

PRINCE2, 2005 Edition - Part 1
Office of Government Commerce, UK
(A book review by R. Max Wideman)

In this Part 1 of our two-part paper we will introduce the PRINCE2 project management methodology, the book's structure and what we liked. In Part 2 we'll cover some special concepts specific to PRINCE2, some of the downsides we see from our perspective, and we'll finish with our summary conclusions.

Introduction

For those not familiar with this book, the Office of Government Commerce (OGC, UK) publishes *Managing Successful Projects with PRINCE2*. It is a prescriptive manual describing in detail a structured method for the effective management of a project. The latest version contains 456 pages, a 12% increase over its 2002 predecessor. PRINCE2 is a widely recognized de facto standard used extensively by governments and the private sector in the UK and around the world, see Figure 1.

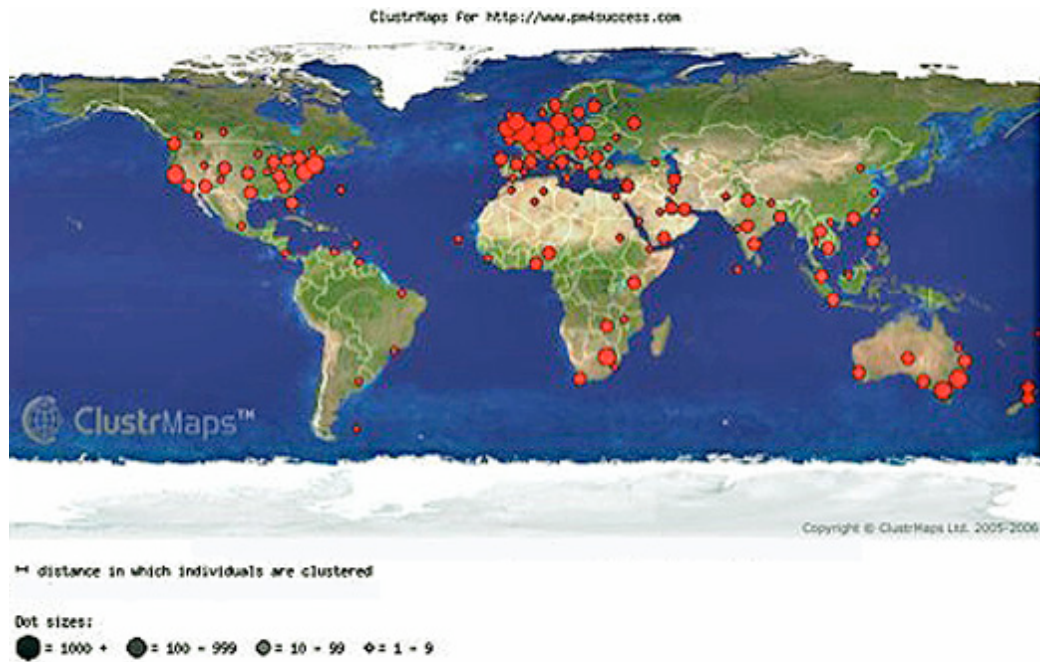


Figure 1: The world of PRINCE2

The widespread use of PRINCE2 owes much to the fact that it can be tailored and scaled to all manner of projects and situations. According to the APM Group:¹

It has become an international standard, with organizations around the world using it as their preferred approach to managing projects. This is reflected in the fact that:

- The PRINCE2 Manual is currently available in English, Danish and Mandarin Chinese, and is being translated into Dutch, French, German, Polish and Spanish
- The PRINCE2 Pocketbook has been translated into Italian and is currently being translated into French and German
- The PRINCE2 Glossary of Terms is available in English, Arabic, Bulgarian, Danish, Dutch, French, German, Greek, Italian, Japanese, Mandarin Chinese, Russian, Polish, Spanish and Vietnamese.

The method was first promulgated around 1989 and has since gone through a number of incarnations. We last reviewed PRINCE2 in some detail in its 2002 Edition back in November 2002 – see <http://www.maxwideman.com/papers/comparing/intro.htm>. However, we did so to draw a comparison with the Project management Institute's *Guide to the Project Management Body of Knowledge*.

Since then, the Guide has been updated to its third revision (2004) and PRINCE2 was updated to its latest revision last year. We reviewed the 2004 version of the Guide in considerable depth in papers from March to May 2005 – see <http://www.maxwideman.com/papers/pmbok3/intro.htm>. Moreover, the team leader of the latest PRINCE2 update, Colin Bentley, has written his own comparison between the latest versions of the two documents – see <http://www.maxwideman.com/guests/prince-pmbok/note.htm>. So now we feel it is appropriate to examine the latest version of PRINCE2, in its own right.

"PRINCE" stands for **P**ROjects **I**N **C**ontrolled **E**nvironments and is described as a structured method for effective project management. It is based on the experiences of scores of projects, project managers and project team who have contributed, some from their mistakes or omissions, others from their successes.² According to the Foreword, it is recognized as a world-class international product and is the standard method for project management, not least because it embodies many years of good practice in project management and provides a flexible and adaptable approach to suit all projects.³

The manual itself is limited in its scope first because it draws a distinction between "product life span" and "project life cycle" as shown in Figure 1. From the manual's perspective, the latter is only a small part of the former and consequently only covers the execution period of the project. This is so even though the "Business Case drives all the project management processes, from initial project set-up through to successful finish",⁴ it, together with the development of the solution to the need and intermediate-level planning, are not included under the terms of the manual. It may be concluded that, in PRINCE2's view, the project does not start until the earlier work, including any feasibility studies, and so on, actually move into formal and physical execution.

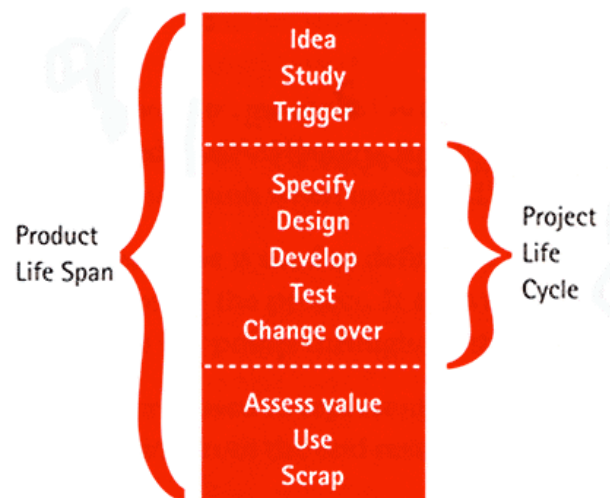


Figure 2: The product life span and project life cycle ranges in PRINCE2⁵

For direction on managing the earlier parts of a project, or "pre-project" in PRINCE2 terms, you must refer to a companion document, *Managing Successful Programmes* (MSP), also published by OGC. We reviewed this document in March 2006 – see <http://www.maxwideman.com/papers/successful/intro.htm>.

As the MSP name implies, this volume is focused on managing collections of projects such as "Making and delivering"; "Organizational Change"; and "External societal change" projects. That means that the "front end" of these projects do not receive dedicated attention as they tend to do in North America, but rather as a part of, and in competition with, any and all other projects that are being contemplated.

Second, as it says in the text, "PRINCE2 assumes that the project is run within the context of a contract".⁶ This statement is made in the discussion of purchasing so it obviously contemplates a legal contract. However, elsewhere there seems to be some ambivalence over this, where the context suggests the possibility of an "internal" commitment between divisions of a large organization. In short, the methodology does not appear to be suited to the large number of relatively modest in-house IS/IT projects in corporate IT departments.

Third, the general tone of the content suggests application to projects of significant value or complexity conducted under rigorous conditions of "high ceremony". These are projects such as you may find in governments at all levels, the process industries, engineering and construction companies, and the like. Indeed, PRINCE2 observes that: "Without a project management method, projects are rarely completed on time and within acceptable cost – and this is especially true of large projects."⁷ However, PRINCE2 does say: "tailoring the method to suit the circumstances of a particular project is critical to its successful use."⁸ In fact, where applicable, the standard format of the process descriptions includes a comment on "scalability".

Book Structure

The PRINCE2 manual is arranged into five major parts: Introduction, *Processes* (of which there are 8 and 39 sub-processes), *Components* (8), *Techniques* (3) that are considered specific to PRINCE2, and Appendices. This is reflected in the general sequence of the twenty-four chapters and seven appendices as follows:

1. Introduction
2. An introduction to PRINCE2

3. Introduction to processes
4. Starting up a project (SU) – covering 6 sub-processes
5. Initiating a project (IP) – 6 sub-processes
6. Directing a project (DP) – 5 sub-processes
7. Controlling a stage (CS) – 9 sub-processes
8. Managing Product delivery (MP) – 3 sub-processes
9. Managing stage boundaries (SB) – 6 sub-processes
10. Closing a project (CP) – 3 sub-processes
11. Planning (PL) – 7 sub-processes

12. Introduction to the PRINCE2 components
13. Business Case
14. Organization
15. Plans
16. Controls
17. Management of risk
18. Quality in a project environment

19. Configuration management
20. Change control

21. Introduction to techniques
22. Product-based planning
23. Change control technique
24. Quality review technique
 - Glossary
 - Appendix A: Product Description outlines
 - Appendix B: Project management team roles
 - Appendix C: Risk categories
 - Appendix D: PRINCE2 health check
 - Appendix E: Project document management

All the processes and sub-processes follow a consistent structure and format, namely:

- Fundamental principles
- Context
- Process description
- Scalability (where applicable)
- Responsibilities
- Information needs
- Key criteria
- Hints and tips

Other parts of the manual also provide hints and tips where appropriate.

Certain areas of project management are *not* covered on the grounds that these are well covered in the literature elsewhere. These areas include:⁹

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

Although PRINCE2 describes its eight processes and thirty-nine sub-processes at some length, the overarching planning that is contemplated is focused on the delivery of "products" and not activities. These "products" may be associated with either the project management process, in which case we sometimes referred to them as project management "assets", or they may be associated with the project's product deliverables. Either way, PRINCE2 views them as "standard [project] management products".¹⁰

Thus, Appendix A describes thirty-six Product Description outlines, and does so in a consistent format of:¹¹

- Purpose – Why it is needed
- Composition – What it will look like
- Derivation – Who will do it
- Quality criteria – The standard to which it will be prepared

These outlines include such standard items as Business Case, Project Brief, Product (not project) Breakdown Structure, Project Plan and Work Package.

Appendix B covers ten project management team roles as viewed by PRINCE2. These range from "Executive", to Project Manager to Project Support. In effect the Executive is the chair of the Project Board, a role we often describe as Project Director, and is the person with the commanding role in PRINCE2. The Project Manager has a much lesser role in terms of responsibility for the overall project, being responsible for the day-to-day of its running.¹² Nevertheless, it is his or her responsibility to produce a project result "*capable* of achieving the benefits defined in the Business Case" (emphasis added) with twenty-one "Specific responsibilities", largely administrative.

The Glossary contains 104 definitions, 16 more than in 2002.

What we liked: *Content consistency and structure*

We really like the fact that this 2005 version of PRINCE2 is an update of the 2002 version where changes have been made only to clarify some areas or resolve other areas that have shown difficulties. The remaining 85% of the text and chapter referencing is virtually identical. Consequently, users of the methodology can upgrade their PRINCE2 skills rather than have to learn a whole new procedure.

PRINCE2 recognizes four levels of management:¹³ Corporate Management that is not part of the project but typically sets the business context; the Project Board, representing the upper part of the project team; the project manager responsible for managing an authorized stage of the project; and the technical team management responsible for product delivery. In this way, the corporate business or program management interests are closely integrated with both project management at the project level as well as with the management of the project's technology at the team level.

An "Executive", more often called "Project Director" in North America, chairs the project board and is the person with the real responsibility for the project. This person represents the customer and is owner of the business case. He or she also ensures that the project or program maintains its business focus, has clear authority, and ensures that the project work, including risks, is actively managed.¹⁴

The project manager, on the other hand, is "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."¹⁵ These constraints are referred to as "Tolerances" and prescribe the ranges of acceptability of each of scope, quality, time and cost within which the project manager must manage. Any trend beyond these limits becomes an "Issue" and must be brought to the attention of the project board.

In terms of control, PRINCE2 establishes a good distinction between Tolerance, Contingency and Change Budget. "Tolerance is the permissible deviation from plan without bringing the deviation to the next higher authority."¹⁶ "Contingency, in PRINCE2 terms, is a budget including the time and money set aside to carry out the plan that will only be invoked if a linked risk actually occurs."¹⁷ A Change Budget is "The money allocated to the change authority to be spent on authorized Requests for Change."¹⁸ This is a valuable feature in projects where there is the likelihood of a significant number of small changes and "the Executive is asked to go back to corporate or programme management for an increase in the budget to cover the cost of such changes."¹⁹

What we liked: *Process relationships*

PRINCE2 displays the main relationships and links between its processes, components and techniques in

a simplified diagram shown in Figure 2. This figure, somewhat modified since the 2002 version, shows the system from the Executive's perspective of Directing the Project. It displays six central Processes acting on the Components, of which there are eight discrete items and which essentially represent project management products or "assets". The remaining two Processes, Directing and Planning are shown as overarching the whole system.

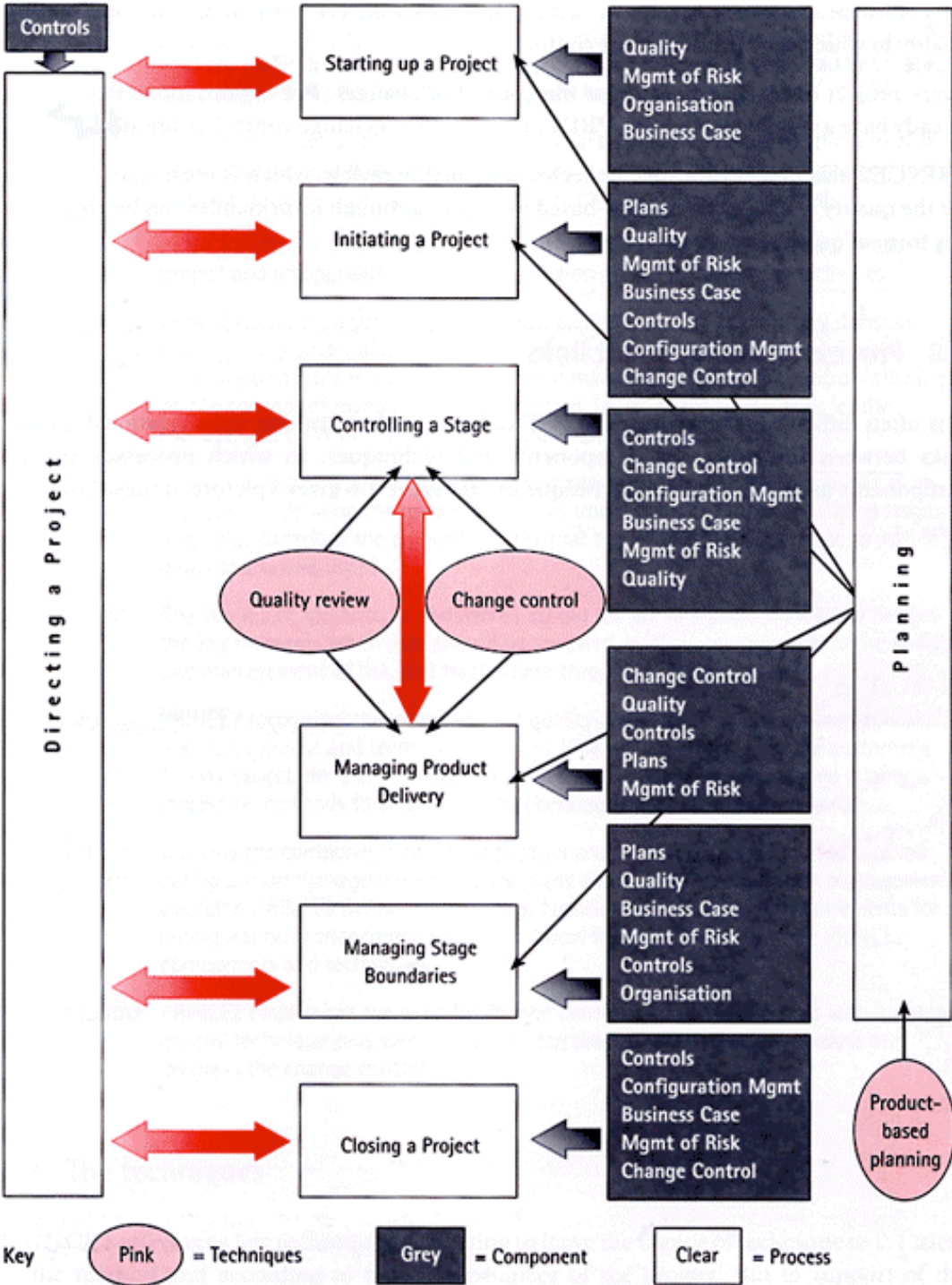


Figure 3: Simplified diagram of PRINCE2 components, processes and techniques²⁰

Although not stated specifically, one may conclude that the top three processes are in the domain of the Project Board under the Executive, while the lower three are in the domain of the project manager. The three techniques considered critical to PRINCE2 are shown in pink in the figure.

While the figure moves from *Starting up a Project* at the top to *Closing a Project* at the bottom, it is not intended to represent a project life span. In fact, PRINCE2 draws a distinction between project management stages and stages in the development of the product as two distinct sequences that may or may not be congruent. We will comment further on this later.

A process can be defined as "A series of actions directed towards a result"²¹ and consequently project management, a project, a method or methodology are all processes in one degree or another. It is hardly surprising, therefore, that PRINCE2 should claim itself as a "process-based approach to project management."²² Figure 3 elaborates on how PRINCE2's main complex process of *Directing a Project* invokes various lesser processes in acting upon each of the eight *Components*.

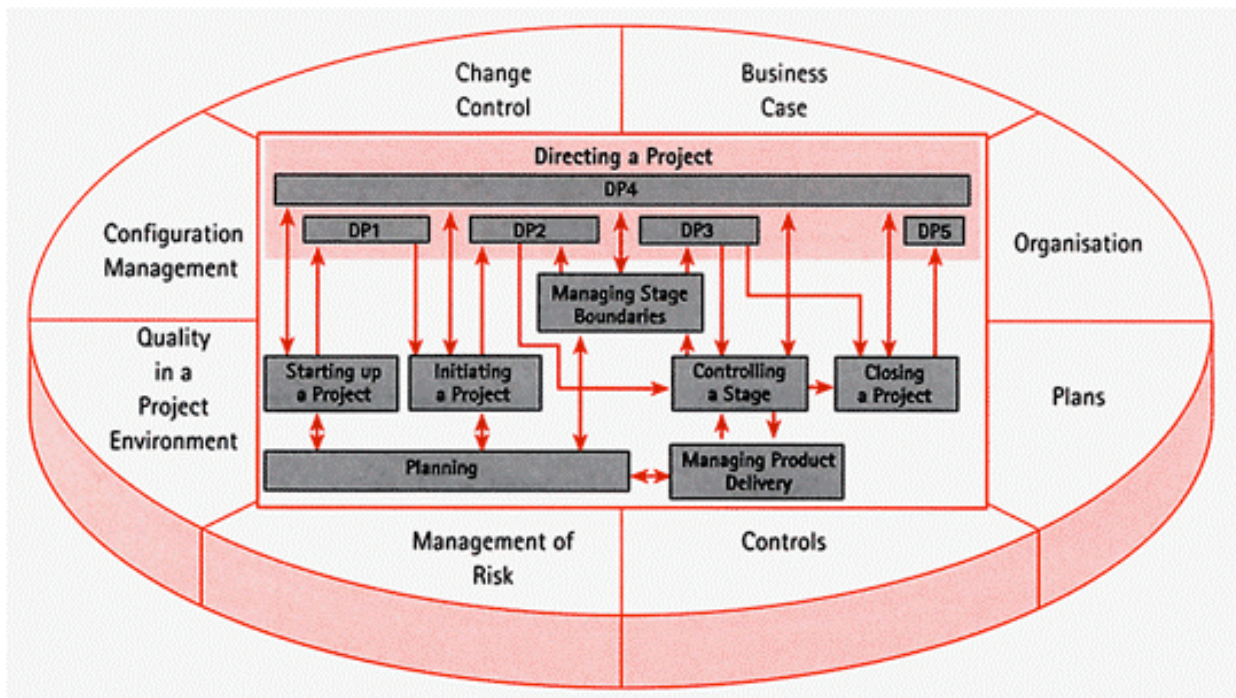


Figure 4: The PRINCE2 Component template²³

In the figure, DP4, DP1, DP2, DP3 and DP5 represent *Giving Ad Hoc Direction*; *Authorizing Initiation*; *Authorizing a Project*; *Authorizing a Stage or Exception*; and *Confirming Project Closure* respectively. Following a detailed description of every process and its sub-processes, the manual then details each *Component* in turn. In our view, the central part of the figure gives a good thumbnail sketch of how the complex business of managing a project has to work along with its component aspects.

We like the way in which the manual deals with each topic in a consistent and detailed manner using bulleted checklists and offering *Hints and tips* along the way.

What we liked: *Planning and Scheduling*

Product-based planning, rather than activity-based, is a key feature of PRINCE2, providing a focus on

the products to be delivered and their quality. It forms an integral part of the Planning (PL) process and leads into the use of other generic techniques such as network planning and Gantt charts.²⁴ It provides a product-based framework that can be applied to any project to give a logical sequence to the project's work. A "product" may be a tangible one, such as a machine, a document or a piece of software; or it may be intangible, such as a culture change or a different organizational structure.²⁵ We would argue that software is an "intangible" product, but we'll let that pass.

PRINCE2 describes four products created as a result of the PL technique:²⁶

1. A Final Product Description for the project
2. A Product Breakdown Structure
3. Individual Product Descriptions
4. A Product Flow Diagram

Each product is described in some detail in text that has been substantially rearranged and re-written since the 2002 PRINCE2 version. The examples and illustrations have also been elaborated.

Writing a clear, complete and unambiguous individual product description is a tremendous aid to its successful creation. The corollary is, of course, that if it is not possible to write the description, then more work, or another iteration, is necessary to ferret out the required information. Sometimes it is easier to identify the Individual Product Descriptions by working backwards from the Final Product Description, rather like developing a schedule with a fixed end date. Once created, the Individual Product descriptions are re-ordered into their logical sequence to form the Product Flow Diagram. The Product Flow diagram is then used to identify the activities needed to take one product, or set of products, and turn it into the next product or set of products in the sequence.²⁷

This feels counter intuitive to those who are used to creating activity flow diagrams. Obviously, every product must be included to capture every activity. The converse is that no activity is necessary unless it contributes to the final product outcome. A correctly formed product flow diagram, therefore, not only identifies the activities involved but also leads to a network dependency-based schedule or Gantt chart. PRINCE2 provides a good explanation of the technique and specifies the associated documentation to go with it.

In Part 2

Next month, in Part 2, we'll cover some special concepts specific to the methodology, some of the downsides we see from our perspective, and then we'll finish with our summary conclusions.

¹ *Embedding Best Practice*, The APM Group Ltd, UK, June 2006

² PRINCE2, 2005 Edition, Office of government Commerce, UK, 2005, p1

³ *Ibid*, p v

⁴ *Ibid*.

⁵ *Ibid*, Figure 2.1, p8

⁶ *Ibid*, p8

⁷ *Ibid*, p2

⁸ *Ibid*, p9

⁹ *Ibid*, p8

¹⁰ *Ibid*, p341

¹¹ *Ibid*, p236

- 12 Ibid, p401
- 13 Ibid, p21
- 14 Ibid, p332
- 15 Ibid, p336
- 16 Ibid, p233
- 17 Ibid, p236
- 18 Ibid, 330
- 19 Ibid, p54
- 20 Ibid, Figure 2.6, p20
- 21 Webster's Electronic dictionary
- 22 PRINCE2 (2005), p11
- 23 Ibid, p195, revised and redrawn in 2005
- 24 Ibid, p291
- 25 Ibid, p293
- 26 Ibid, p293
- 27 Ibid, p176