

PRINCE2™
PLANNING AND CONTROL
USING
MICROSOFT® PROJECT

UPDATED FOR MICROSOFT OFFICE
PROJECT 2007
BY
PAUL EASTWOOD HARRIS

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SUMMARY

The book is an update of my PRINCE2™ Planning and Control Using Microsoft® Project book and has been written so it may be used as:

- A training manual for a two-day training course,
- A self teach book, or
- A reference manual.

The screen shots for the book are taken from Microsoft Project Standard 2007 but the book may be used to learn Microsoft Project Professional 2007 and all versions of Microsoft Project 2003, 2002 and 2000 as the differences between the versions is described in this book

The book has been written to be used as the basis for a two-day training course and includes exercises for the students to complete at the end of each chapter. Unlike many training course publications this book may be used by the students as a reference book after the course.

This publication is ideal for people who would like to quickly gain an understanding of how the software operates and explains how the software differs from Primavera P3 and SureTrak, thus making it ideal for people who wish to convert from these products.

SPELLING

This book is written in US English to be compatible with the software menu. PRINCE2 terms have been spelt in British English spelling so not to contradict the British spelling of PRINCE2 terms.

AUTHOR'S COMMENT

As a professional project planner and scheduler and an Approved PRINCE2 Trainer I have used a number of planning and scheduling software packages for the management of a range of project types and sizes. There appeared to be very little literature aimed at the professional who understands how to run projects, however require a practical guide on how to use Microsoft Project in a PRINCE2 project environment. The first books I published were user guides/training manuals for Primavera SureTrak and P3 users. These were well received by professional project managers and schedulers, so I decided to turn my attention to Microsoft Project 2000, 2002 and 2003. To produce this book I edited my Microsoft Project 2003 book to explain how Microsoft Project may be used with PRINCE2. I trust this book will assist you in understanding how to use Microsoft Project on your PRINCE2 projects. Please contact me if you have any comments on this book.

I would like thank my daughter Samantha Harris and Peter Whitelaw of Rational Management Pty Ltd, Victoria, Australia for their assistance in the production of this publication.

COVER PHOTOGRAPHS

Top right Photograph of the Endeavour Replica in Melbourne Docklands, Australia.
Middle right Iron bridge at Lower Landing on the West Coast Wilderness Railway Tasmania, Australia.
Bottom right ConocoPhillips Ltd, Humber Refinery, UK.

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1 INTRODUCTION

1.1 *Purpose*

The purpose of this book is to provide you with methods of using Microsoft Project and the PRINCE2 Planning and Controlling components in a single project environment. The PRINCE2 Product Based Planning Technique is not simply transposed to Microsoft Project; this book makes some suggestions on how to best handle these areas of incompatibility.

The screen shots in this book were captured using Microsoft Project Standard 2007 and Windows XP. Readers using Microsoft Project Professional 2007 will have additional menu options to those shown in this book, which will operate when their software is connected to Microsoft Project Server software. Users of Microsoft Project 2003, 2002 and 2000 will find some minor differences in how the software functions which are outlined in **Chapter 23 WHAT IS NEW IN MICROSOFT PROJECT** and in the relevant sections of this book.

By the end of this book, you should be able to:

- Understand the steps required to create a project plan using PRINCE2
- Set up the software
- Define calendars
- Add tasks which will represent the PRINCE2 **Products** and/or **Activities**
- Organize tasks and format the display
- Add logic and constraints
- Use Tables, Views and Filters to present PRINCE2 **Project Plans**, **Stage Plans**, **Exception Plans** and **Team Work Package Plans**
- Print reports
- Record and track progress, producing PRINCE2 **Highlight Reports** and **Checkpoint Reports**
- Customize the project options
- Create and assign resources
- Understand the impact of task types and effort driven tasks
- Analyze resource requirements and resource level a schedule
- Status projects that contain resources, producing resourced **Highlight Reports** and **Checkpoint Reports**
- Understand the different techniques for scheduling

The book does not cover every aspect of Microsoft Project, but it does cover the main features required to create and status a project schedule. It should provide you with a solid grounding, which will enable you to go on and learn the other features of the software by experimenting, using the Help files and reviewing other literature.

This book has been written to minimize superfluous text, allowing the user to locate and understand the information contained in the book as quickly as possible. It does NOT cover functions of little value to common project scheduling requirements. If at any time you are unable to understand a topic in this book, it is suggested that you use the Microsoft Project Help menu to gain a further understanding of the subject.

1.2 Required Background Knowledge

This book does not teach you how to use computers or to manage projects. The book is intended to teach you how to plan and control a project using Microsoft Project in a PRINCE2 project environment. Therefore, to be able to follow this book you should have the following background knowledge:

- An understanding of the PRINCE2 Project Management Methodology.
- The ability to use a personal computer and understand the fundamentals of the operating system.
- Experience using application software such as Microsoft Office, which would have given you exposure to Windows menu systems and typical Windows functions such as copy and paste.

1.3 Purpose of Planning

The ultimate purpose of planning is to build a model that allows you to predict which tasks and resources are critical to the timely completion of the project. Strategies may then be implemented to ensure that these tasks and resources are managed properly, thus ensuring that the project will be delivered within **Tolerances**, or more traditionally described as delivered **On Time** and **Within Budget**.

A PRINCE2 **Tolerance** is the permissible deviation from plan without bringing the deviation to the attention of the next higher authority. This may be negative or positive and be defined in values such as costs, time, quality, scope and risks.

Planning aims to:

- Identify the Products and Activities required to deliver a project
- Evaluate different project delivery methods
- Identify and optimize the use of resources
- Optimize time and evaluate if target dates may be met
- Identify risks and set priorities
- Provide a baseline plan against which progress is measured
- Communicate the plan to all stakeholders, including what is to be done, when and by whom
- Provide early warning of potential problems and enable proactive and not reactive action to be taken
- Assist management to think ahead and make informed decisions

Planning helps to avoid:

- Increased project costs or reduction in scope and/or quality
- Additional changeover and/or operation costs
- Extension of time claims
- Loss of your client's revenue
- Contractual disputes and associated resolution costs
- The loss of reputation of those involved in a project
- Loss of a facility or asset in the event of a total project failure

1.4 Definition of a Plan

PRINCE2 defines a plan as a document identifying all the Products to be delivered by a project and their associated timescale, cost, quality and targets for the production of each.

A PRINCE2 Project Plan must at all times be able to deliver the expected benefits identified in the Business Case.

PRINCE2 also states that all plans must have the approval and commitment of all the appropriate management levels.

A plan is therefore not just a Microsoft Project Gantt Chart (bar chart), although a Gantt Chart is an important output of the planning process.

Microsoft Project is also able to record resource hours, costs and targets, and other basic information that can be kept in the Notes or Custom (user defined) Fields. It is neither a quality assurance nor a document management software package. Specialist packages should be considered for those processes.

1.5 Elements of a Plan

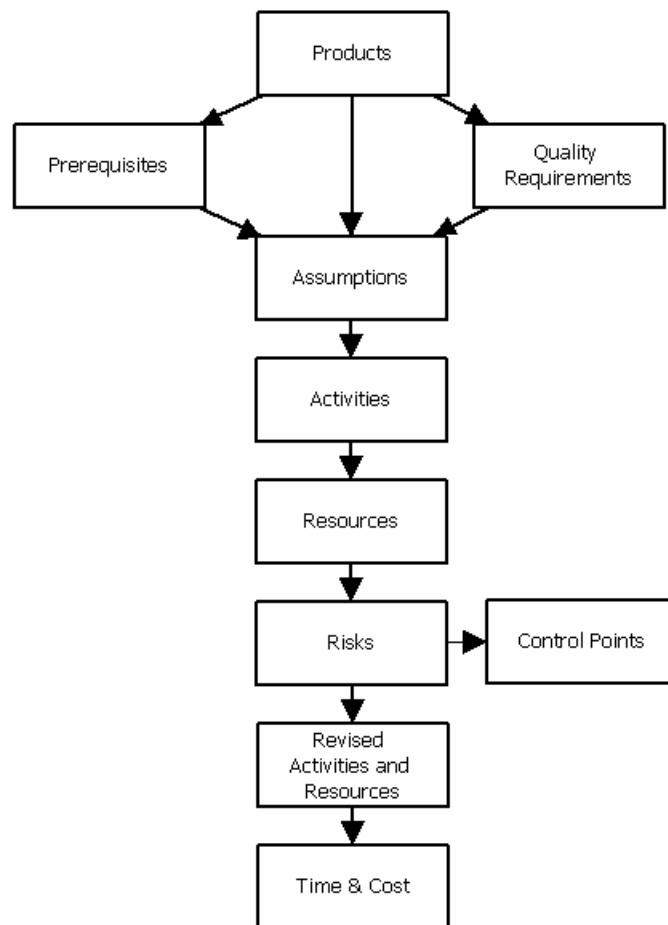
PRINCE2 defines the elements of a plan as:

- Products to be produced, both Specialist and Management
- Activities required to produce the Products
- Activities to validate the Products' quality
- Resources required to produce the Products, including management and quality
- The relationships or dependencies between the Products and Activities
- External dependencies that will influence Product creation
- Timings for the Products
- Control points to measure progress
- Tolerances in time, cost and any other agreed variable

All these elements may be entered into Microsoft Project, as well as additional information such as Notes and links to documents.

A Plan must be supported with a document that explains:

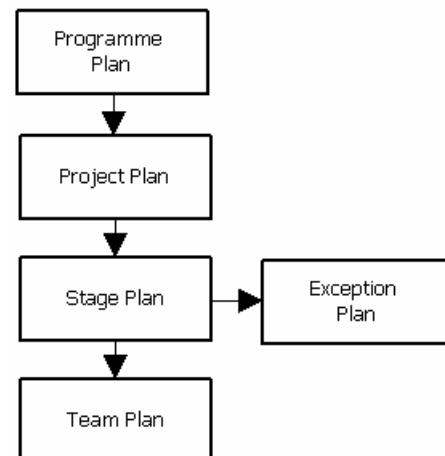
- The scope of the Plan
- The method to be used to execute the project
- Methods to measuring progress and report
- Quality control techniques
- Assumptions and risks



Note the above picture was created using Microsoft Project 2007.

1.6 Plan Levels

PRINCE2 defines four levels and five types of plans:



- **Programme Plan**, a Project Plan may be a stand-alone plan or part of a portfolio of multiple projects within a programme.
- **Project Plan**, this is mandatory and updated throughout the duration of a project.
- **Stage Plan**, there are a minimum of two Stage Plans: an **Initiation Stage Plan** and **First Stage Plan**. (There would be usually one Stage Plan for each Stage.)
- **Exception Plan**, which is at the same level and detail as a Stage Plan and replaces a Stage Plan at the request of a Project Board when a Stage is forecast to exceed Tolerances.
- **Team Plan** is optional and would be used on larger projects where Teams are used for delivering Products which require detailed planning. A typical example is a contractor's plan that would be submitted during the bidding process.

1.6.1 Programme Plan

A **Programme Plan** contains a large amount of information including:

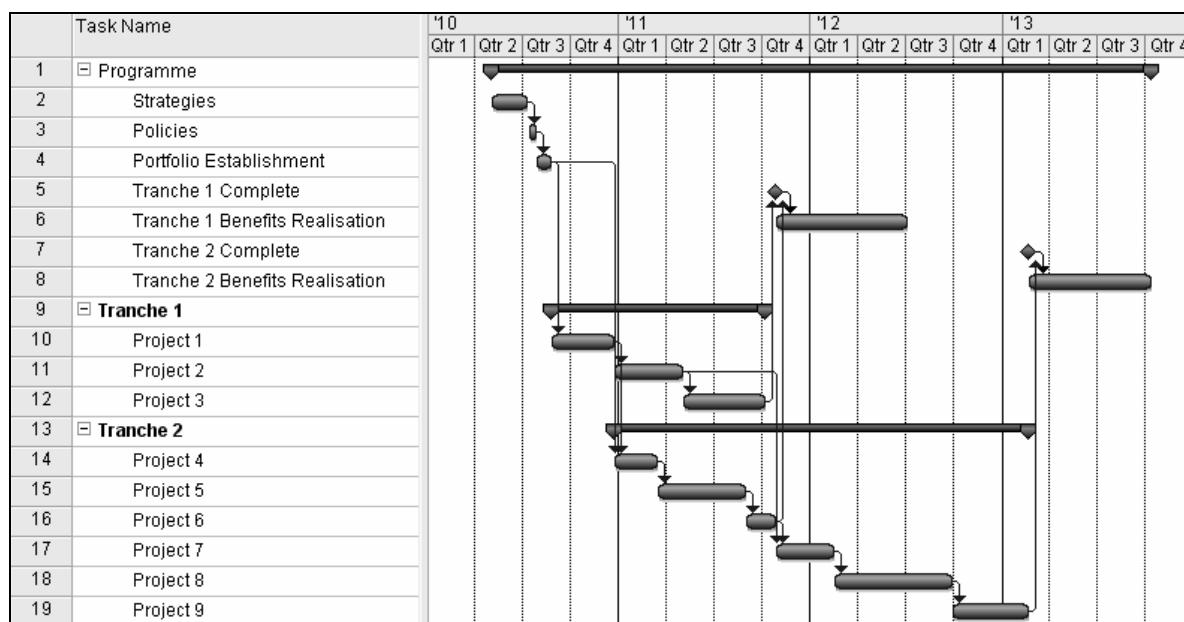
- The **Vision Statement**, a statement of the target or targets of an organisation and the performance measurements of the new capabilities.
- The **Blueprint**, the outline of practices, processes, information and technology required to deliver the Vision Statement.
- **Benefits**, a statement of the benefits that the programme will deliver the Organisation. Benefits may be scheduled and monitored using Microsoft Project with tasks in a programme level.
- **Projects**, which may be grouped under **Tranches**.
- **Resources**, which outlines the people, equipment, funding and all other assets required to deliver the Projects. This allows the management of resources amongst projects; it is possible to share a Microsoft Project Resource pool over more than one project.
- **Stakeholders**, identification and communication with the stakeholders to ensure that the right products are delivered; their acceptance is very important.
- **Risks**, managed at both Programme and Project level. A sound Risk Management Plan and supporting processes are required to successfully manage a Programme.

- **Timetable**, this outlines deadlines and the timeline that the programme must work to. This timeline would usually impose start and completion dates for projects. The programme work may be scheduled with Microsoft Project and include tasks for Benefits Realisation.
- **Progress monitoring**, established in a programme. Programmes may be divided into **Tranches**, which are distinct steps of a Programme, they may be tied to a financial instalment and provide a point where the business benefits of completed projects may be evaluated.
- **Transition** addresses the cultural changes required in an organisation from the Project Approach through to the smooth operation of a new process.

Programme planning steps are as follows:

- The Portfolio of projects should be designed.
- The Projects and the Programme Benefits Realisation are scheduled and the Benefits Realisation should be aligned with the programme strategic objectives.
- The Project plans should show an increasing level of detail as they are executed and progress is reflected back into the Programme Plan.
- The Programme schedule will have to be monitored, reviewed and revised as the projects progress and the effects of external events and emerging risks impact on the Programme.

Below is a very simple example of a programme plan produced with Microsoft Project to demonstrate how Microsoft Project may be used to assist in the management of Programmes:



1.6.2 Project Plan

The Project Plan is the overall control document for the **Project Board**, who is responsible for directing and monitoring the project in terms of Product, Cost, Timing, Resources and Control Points. Quality is documented in the Project Quality Plan. The Project Plan is part of the Project Initiation Document (PID) and the Project Plan is Baseline after the project has been authorised in **DP2 – Authorising a Project**.

The Project Plan is updated at least:

- At the end of each Stage, and
- When a Project has exceeded Tolerances and the Project Board has requested the Exception Plan.

1.6.3 Stage Plan

There are a minimum of 2 Stages in a PRINCE2 project and each have a plan:

- Initiation Stage Plan, created during Starting Up a Project, and
- First Stage Plan, created during the Initiation Stage.

A **Next Stage Plan** is created towards the end of the previous Stage and approved by the Project Board before the next Stage commences.

A Stage Plan provides the Project Manager with a tool for day-to-day management of the project. It would have a greater level of detail than the Project Plan and would fit into the timing of the Project Plan. A Stage Plan may be created in Microsoft Project in several ways:

- Granulating the Project schedule into more detail in the Projects schedule file , thus creating a single schedule that contains both Project and Stage schedules, or
- Creating a stand-alone schedule for each Stage that is manually aligned to the Project Plan. This allows the Project Manager to set tighter time Tolerances on a Stage schedule than the Project schedule. Thus creating a Stage schedule with a tight Stage Tolerances to force Team Managers to deliver the products on time, or
- Creating a stand-alone schedule for each Stage that is inserted into a Project Schedule.

1.6.4 Exception Plan

When a Stage exceeds Tolerances, normally identified as a breach of time or cost but could include Scope, Quality, Risk or Benefit, then the project is in Exception. If a Stage breaks Tolerances:

- The Project Manager may create an Exception Report in the sub-process **CS8 – Escalating Project Issues** and would submit the Exception Report, which should include options for the future course of the project, to the Project Board.
- The Project Board may request an Exception Plan from the Project Manager in **DP4 – Giving Ad Hoc Direction**.
- The Project Manager would produce an Exception Plan in **SB6 – Producing an Exception Plan** and submit it for approval by the Project Board,
- Should the Project Board approve the Exception Plan in **DP3 – Authorising a Stage or Exception Plan**, this plan would replace the current failed Stage Plan.

1.6.5 Team Plan

Team Plans are optional plans for detailing out the delivery of one or more products included in a **Work Package** and would typically be represented by:

- A subcontractor plan for the delivery of a product which could be submitted with a bid for work, or
- A plan supplied by another team, group or department for the internal delivery of products.

A Team Plan should be approved as part of **Accepting a Work Package** and progress would be reported in **Checkpoint Reports** from a **Team Manager** to the **Project Manager**. In a similar way to the development of a Stage Plan from a Project plan, a Team Plan may be integrated into a Stage Plan in several ways. For example:

- A single task may be manually inserted in the Stage schedule to represent all the tasks from a Team schedule, and manually updated.
- A single task representing each of the Team schedule summary tasks may be manually inserted into the Stage schedule and manually updated, thus providing a summary of the Team schedule with more than one task.
- When a Team schedule is received electronically it may have all its tasks copied and pasted into the Stage plan as long as all the activities and resources are common.
- When a Team schedule is received electronically it may be inserted into the Stage schedule and look like a sub-project.

1.7 Controlling a Project

Controlling a project ensures:

- The work is being authorised in accordance with the plan
- The required products are being produced
- The required quality is being met
- The products are being produced on time, with the planned resources and to the planned costs
- The project products will achieve the **Business Case**

Controlling a project provides the next level of management with information allowing them to:

- Monitor the progress of products
- Compare the progress with the plan
- Review options
- Forecast problems as early as possible enabling corrective action to be taken as early as possible
- Authorise further work

1.7.1 Project Board Controls

The Project Board controls the project using the following processes:

- **DP1 – Authorising Initiation** where an Initiation Stage Plan would be reviewed and approved.
- **DP2 – Authorising a Project** where the Project Plan and First Stage would be reviewed and approved.
- **DP3 – Authorising a Stage Plan** where:
 - A Stage would be reviewed and approved, or
 - After receiving an Exception Plan and holding an Exception Assessment meeting, the Exception Plan would be reviewed and approved.
- **DP4 – Giving Ad Hoc Direction** after reviewing:
 - Highlight Reports from the Project Manager produced in **CS6 – Reporting Highlights** which would include an update of the Stage Plan, or
 - Review Exception Reports created by the Project Manager in **CS8 – Escalating Project Issues**, which would show Tolerances being exceeded.
- **DP5 – Confirming Project Closure** where the Actual Duration and Costs would be compared to the Planned Duration and Costs.

1.7.2 Project Manager Controls

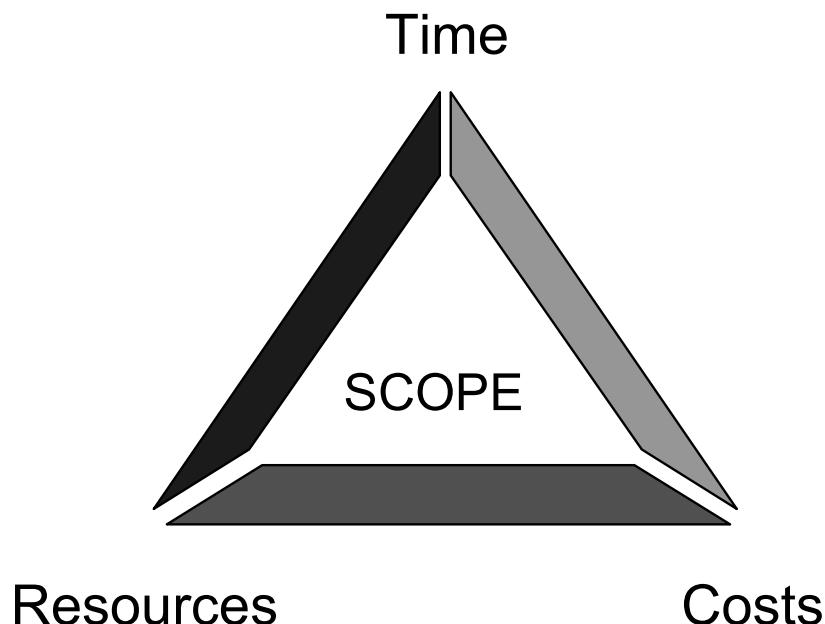
The Project Manager controls the project through the normal day-to-day management activities which should be recorded on the **Daily Log**. The Project Manager controls Product delivery through:

- The definition of Products in **PL2 – Defining and Analysing Products**,
- Authorising work to commence in **CS1 – Authorising Work Packages**,
- **CS2 – Assessing Progress** where the Project Manager would review Checkpoint Reports created by Team Managers, and
- **CS9 – Receiving Completed Products**.

1.8 Project Planning Metrics

There are four components that are usually measured and controlled using planning and scheduling software:

- Time
- Effort (resources)
- Cost
- Scope



A change in any one of these components normally results in a change in one or both of the other two.

Other project management functions that are not traditionally managed with planning and scheduling software but may have components reflected in the schedule include:

- Document Management and Control,
- Quality Management,
- Contract Management,
- Issue Management,
- Risk Management,
- Industrial Relations, and
- Accounting.

The development of Enterprise Project Management systems has resulted in the inclusion of more of these functions in project planning and scheduling software.

1.9 Planning Cycle

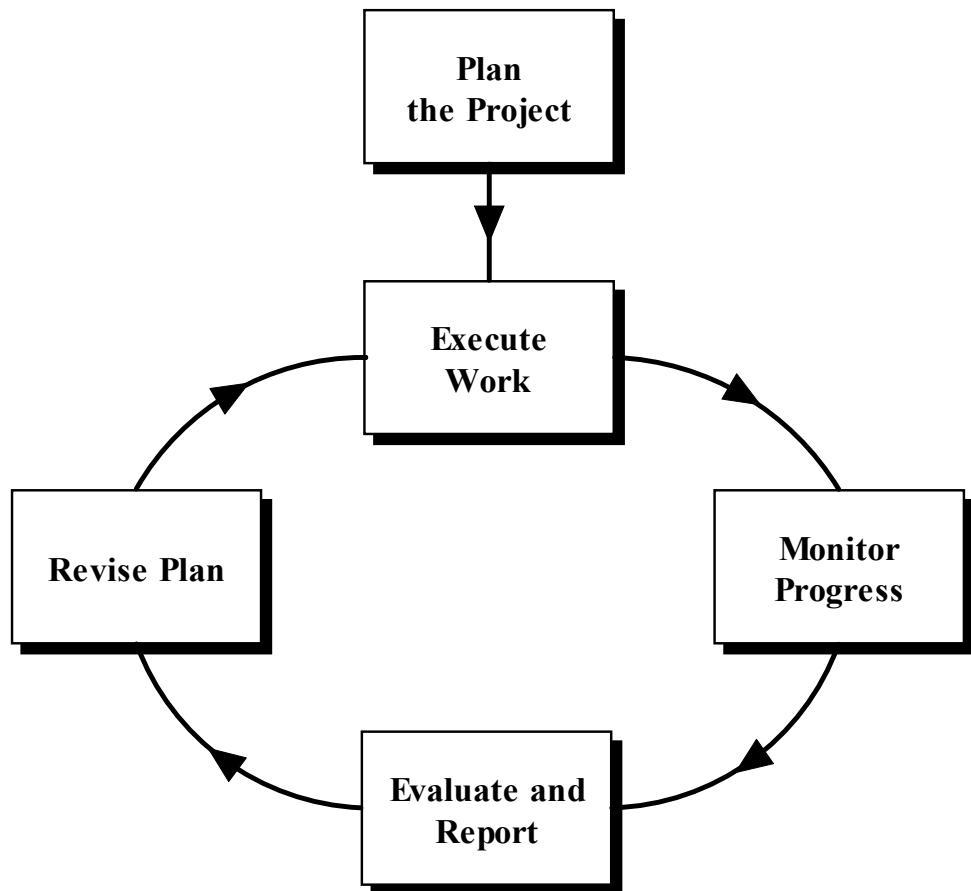
The planning cycle is an integral part of managing a project. A software package such as Microsoft Project makes this task much easier.

When the original plan is agreed to, either Project or Stage, the **Baseline** is set. The **Baseline** is a record of the original plan. The **Baseline** dates may be recorded in Microsoft Project in data fields titled **Baseline Start** and **Baseline Finish**.

After project planning has ended and project execution has begun, the actual progress is monitored, recorded in **CS2 – Assessing Progress** and compared to the **Baseline** dates in **CS5 – Reviewing Stage Status**.

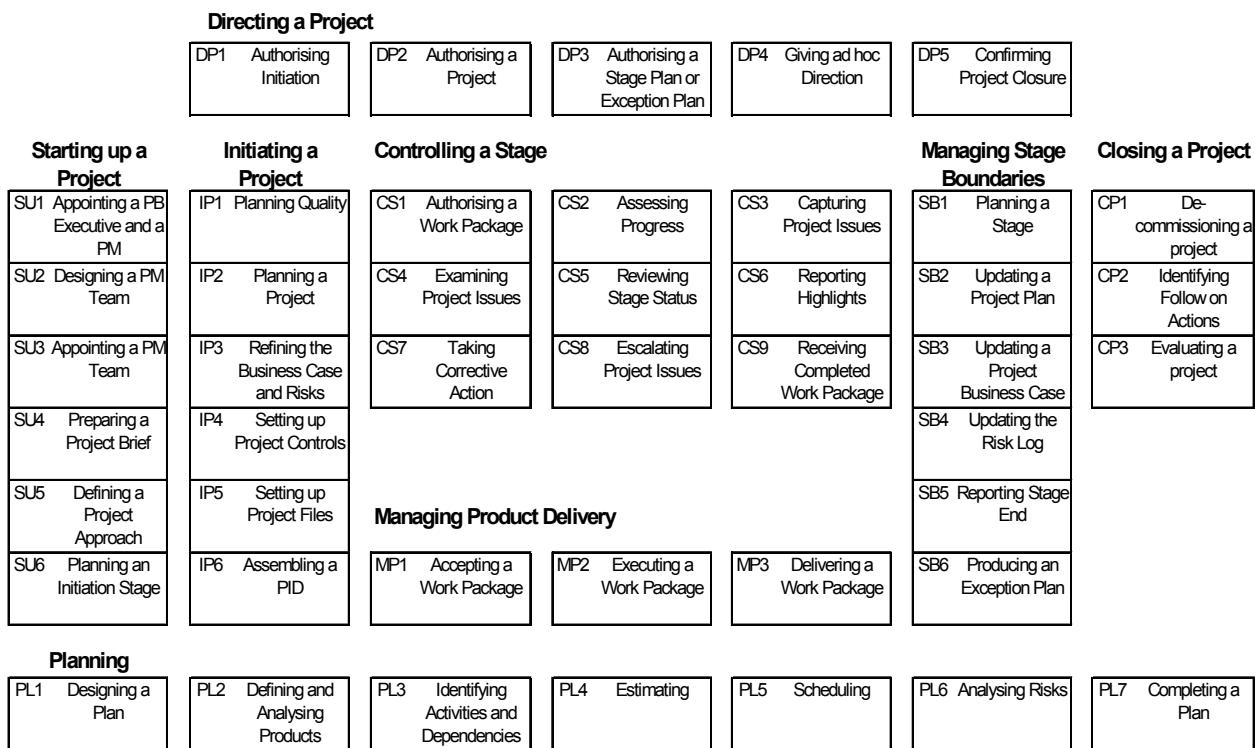
The progress is then reported in **Checkpoint Reports** produced by **Team Managers** for the **Project Manager** or **Highlight Reports** produced by the **Project Manager** for the **Board**.

The plan may be amended by adding or deleting tasks and adjusting Remaining Durations or Resources. A revised plan is then published as progress continues.



1.10 PRINCE2 Planning Component and Microsoft Project

The picture below shows the PRINCE2 processes:



It is possible to use Microsoft Project to support most PRINCE2 processes, as presented in the table below:

SU2	Designing a PM Team	There are some functions in Microsoft Project that allow Organisation information to be recorded. This may be achieved by using either a Resource Customized Field or a Resource Customized Outline Code to record the Organisation Structure and assign these codes to resources.
SU6	Planning an Initiation Stage	The Initiation Stage plan may be prepared and presented in Microsoft Project.
PL1	Designing a Plan	Microsoft Project may be nominated as the planning tool in this process. However it would not be used to define this process, normally a word processor software package such as Microsoft Word to create the Plan Design document.
PL2	Defining and Analysing Products	The PRINCE2 Product Based Planning technique is a good technique and is used to define and analyze products. Products may be represented as Tasks, or Summary Tasks using the Outlining feature, or by using a Custom Outline Code.

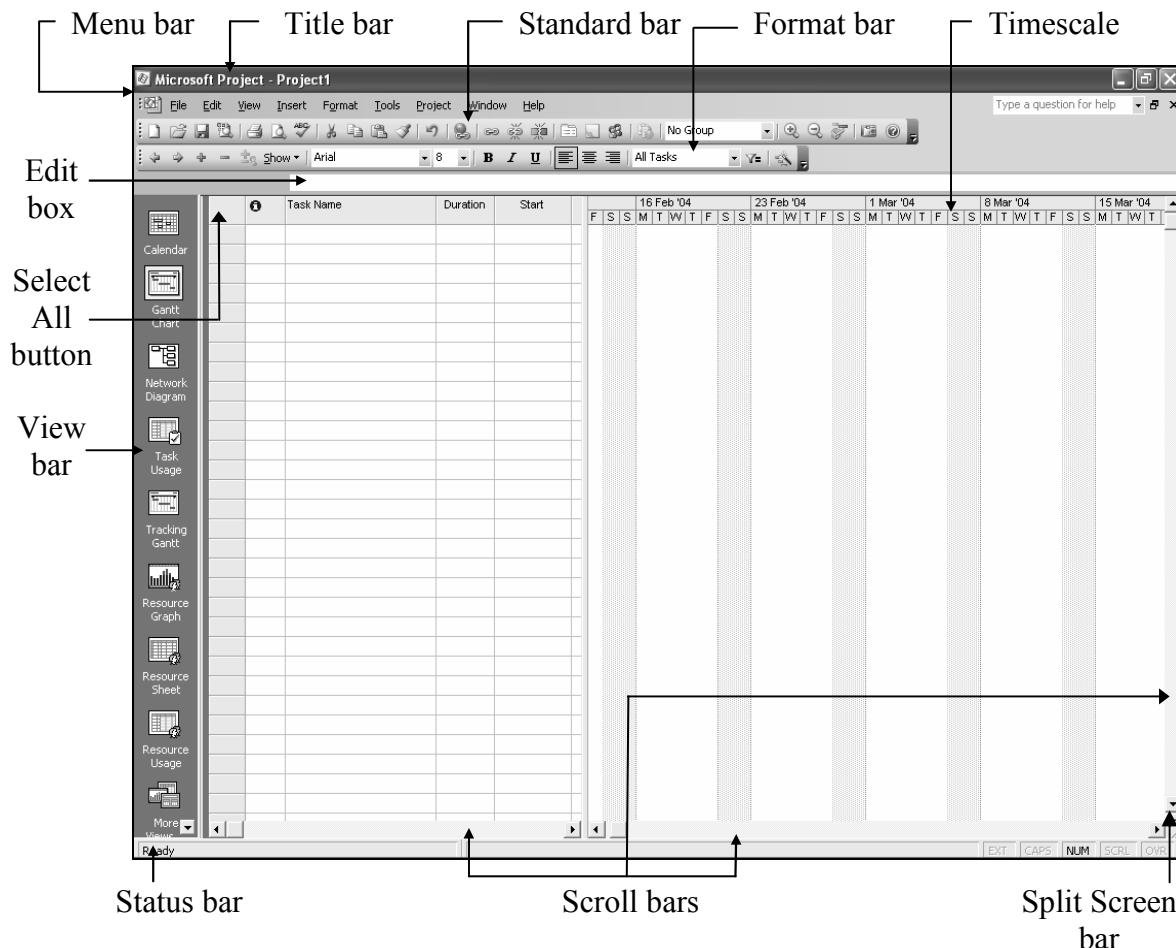
	Product Based Planning	<p>1. Defining the Product Breakdown Structure may not be duplicated exactly in Microsoft Project due to formatting limitations. Graphical flow charting tools or specialist PRINCE2 tools may be used to duplicate this process exactly. Only a close approximation of a Product Breakdown Structure may be duplicated using Outlining or a Custom Outline Code structure.</p> <p>2. Product Descriptions may be recorded in Microsoft Project using a number of methods including:</p> <ul style="list-style-type: none"> ➤ Notes, as an attached file, or ➤ Custom Fields. <p>When data such as Product Descriptions are entered into Notes or in User Defined Fields in Microsoft Project, this information is no longer accessible to those who do not have access to the software. This may deter the use of Microsoft Project to record such data.</p> <p>3. A PRINCE2 type Product Flow Diagram may be created in Microsoft Project by using the Network Diagramming function; however, users may find this software function a little time consuming to use for this purpose.</p>
PL3	Identifying Activities & Dependencies	Microsoft Project will handle this process as it is the primary purpose of the product.
PL4	Estimating	Microsoft Project may be used for estimating and has a number of functions that would assist including Labor Resources, Material Resources, Cost Resources (new to Microsoft Project 2007) and Fixed Costs. A user must be aware that a detailed schedule with many resources and costs is very difficult to update and maintain as the project progresses. Consider the use of an external estimating system or a spreadsheet with the summary costs then transferred to Microsoft Project.
PL5	Scheduling	Microsoft Project is designed to handle this function.
PL6	Analysing Risks	Microsoft Project is not a Risk Analysis tool. It may be used to evaluate options and include risk countermeasure activities; however, it is recommended that Risk Analysis data be recorded outside Microsoft Project.
PL7	Completing a Plan	The output from Microsoft Project would form part of the plan, but it should not be the only element in the plan. Microsoft Project Views and Tables would be used to create reports for stakeholders to review the schedule.
DP1	Authorising Initiation	The Initiation Stage schedule would be created in Microsoft Project and form part of the Initiation Stage Plan authorised in this PRINCE2 sub-process.
DP2	Authorising a Project	During this process a project schedule created in Microsoft Project would be analyzed. Microsoft Project Views and Tables would be used to create reports for the Project Board to review.
DP3	Authorising a Stage or Exception Plan	The review of a Microsoft Project Stage schedule would form part of this review.

DP5	Confirming Project Closure	The Project and Last Stage Plan should be reviewed to ensure all activities are complete.
CS1 and MP1	Authorising and Accepting a Work Package	The Timing and Costs aspects of a Work Package may be calculated and recorded in Microsoft Project. When there is more than one task per Work Package then tasks associated with a Work Package may be tagged with a Custom Field and all the WP tasks viewed with a filter when the WP tasks are separated by other activities, or if the activities are in one location they may be demoted under a summary task.
CS2 and CS5	Assessing Progress and Reviewing Stage Status	These processes could be managed in Microsoft Project by statusing the schedule in the normal way. Microsoft Project Filters would assist in isolating Stage activities and the Baseline function would show deviation from the Approved Stage Plan.
MP2	Executing a Work Package	Microsoft Project may be used to record and report the progress of a Work Package.
CS6	Reporting Highlight	Microsoft Project Views, Tables and Filters may be used to create elements of a Highlight Report.
MP3 and CS9	Delivering a Work Package and Receiving Completed Work Package	A Microsoft Project Schedule would be updated when a Work Package is completed and delivered.
SB1	Planning a Stage	Microsoft Project may be used in the way identified in PL1 to PL7 above.
SB2	Updating a Project Plan	The Project schedule would be updated as part of this process. Activities would be updated with progress and compared to the Approved Project Plan.
SB5	Reporting Stage End	The Stage schedule would be updated as part of this process.
SB6	Producing an Exception Plan	The replacement Stage schedule and possibly the Project schedule would be updated as part of this process.
CP3	Evaluating a Project	The Baseline schedule should be compared to the actuals and the performance evaluated from this comparison.

4 NAVIGATING AROUND THE SCREEN

4.1 Identify the Parts of the Project Screen

After a blank project has been created from a template, the default Microsoft Project 2007 screen will look like this:



Microsoft Project has a Windows-style menu system with a typical Windows look-and-feel.

- The project name is displayed after **Microsoft Project** at the top of the left-hand side of the screen.
- The drop-down menus are just below the project name.
- The toolbars are displayed below the menu.
- The left-hand side of the line underneath the toolbars is the **Edit Box** and **Edit Box**. Any editable data may be edited in the **Edit Box** or directly in the field.

		Project Kickoff							
		Task Name	Duration	Start	Finish		24 Nov '08	1 Dec '08	
1		Project Kickoff	1 day?	1 Dec '08	1 Dec				

The and icons are displayed on the left of the **Edit Box** only when performing editing, and may be used for accepting and not accepting data changes that are made from within the edit box.

- The main display has the **Bar Chart** or **Gantt Chart** on the right-hand side, with the **Timescale** above, and the **Data Columns** on the left-hand side with their column titles above them. The divider between the two areas may be dragged from side to side by holding down the left mouse button.
- The **View Bar** displays the same options as the **View** menu and is located on the far left of the screen. This may be hidden or displayed by:
 - Selecting **View**, **View Bar**, or
 - Holding the mouse pointer over the **View Bar**, right-clicking to display a menu, and selecting **View Bar**.
- The horizontal **Scroll Bars** are at the bottom of the screen and the **Status Bar** is below the **Scroll Bars**. The vertical **Scroll Bar** is at the right-hand side of the screen.



It is recommended screens to hide the **View Bar** when using computers with small as it consumes valuable screen space that is often better utilized showing project data.

4.2 Customizing the Screen

The screen may be customized in a number of ways to suit your preferences. The toolbars and menu bar may be moved around the screen by holding down the right mouse button and dragging them to a new position on the screen.

4.2.1 Toolbars

Toolbars will not be covered in detail but significant productivity improvements may be made by ensuring that functions frequently used are available on a toolbar.

- There are many built-in toolbars in Microsoft Project. These may be displayed or hidden by:
 - Using the command **View**, **Toolbar** or **Tools**, **Customize**, **Toolbars...** and selecting the **Toolbar** tab, then checking or un-checking the required boxes to display or hide the toolbars, or
 - Right-clicking the mouse in the toolbar area to display a Toolbar menu.
- Icons may be added to a bar by selecting **Tools**, **Customize**, **Toolbars...**, **Commands** tab. **Toolbar Icons** may be selected from the dialog box and dragged onto any toolbar.
- Icons may be removed from the toolbars after the **Customize** (Toolbar) form is opened by holding down the left mouse button on the icon and dragging them off the toolbar.
- Icons may be reset to default by selecting **Tools**, **Customize**, **Toolbars...**, selecting the **Toolbar** tab and clicking on **Reset...**
- Other toolbar display options are found under **Tools**, **Customize**, **Toolbars...** and then selecting the **Options** tab.



It is recommended to check the **Always show full menus** option in the **Tools**, **Customize**, **Toolbars...**, **Options** tab to ensure full menus are always displayed. This saves time waiting for the menu item you require to be displayed.

4.2.2 Menu Bar

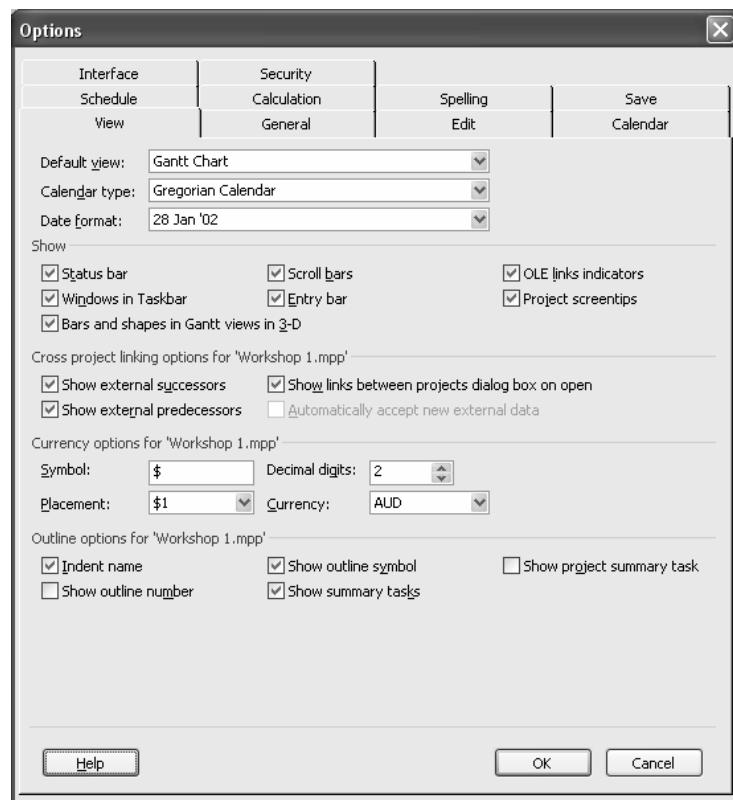
The **Menu Bar** display options are found under **Tools**, **Customize**, **Toolbars...** and then selecting the **Options** tab.

4.3 Setting up the Options

The basic parameters of the software must be configured so it will operate the way you desire. In order for the software to operate and/or calculate the way you want, some of the defaults must be turned on, or off, or changed. These configuration items may be found under **Tools, Options....**

We will discuss some of the more important options now. All the Options are discussed in the **OPTIONS** chapter. Select **Tools, Options...** to display the **Options** form.

Select the **View** tab:

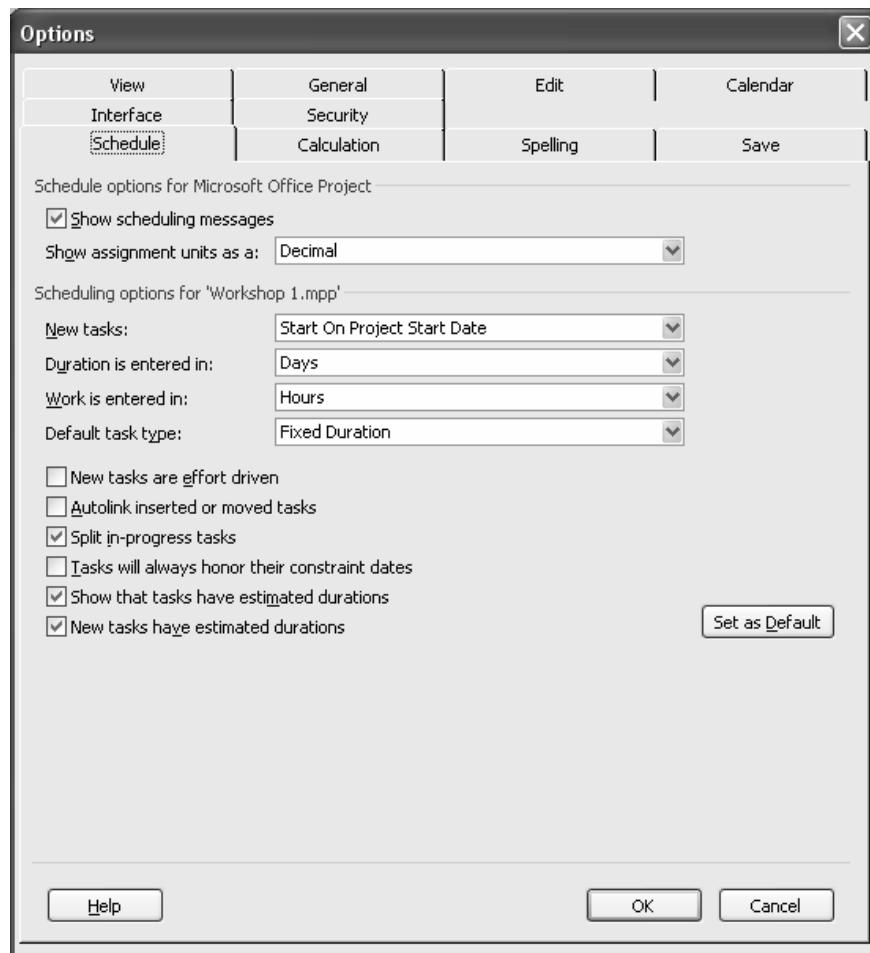


- **Date format:** This is used to select the display style of the dates for all projects. The date format will be displayed according to a combination of your system default settings and the Microsoft Project Options settings. You may adjust your date format under the system Control Panel, Regional and Language Options and the Microsoft Project settings in the Options form, which are covered in the **OPTIONS** chapter.



There is often confusion on international projects between the numerical US date style, mmddyy and the numerical European date style, ddmmyy. For example, in the United States 020710 is read as 07 Feb 10 and in many other countries as 02 Jul 10. Consider always adopting the ddmmmyy style, **06 Jan '07** or mmmddyy style, **Jan 06 '07**.

- Select the **Schedule** tab:

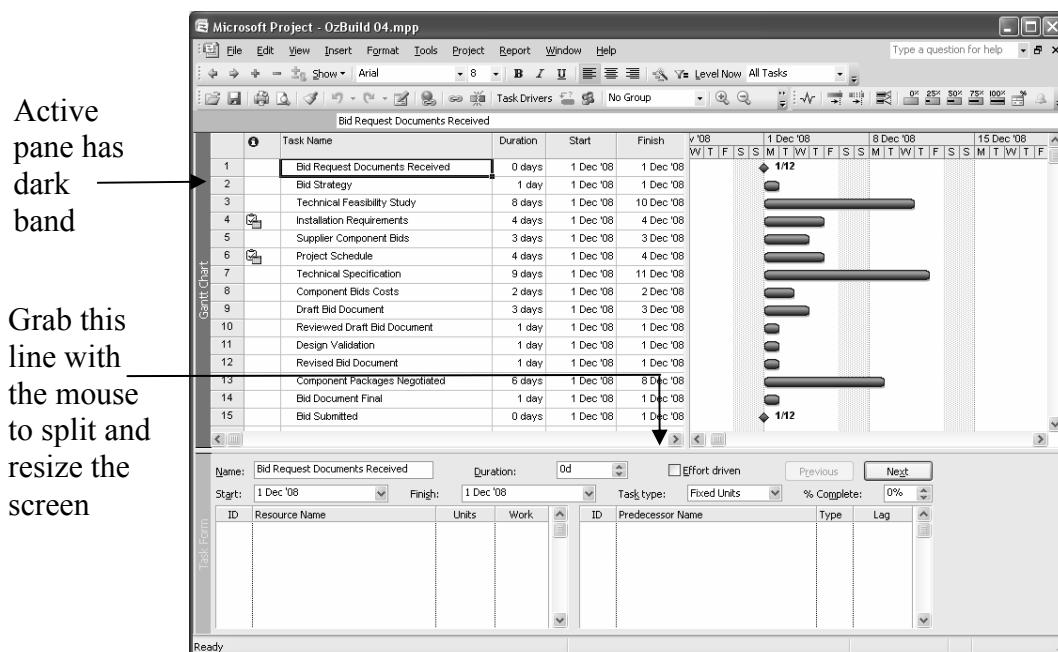


- **New tasks:** - When the option of **Start on Current Date** is selected new tasks are assigned an Early Start constraint as they are added to the schedule.
 - i** It is not desirable to have activities assigned constraints as they are created in a Critical Path schedule, therefore Start On Project Start Date should always be selected when creating a Critical Path schedule.
- **Duration is entered in:** – This option specifies the format in which durations are entered via the keyboard. If **Day** is selected as the default, then a duration of 2 days is entered as 2 (without the d). If **Hours** is selected as the default, then a 2-hour duration should be entered as 2h.
- It is important that both the **Autolink inserted or moved tasks** and the **Tasks will always honor their constraint dates** are both unchecked.
 - **Autolink inserted or moved tasks** option will result in relationships being changed when tasks are dragged to another position.
 - **Tasks will always honor their constraint dates** results in the possibility of tasks being scheduled earlier than it is technically possible.

4.4 Splitting the Screen Views and Details Forms

The screen may be split horizontally into two panes. A different **View** may be displayed in each pane. This is termed **Dual-Pane** view. To open or close the dual-pane view:

- Select **Window, Split** or **Window, Remove Split**, or
- Grab the horizontal dividing bar at the bottom of the screen (see the picture in paragraph 4.1) by holding down the left mouse button and dragging the line to resize the panes.
- Right-click in the right-hand side of the top pane and you will, in most views, be able to display a menu to open or remove the split.
- Double-click the dividing line or drag it to also remove or open the split window.



A pane needs to be **Active** before menu items pertaining to that pane become available. A dark blue band (with the standard Windows color scheme) on the left-hand side is displayed in the **Active Pane**.

The menu options will often change when different **Views** are selected in a pane.

A **Pane** is made **Active** just by:

- Clicking anywhere in the pane, or
- Pressing **F6** to swap active panes.

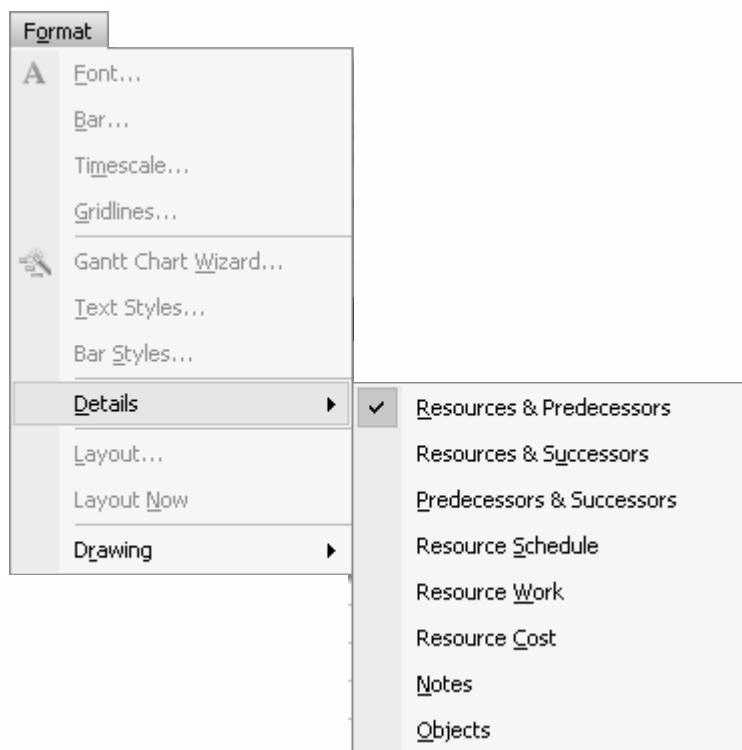


Not all panes may be printed and only the **Active Pane** may be printed, thus it is not possible to create a printout with a Gantt Chart and a Resource Sheet (Table) or Graphs (Histograms) with Microsoft Project.

Some **Views** displayed in **Panes** have further options for displaying data. These are titled **Details** forms. The **Details** forms may be selected, when available, by:

- Making the pane active, then
- Selecting:
 - **Format, Details**, or
 - Right-clicking in the right-hand side of the screen and clicking the required form.

The example below is for the **Task Information** form:



4.5 Right-clicking with the Mouse

It is very important that you become used to using the right-click function of the mouse as this is often a quicker way of operating the software than using the menus. The right-click will normally display a menu, which is often different depending on the displayed View and which pane is the Active Pane. It is advised that you experiment with each view to become familiar with the menus.

WORKSHOP 2



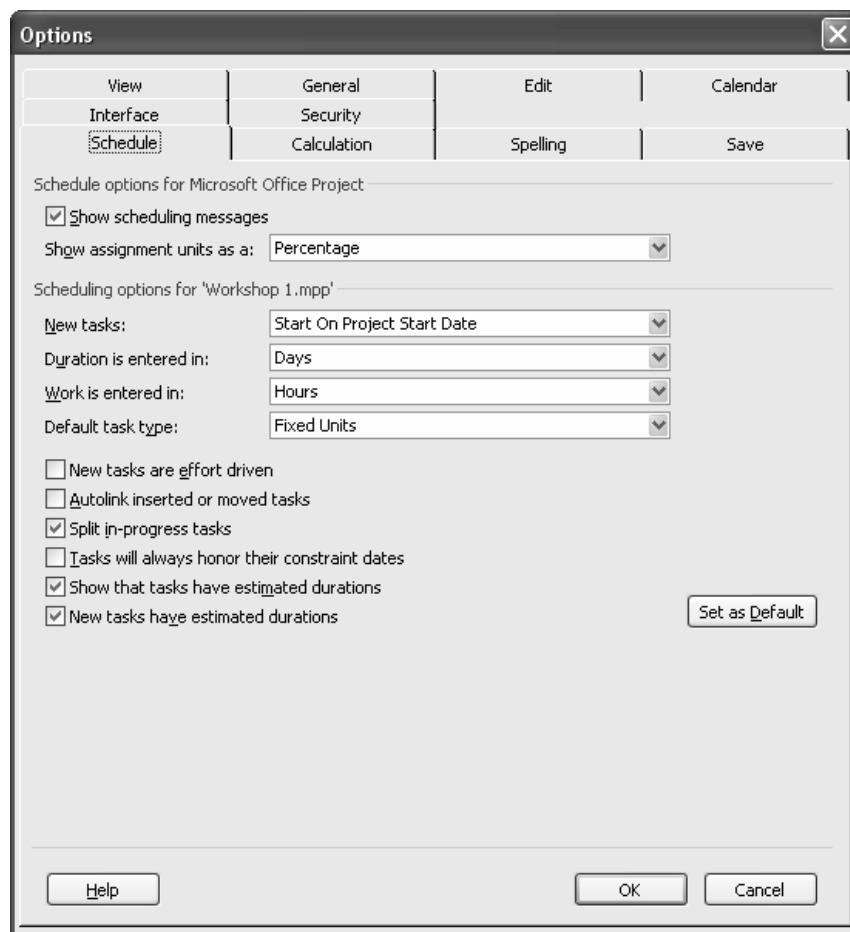
Setting Your Project Options

Background

For control purposes it is expected that all tasks will be entered in days.

Assignment

1. Select **Tools, Options...** and open the **Project Options** form. Click on each tab and familiarize yourself with the forms. set your options as follows:
 - Select View tab, set the **Date format** to:
 1. “**ddmmmyy**” i.e., 28 Jan '02, or
 2. “**mmddyy**” i.e., Jan 28 '02.
 The available date format will depend on your system settings.
 - Select the Schedule tab and set the Schedule Options as per the picture below:



Continued over....

2. Hide and display the **Standard** and **Formatting** toolbars using the **View** menu.
3. To ensure full menus are always displayed (and thus save time waiting for the menu item you require to be displayed) check the **Always show full menus** option in the under **Tools**, **Customize**, **Toolbars...**, **Options** tab.
4. Experiment by dragging the toolbars around the screen with your mouse.
5. Hide and display the **View** bar by selecting **View**, **View Bar**.
6. Split the screen into two panes by right-clicking with the mouse in the right-hand side of the screen, and selecting **Split** from the menu.
7. Activate the lower pane by clicking in it; note the blue bar (or a different shade of bar if you do not have the default Windows colors) on the left-hand side of the screen has moved from the top pane to the bottom pane.
8. Activate the upper pane, by clicking in it.
9. Resize the panes by dragging the Split screen bar.
10. Close the Split screen by double-clicking on the horizontal dividing line.
11. Split the screen by double-clicking on the small bar in the bottom right-hand corner of the screen.
12. Save your **OzBuild Bid** Project.

7 ORGANIZING TASKS USING OUTLINING

Outlining is used to summarize and group tasks under a hierarchy of **Parent** or **Summary Tasks**. They are used to present different views of your project during planning, scheduling and statusing. These headings are normally based on your project breakdown structure. In a PRINCE2 project these Summary Tasks may be used to represent the project Stages and/or the Product Breakdown Structure.

Defining the project's breakdown structure can be a major task for project managers. The establishment of templates makes this operation simpler because a standard breakdown is predefined and does not have to be typed in for each new project.

Projects should be broken into manageable areas by using a structure based on a breakdown of the project deliverables, systematic functions, disciplines or areas of work. The Outline structure created in your project should reflect the primary breakdown of your project, normally as the PBS and Stages.

Microsoft Project 2000 introduced a new feature titled **Grouping**, which is similar to the **Organize** function found in Primavera software. This feature allows the grouping of tasks under headings other than the Outline Structure. Unlike Primavera software, **Grouping** is not the primary method of organizing tasks. It is covered in the **GROUPING, OUTLINE CODES AND WBS** chapter.

7.1 *Creating an Outline*

To create an **Outline**:

- Insert a new **Summary task** above the **Detailed tasks**:



- Then **Demote the Detailed tasks** below **Summary task**. (Demoting is explained in the next section.):



The Start and Finish dates of the **Summary task** are adopted from the earliest start date and latest finish date of the **Detailed tasks**.

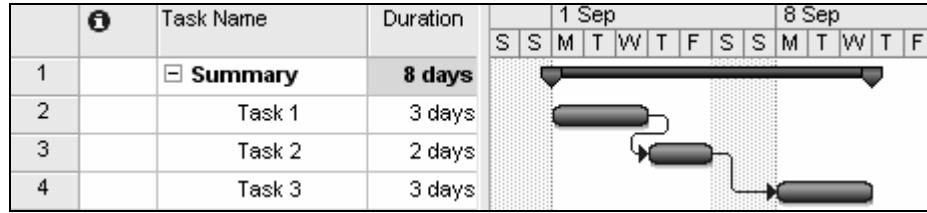
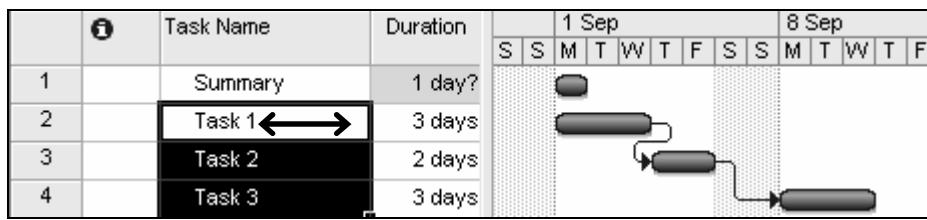
The duration of the **Summary** is calculated from the adopted start and finish dates over the **Summary** task calendar, which is initially the **Project Calendar**.

The Duration and Finish dates of the Summary task are shaded because these were changed after Tasks 1 to 3 were demoted. This shading may be removed by pressing F9 to recalculate the schedule or saving the file.

7.2 Promoting and Demoting Tasks

Demoting or **Indenting** tasks may be achieved in a number of ways. Select the task or tasks you want to **Demote**. Ensure you have selected the whole task and not just some cells. You may use any of the following methods to **Demote a selected task**:

- Click on the Indent  button, or
- Right-click on the **Task ID** column to open the task shortcut menu, click on the  **Indent** button, or
- Move the mouse until you see a double-headed horizontal arrow in the task name, left-click and drag the task right. A vertical line (see lower of the two pictures below) will appear indicating the outline level you have dragged the task(s) to, or

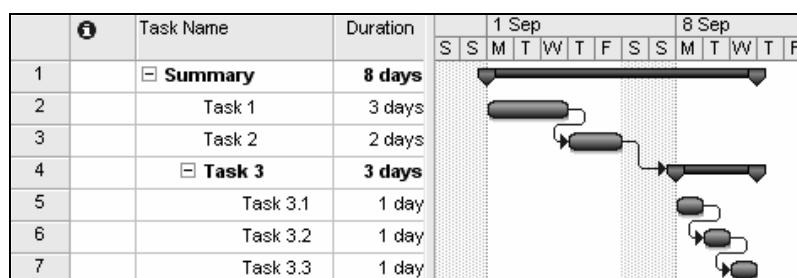


- Hold down the **Alt** and **Shift** keys and press the **Right Arrow Key** on your keyboard.

Promoting or **Outdenting** tasks uses the same principle as demoting tasks. Select the task or tasks you want to promote, ensure you have selected the whole task and not just some cells, then you may:

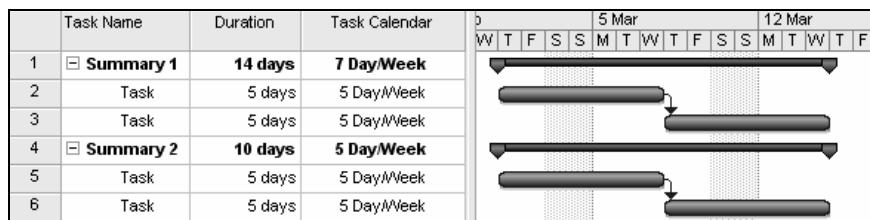
- Click on the Outdent  button, or
- Right-click on the **Task ID** column to open the task shortcut menu, click on the  **Outdent** button, or
- Move the mouse until you see a double-headed horizontal arrow in the task name column, left-click and drag the tasks left, or
- Hold down the **Alt** and **Shift** keys together and press the **Left Arrow Key** on your keyboard.

Tasks may be added under a **Detailed** task and demoted to a third level and so on.



7.3 Summary Task Duration Calculation

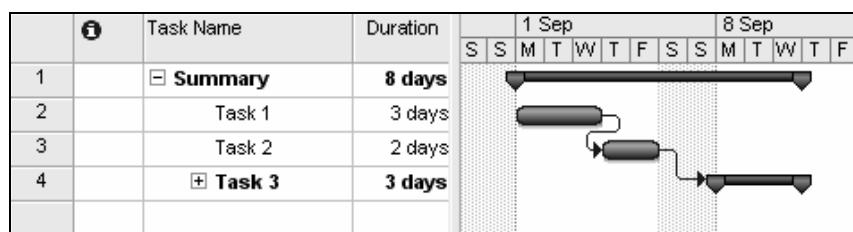
The Summary Task duration is calculated from the Start to the Finish over the calendar assigned to the task, thus changing the summary task calendar will change the displayed duration of the Summary Task:



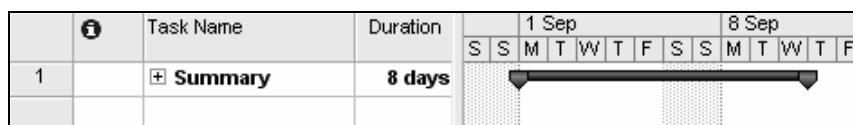
7.4 Summarizing Tasks

Once you have created summary tasks, the detailed tasks may be rolled up or summarized under the summary tasks. Rolled up tasks are symbolized by the + sign to the left of the summarized task description:

- This picture shows **Detailed Task 3** rolled up.



- This picture shows **SUMMARY TASK** rolled up.



7.4.1 To Roll Up Summary Tasks and Show Tasks

The Outline Symbols, and , in front of the tasks may be hidden and displayed from the **Tools, Options..., View tab, Show outline symbol**.

Select the task you want to roll up:

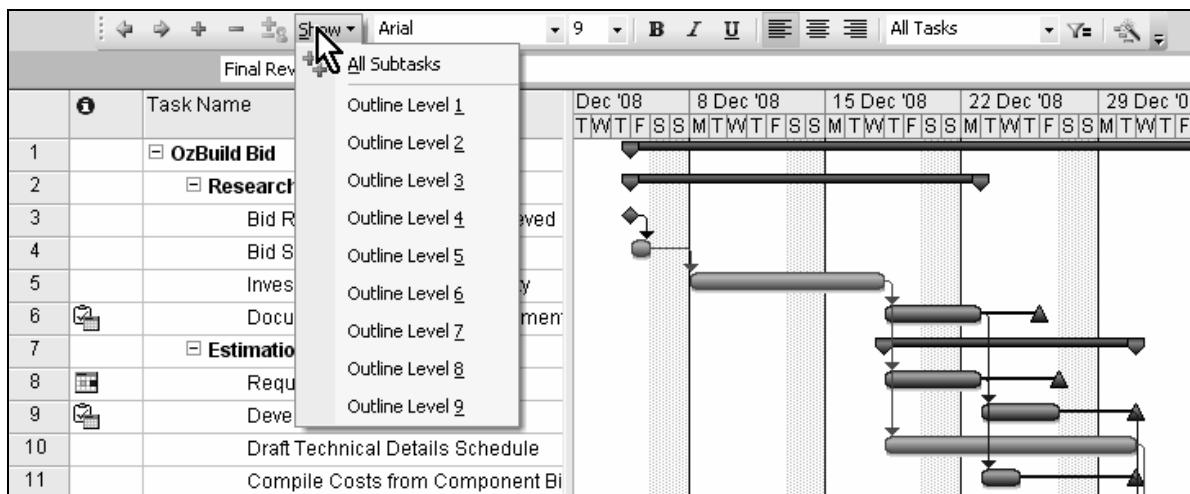
- Click on the to the left of the Task Name, or
- Click on the **Hide Subtasks** icon, or
- Double-click on the **Task ID** (not the **Task Name** as this will open the **Task** form).

Displaying rolled-up tasks is similar to rolling them up. To do this, select the task you want to expand. Then:

- Click on the to the left of the Task Name, or
- Click on the **Show Subtasks** icon, or
- Double-click on the **Task ID**.

7.4.2 Roll Up All Tasks to an Outline Level

A schedule may be rolled up to any Outline Level by selecting the desired Outline Level from the **Show** drop-down box on the **Formatting Toolbar**.



7.4.3 Show All Tasks

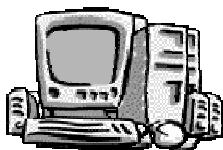
Select the **All Subtasks** option at the top to display all tasks.

7.5 Project Summary Task

A Project Summary Task may be displayed by checking the **Show project summary task** box from the **Tools, Options..., View** tab. This task spans from the first to the last task in the project and is in effect a built-in Level 1 outline. The description of the Summary Task is the Project Title entered in the **File, Properties** form. A Project Summary Task is a virtual task and may not have resources, relationships or constraints assigned.



WORKSHOP 5



Entering Stages

Background

The summary tasks may be used to represent

The PRINCE2 Planning Process shows that you need to identify the following stages:

- Research
- Estimation
- Proposal

These will be added as Summary Tasks in this workshop.

Assignment

1. Go to the **View** tab in the **Tools, Options...** form and check the option to display the Project Summary Task, close the form and observe how the Project Summary Task is formatted
2. Remove the Project Summary Task as we will create an Outline Level for the Project Summary Task.
3. Create an Outline Level 1 for the whole project entitled “OzBuild Bid” and
4. Create an Outline Level 2 for each of the three Stages: Research, Estimation and Proposal. Try using the various methods for indenting and outdenting tasks.
5. Your schedule should look like this:



6. Save your **OzBuild Bid** project.

Continued over...

7. The second level of the Outline Structure could have been used for the **Collective Groupings Products** and not Stages and would look like the example below:

