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## Project Estimating

### A one day programme

The project manager's role in the estimating process will vary from the collection of estimates from other people in the preparation of the project proposal, to the provision of detailed cost-benefit analysis. In this workshop we take you through the estimating process with the objective of helping you improve your estimating techniques, by introducing you to some of the newest techniques available and how best to use them. However, before looking at these techniques, we can learn a lot from other people's mistakes and so the first step to better estimating is to look critically at the pitfalls that await the unwary project manager. We deal with the main pitfalls in the production of estimates one by one in detail in this section, but first it is important to list the main reasons why these pitfalls occur.

### Key elements of project estimating

Estimating is a key part of project planning, but unfortunately is subject to game-playing, statements that are economical with the truth and more '*honourable*' deception than any other human activity bar politics. People also forget that the definition of the word *estimate* is a guess or an approximation. An estimate is not a precise calculation needing the head of the person who gave you some numbers on a platter, if they are wrong, but that is the way an estimate is often viewed.

### The programme enables participants to:

- Be aware of the various estimating techniques used for projects.
- Be able to plan project timescales with greater accuracy.
- Appreciate the need for treating estimates as variable targets.
- Be aware of the financial techniques used in project justification.
- Understand the impact of risk management on project estimates.

### Learning outcomes:

At the completion of this programme, you will understand the concepts of modern project estimating and budgeting processes. In addition, you will be able to construct a project estimate that is sound and robust.

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## Programme Agenda

### Estimating pitfalls

Misinterpretation of the statement of work  
Improperly defined scope and scope creep  
Inaccurate work breakdown structure  
Failure to account for risk

### Life-cycle costing

Engineering estimates  
Parametric estimates  
Comparative estimates  
Expert opinion

### Project Budgets

The budget  
Putting the budget together  
Having separate risk budgets

### Typical delegates are:

For people who are involved in giving estimates and those who have to rely on others' estimates.

### Estimating techniques

Single point estimating – pros and cons  
Time zone planning  
Critical chain planning

### Estimating for high risk projects

Risk assessment and response  
Risk budgeting  
Rolling wave planning  
Project and risk financial estimates

### Financial measurement

Financial justification of a project  
Pay back period and capital rationing  
Net present value and internal rate of return