seen as a Team Manager.

The Project Assurance role is another role that needs to be carefully chosen. It has to be made sure that they have the correct authority to their job.

Just remember that there are numerous ways to structure a project team.

20.7.3 Tailoring: Effect on Quality & Risk

Quality

Both the Customer and Suppler may have their own Quality Management System. The main question to decide here is which Quality Management System to use. The Quality Management Strategy document is created at the start of the project and will define whether the project will conform to either the customer'' or supplier's quality management systems, or if they should be combined. As you can imagine in most cases the Quality Management System from the customer will be used, but this will depend on the type of project.

Once you decide on the Quality Management System, then the Quality theme will proceed as normal.

Risk

Consider for a moment that the supplier is another company. Now answer the following questions:

Question: Do you think the supplier will have different risks than the customer or will these be the same?

Risks from the Customer's and Supplier's points of view will mostly be different but with some overlap. Therefore, it will be impossible to use the one Risk Register for both the Customer and Supplier. Each will have their own Risk Register.

Questions: Can you think of some risks that might be specific to a supplier and not listed in the customer's Risk Register?

- Pay a penalty if the project is more than 2 weeks late.
- Existing resources may leave the supplier company, but the customer may not care about this as they have an agreement to get the work done.
- Client may not be able to pay (for example, your client is a small airline and the Icelandic volcano is still active).

20.7.4 Tailoring: Effect on Plans

If the supplier is an external company rather than an internal department, then the project will be a lot more formal. The two most common changes to the plans will be

- Where in the plan payments will be made?
- More time planned at the end of each stage to approve work done and to do the reporting during the project.

The agreed payment structure will be defined in the contract, which is part of the Project Initiation Documentation and which includes the Project Plan. The customer might like to be able to do the following:

- Pay in relation to deliverables or pay at the end of each stage.
- Stop the project if the project is not going according to plan or if the Business Case is no longer viable. (The project contract would take this into account.); or
- To stop the project at any time but agree to pay a cancellation fee to do this.

The Supplier is concerned with creating the products as described, so that the products will be approved and they can get paid on time. They might wish to include a penalty for late payments or if there are delays from the client giving feedback that would cause the project to stall for a time.

Team Plans

If the Supplier is external, then the Project Manager will most likely be from the customer and the Team Manager will be from the supplier.

The Project Manager will agree on Work Packages with the Team Manager but the Team Manager could then have their own style or method for creating a Team Plan. The Project Manager may not even have access to the Team Plan, but this is not a problem for the Project Manager. The Project Manager cares more about the following:

- Products are produced as they are defined in the Work Packages.
- The Team Manager understands what needs to be done and by what deadline.
- They receive regular Checkpoint Reports.
- Products pass the necessary Quality Tests and have been approved.

20.7.5 Tailoring: Effect on Processes

From a customer's point of view, the processes will remain the same.

From a supplier point of view, they may not be involved too much in the first 2 processes.

- The Starting up a Process can happen before the supplier is involved in the project and some of the Initiating a Project Process.
- For example the strategy documents, part of the planning and the controls could already be done before the supplier is asked to bid for the project.
- The Initiating a Project Process cannot be completed until after the supplier is chosen and the contract has been negotiated, however. Then only the Project Plan can be completed.
- So it is safe to say that suppliers may be brought in on the planning work in the Initiation Stage. They could help with product definitions, estimation, providing risk information and other tasks.

- The Project Plan is part of the Project Initiation Documentation and the Project Board needs to see all this information before the first product delivery stage is allowed to start.
- For the rest of the processes, the Project Manager will most likely manage the project much more formally when working with an external supplier.

20.8 Tailoring: Project Type

20.8.1 Tailoring: Project Type: Lifecycle Models

There are a number of different lifecycle models used today such as Waterfall and Agile. PRINCE2 works well with these models and sees their value in the creation of specialist products, which is not addressed by PRINCE2.

Tailoring PRINCE2 to work with specialist lifecycle models involves the following:

- Aligning the PRINCE2 Management stages to the development lifecycle (e.g., design, build, test and transition); and
- Integrating any specialist roles into the project team (e.g., technical design authority). All roles should be correctly assigned and clearly understood.

In some ways a project method is like a religion with people sticking by one method and viewing another method as evil or for nonbelievers. Agile SCRUM is a new cool way to develop applications and in fact can work very well with PRINCE2. The SCRUM process is all about the fast development and delivery of products. This all happens in the Managing Product Process.

We have mentioned the fact that products can be created by external suppliers and these suppliers do not have to use or even be aware of PRINCE2. In fact, they could use SCRUM or any other method to deliver the products. The Project Manager is only concerned that the correct products are delivered and that they have passed the necessary quality tests.

20.8.2 Tailoring: Project Type: The Feasibility Project

Some projects will be feasibility studies. The reason to start the project will be to find the best option for dealing with a defined problem (called a “problem definition”). The project then investigates this problem, develops options and recommends just one option. There is then just one main Project Product output, which is the Recommendation and of course, supporting information for each one of the other options considered.

Each option developed will include its own Project Plan, Business Case, Risks, and Quality and so on.

A feasibility project could be anything from a number of brainstorming sessions to some years of research (such as for how best to design and build a new Nuclear Plant, how to choose the location for a large wind farm, or how best to get peace in Middle East).

20.8.3 Tailoring: Project Management Body of Knowledge

You may have heard about PMI and the PMBok which stands for the Project Management Body of Knowledge.

Here is a simple definition of both PRINCE2 and PMBok so you can get an idea of how they differ and how they can complement each other.

PRINCE2 is an integrated project management method providing a set of processes and themes that can be applied to manage a project from start to finish.

The Project Management Body of Knowledge covers the broad spectrum of project management competencies and techniques that Project Managers might need to apply, such as leadership and negotiation.

I prefer the following way of explaining the difference:

- PRINCE2 provides a framework of what needs to be done, by whom, & when.
- The PMBoK provides a range of techniques of how those things can be done.

Let us give an example:

Estimating: PRINCE2 says that this is an important step but offers no more information on how to do it, and there are many techniques available. The Project Management Body of Knowledge, on the other hand, provides an explanation and an analysis of the range of estimating techniques available so that the planner can judge which one is the most suitable to use.

Exams Tips

- Tailoring is not part of the Foundation Course
- Tailoring is an important part of the Practitioner Course

Appendix A
Simple Glossary

Acceptance Criteria

A prioritized list of criteria that the final product(s) must meet before the customer will accept them (a measurable definition of what must be done for the final product).

A list of criteria the final output of the project must satisfy for the customer to accept it. Just imagine a list of criteria arranged in order of importance in a spreadsheet and each entry should be discussed and confirmed by both the customer and the supplier. Throughout the project, the acceptance criteria can be refined and changed, but in the end only when all the criteria are met and each box ticked off can the project can be closed.

Baseline

A snapshot; a position or situation that is recorded. A baselined product is a reminder of the original state and as a comparison against the current position. Products that have passed their quality checks and are approved are baselined products.

Once a product is baselined, it becomes a fixed reference for the following versions of the same product. For example, the Project Plan is defined, agreed and signed off at the start of the project. The Project Plan will be updated during the project to show what has been done. The Project Board can compare the baselined Project Plan with the current project plan to see how well the project is going compare to the original expectations.

Another example: a mailing list for an event may have been approved, so this mailing list will be baselined, given a version number and cannot be changed. If changes do need to be made, then a new version of the mailing list will be created as the baseline version cannot be changed.

Business Case

Information that describes the justification for setting up and continuing a PRINCE2 project. It provides the reasons (and answers the question: 'Why?') for the project. An outline Business Case should be in the project mandate and can be updated in Project Brief. A fuller version should appear in the Project Initiation Document.

A document that explains the reasons for the project in terms of costs, risks and benefits. It explains in detail why the project should be done, why the final outcome is desired. During the project lifetime whenever a risk appears, the odds should be weighed against the Business Case to check if the benefits still exist within the expected time and cost constraints.

For example, if a company is running a project to develop and implement a new CRM application, the Business Case should include the improved efficiency for client management so more clients could be handled within a certain period of time.

Another example: During the project an important new requirement has been added to the project. A new feature will be added to allow users to see if items they wish to order are already in stock and this connection to the stock application will cost an extra €30,000. So the business case must be updated to reflect this increase in costs and see if the project is still worth doing.

Communication Management Strategy

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

A description of the flow of information between the project and its stakeholders. It defines the method and frequency of the information exchange. During the start-up, the traffic of communication and reporting may be higher. The Communication Management Strategy provides an organized approach to deliver reports on a timely basis to those who need the information for decision making and/or the purposes.

E.g.: *The Communication Management Strategy document may show that it has been agreed that the Project Manager will send a two page Highlight Report to the Project Board every two weeks on a Thursday morning with a certain format.*

Customer

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

The customer will specify the desired outcome of the project, will be the owner of the final product of the project, will be representative to those who are going to use the final product and will probably pay for the project. Remember PRINCE2 is based on a Customer/Supplier environment and both will be represented in the Project Board.

The term Customer can also refer to both User and Business interests.

Output

A specialist product that is handed over to a user. Note that management products are not outputs but are created solely for the purpose of managing the project.

Outputs refer to the products that are delivered to the customer/user and they are the reason why the project is done. There are two kinds of products in a PRINCE2 project which are Specialist products and Management products. Specialist products are the outputs of the project and are given to the users.

Management products are created for the purpose of managing the project, ***e.g.:*** *Project Plan, Business Case. These are never given to users.*

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 a Project Assessment.

The End Project Report is the Project Manager's report to the Project Board that confirms the delivery of outputs to the customer, an overview of what went good and not so good, review of the benefits compared to the expected benefits that were listed in the Business Case, review of how well the project went according to the Project Plan. It can also confirm that products have been accepted by the customer.

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.

The Project Manager's report to the Project Board that provides information on project performance during each stage and the overall project status up to that point. It will also include a review of the benefits reached so far and a review of the Issues and Risks. An End Stage Report should contain a forecast for the next stage, this will help the Project Board to decide whether to continue the project or not. This can be a structured document, email or a few slides.

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 is actively managed. The Executive is the Project Board chairperson, representing the customer, and is the owner of the Business Case.

The person responsible to ensure the project satisfies its goals and delivers the intended benefits. The Executive is the chairperson of the Project Board, represents the Customer and is responsible for the Business Case. He or she is also responsible for making sure the project runs within the framework of the Business Case and has the final say in the Project Board.

Follow-on Action Recommendations

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

*A report created by the Project Manager at the end of a project that puts together recommendations on how to handle incomplete outputs, ongoing issues which are taken from the Issue Register and existing risks. **E.g.:** unfinished work, possible activities that should be done for some products. As you can imagine, this can be very important for the persons who are going to take over the maintenance of the products.*

Highlight Report

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

*A report on the stage progress, prepared regularly by the Project Manager for the Project Board. The frequency for this report is indicated in the Communication Management Strategy, **e.g.:** It may be agreed that the Project Manager will send this every two weeks on a certain day and with a specific format which can be a 2 or 3 page overview.*

The report can confirm that the stage runs within tolerances and the Project Manager can also point out any foreseeable problems.

Issue

A relevant event that has happened, was not planned and requires management action. It can be any concern, query, request for change and suggestion or off-specification raised during a project. Project issues can be about anything to do with the project.

Any event related to the project that has already happened and requires the intervention of the higher management. All issues that need to be handled formally will be first examined and then classified into one of three types of issues and then entered into the Issue Register. The three categories for an issue are: 1) A request for change, 2) An off-specification (which is something that supplier was not able to do as planned) and 3) and a problem or a concern.

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.

A log that captures and keeps track of all formal issues. It is regularly monitored by the Project Manager throughout the project. Just imagine a spreadsheet where each line is an issue and there are columns for Issue ID, Issue Type, Date Raised, Raised By, Description, Current Status and Close Date.

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.

A document that lists the lessons gained during the project. It helps to avoid possible mistakes and to repeat positive actions in future projects. Any important lessons that can be applied to future projects should be listed in the Lessons Report. This report is created by the Project Manager using the information from the Lesson Log and given to Project Board always at the end of the project. In large projects, it can also be created at the end of a stage.

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.

Any input to a project or output produced during the project. A PRINCE2 project creates two kinds of products, specialist product and management products. The creation of the specialist

*products is the reason that the project was started and these are the products that will be given to the users. The management products are documents used solely for the purpose of communication among the project management team. **E.g.:** Project Plan, Business Case. So the Users are only interested in the specialist products.*

Product-based planning

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

A PRINCE2 technique used to create a detailed plan that focuses on the required products before even thinking about activities. There are four steps in Product Based Plan:

***Step 1:** Write the Project Product Description: Just imagine the information you might see on a web site about a laptop: Laptop Overview, Laptop Specifications and Features including information on Quality.*

***Step 2:** Create Product Breakdown Structure: This is a sorted list in a diagram of all the parts that make up the laptop such as keyboard, mouse, memory, motherboard, hard-drive and case. You may put keyboard & mouse under a branch labeled as Input devices.*

***Step 3:** Write a Product Description for each part mentioned in the Product Breakdown structure: For example, Hard-drive: overview information, specifications, features and quality information.*

***Step 4:** Create Product flow diagram: This defines the sequence in which the Project Product will be created. **E.g.:** A new Laptop prototype – You may decide to start with products that are manufactured in house and add products that are out sourced. The flow diagram must represent the sequence of how the product will be created.*

Product Breakdown Structure

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

A ranking list of all the products defined in the plan. The plan is broken down into the its major products and these products are listed in priority according to their dependencies.

***E.g.:** A Laptop Prototype: You would list and link all the parts that make up the laptop in a diagram such as keyboard, mouse, memory, motherboard, hard-drive and case. You might place Keyboard & Mouse Pad under a branch Input devices, and you may have another branch for external connection adapters, for example Video, USB, Power, Network, Earphone.*

This can either be a top down diagram or you can use a Mind-map.

Product Checklist

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

A list of all the major products to be produced, along with their dates of delivery.

Imagine a spreadsheet with a number of columns like Product ID, Product Title, Product Description Approved date, Draft Ready date – Plan & Actual, Quality Check date – Plan & Actual and Approved date – Plan & Actual.

This checklist is a great way to see how the project is progressing and some Project Managers use this as their main document for this purpose.

Product Description

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

Information on the product's purpose, composition, derivation and quality criteria. A product is defined as soon as its need is identified. Technical products as well as management products should have product descriptions.

***E.g.:** Think of a Product Description for the Hard Drive of a Laptop. You will have an Overview description, Features, Specifications, Quality requirements & how this will be tested and a list of parts it may have.*

Product Flow Diagram

A diagram showing the sequence of production and interdependencies of the products listed in a Product Breakdown Structure. (It shows what has to be produced 1st, 2nd, 3rd and so on.)

A diagram showing the order of production and the prerequisites for each product defined in the Product Breakdown Structure.

***E.g.1:** Imagine you are building a new prototype Laptop: The Product Flow Diagram may show that you start with the bottom casing, and then add the metal linings, the motherboard and the rest of the parts in sequence until the laptop is built.*

***E.g.2:** Think of an instruction diagram that comes with a flat pack piece of furniture from IKEA; this is also a sequence of steps to create a product.*

Project Assurance

The Project Board's responsibilities to assure itself that the project is being conducted correctly. Each of the Project Board members have a specific area of focus for Project Assurance, namely business assurance for the Executive, user assurance for the Senior User, and supplier assurance for the Senior Supplier.

The Project Board is responsible for monitoring the project's performance in the user, supplier and business areas. To achieve this, the Board may decide to delegate its assurance functions to another entity to make sure the project runs smoothly.

The best way to explain Project Assurance is to look at why we need Project Assurance. The Project Manager may be hiding information or providing misinformation to the Project Board, therefore the Project Board need an independent view of how the project is really going, so that they can check if the products reported to be created have actually been created. This is Project Assurance.

Project Brief

A statement that describes the purpose, time, cost 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 the Project process to create the Project Initiation Documentation and its components. It is superseded by the Project Initiation Documentation and not maintained.

A document that contains the following information collected during the Pre-project process "The Starting up a Project Process": The Project Definition which includes background information, time, cost, quality & scope; an Outline of the Business Case; Project Description; Project Team Structure and Project Approach.

It is used by the Project Board to decide if they will continue with the initiation stage of the project and therefore spend money. This is their first decision. It is not updated during the project.

Project Initiation Documentation

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

A set of documents that contain essential information to start the project; in other words the documents that were created during the Initiation Stage that describes how the project will be done in detail. It includes the Project Plan, Business Case, 4 Strategy Documents, Risk

Register and Team Structure among others. The Project Board reviews the Project Initiation Documentation in order to authorize the start of the project. It is also used to communicate the project to its stakeholders. The documents in the Project Initiation Documentation are subject to change throughout the project. After each change every document is baselined for future comparison. A good way to think about the contents of a PID is to think of the Themes.

Project life cycle

The period from the start-up of the project to the acceptance of the project product.

The time between the start of the project and the acceptance of the product or the close of the project. Therefore, follow up maintenance and support is not part of the project life cycle but happens after the project has closed.

Project management

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

The conducting of the project by planning, delegating, monitoring and controlling all sides of the project in view of the project objectives by creating the project plan and then running the project according to this plan. This includes the management of the human and nonhuman resources within the limits of time, cost and quality.

Project management team

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

Defines the total management structure of the project from top to bottom, from the Project Board to the Project Manager to the Team Managers and the support staff. It is a temporary structure solely established to manage the project to a successful conclusion. The Project Management Team is disbanded at the end of the project.

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.

The person appointed by the Project Board to manage the daily progress of the project to deliver the end product within the limits set by the Board, in other words run the project according to the project plan as efficiently as possible, for example, by looking for opportunities to speed the project up and reduce costs.

Project mandate

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

Information provided by the upper management outlining what is desired from the project. This is an external document and is used as an input for the Starting up a Project process. This can be an email, internal memo or a structured document. The project mandate can contain some basic information on the business case, project tolerances, reasons for the project, who the executive should be and risk information.

The information in the project mandate document is expanded into the Project Brief in the Starting up a Project process.

Project Plan

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

A control document for measuring progress. It shows the required products of the project, their delivery dates and costs as well as the quality objectives and how these will be achieved. It is not just a Gantt chart but contains product descriptions, product breakdown structure, responsibilities, how stages are used, lessons, how the project will be controlled, tolerances, and quality information.

Quality Management Strategy

A strategy defining the quality techniques and standards to be applied, and the various responsibilities for achieving required quality levels during a project.

A plan of action that defines the quality requirements and the control methods for all the products in the project. This document also confirms how the quality systems from the customer and supplier are going to be applied in the project. This is created at the Initiation Stage and becomes a part of the Project Initiation documentation.

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.

A product's ability to satisfy its intended properties by meeting expectations, requirements and specifications. One of the first questions you should ask when defining the Project is what quality is expected, for example, if you are developing a CRM system, some quality questions would be: how easy should the product be to use, what percentage of features should work when launched (this could be 99%), the time delay to carry out specific activities like a search.

Documenting the quality requirements really helps to define the project product and therefore the project.

Risk

An uncertain event or set of events that, should they occur, would 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.

An event that, if it occurs, may have a positive or negative effect on the project's objectives. Risks are constantly reviewed during the project using the Risk Register. As projects are unique in nature, they will have risks and these need to be managed.

Risk Register

A record of identified risks that are faced by an organization and its exposure to those risks.

A log of possible risks that the project faces, this is kept up to date during the project by the Project Manager. Imagine a spreadsheet with the following columns: Risk ID, Risk Author, Date Registered, Risk Category, Risk Description, Impact, Proximity, Risk Status, Risk Owner.

Senior Supplier

The Project Board role that provides knowledge and experience of the main disciplines involved in the production of the project's deliverables. The Senior Supplier represents the supplier interests within the project and provides supplier resources.

Senior Supplier is a Project Board role that represents the interests of those who are going to deliver the desired products. The supplier can be an in-house department or an external company. Their main concern throughout the project is "Can it be done?" and can it be done within the agreed time and costs and quality.

Senior User

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

The Senior User is a Project Board role that represents the future users of the project's product. They represent the Users' Interests. The Senior User is responsible to ensure that the product satisfies the quality and functionality requirements of the user and their main concern throughout the project is Will it Work as expected.

Stage Plan:

A detailed plan used as the basis for the project management control throughout a stage.

A Stage Plan is created by the project manager and has a similar structure to the Project Plan but it differs in two ways:
1) The project plan is very high level while the stage plan is much more detailed for example, it can show what has be done day to day.
2) The project plan lists all products that will be produced during the project while the stage plan is just focused on the products that will be created during a particular stage.

Stages (Management Stages and Technical Stages)

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.

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.

There are two types of stages Management Stages and Technical Stages.

Management Stages: A PRINCE2 a project is divided into stages and each stage is separated by a decision from the Project Board to continue or not to the next stage.

A Technical Stage is a grouping of a certain set of techniques used in the development of the product.

*One difference is that Management Stages can never overlap while the Technical Stages can overlap, **e.g.:** Designing, Building and Training may overlap.*

So how can the Project Manager manage Technical Stages from PRINCE2?
The PRINCE2 Project Manager uses Management Stages so they see which products are created in the Technical Stages and place these in the corresponding Management Stage.

***E.g.:** There may be a Training Technical stage that spans two Management Stages and the final output is approved training material. So the Project Manager looks to see how they can divide this work into two separate Management Stages. A solution can be to split the product into 2 products, a first product could be **draft training** and the complete product could be the **approved training material**. Therefore the draft training product can be produced in the first Management Stage and Approved Training Material product is produced in the next Management Stage. See page 106 for more information on this.*

Team Plans

An optional level of plan used as the basis for a team management control when executing Work Packages.

A Team Plan is created by the Team Manager to plan the execution of the activities which are agreed with the project manager. Team Plans are optional. These activities are grouped together into Work Packages and a Team Plan can be for one or more Work Packages.

PRINCE2 does not provide a format for Team Plans and the Team Manager can use a simple task list in excel, MS Project or create a plan that looks like a stage plan. In most projects the Project Manager may request to review the Team Plan to get a better idea of how the work will be done.

Tolerance

The permissible deviation above and below a plan's estimate of time and cost without escalating the deviation to the next level of management. Separate tolerance figures should be given for time and cost.

The estimated time and cost allowance in the project plan to tolerate possible deviations without the need of the Project Board intervention. Imagine if there was no tolerance in a project, then every small issue that the Project Manager would have, they would contact the Project Board, this would happen many times each day and the Project Board would end up running the project.

The Project Board members are very busy and don't want to be bothered each hour by the PM, so they give them tolerances for time, cost, quality, benefits, scope and risk and let the Project Manager get on with it. They are told to alert the Project Board only if it is forecasted for the project to go above one of these tolerances.

User(s):

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

The end users of the project's final deliverable; they will receive the benefits of the project.

Work Package:

The set of information relevant to the creation of one or more products. It will contain a description of the work, the Product Descriptions(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 such that the work is done within these constraints.

Work Packages are a way for the Project Manager to group work activities together and assign work to a team or Team Manager to produce one or more products. A Work Package is therefore a set of information about one or more required products. A Work Package can contain: Work Package description, product descriptions, techniques to be used, tolerances, date of agreement between PM and TM, how the TM will report to the PM and Quality information.