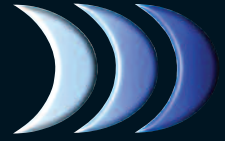


m b m c o n s u l t i n g

CONSTRUCTION & PROJECT CONSULTANTS



+44 (0) 1892 557290

www.mbmconsult.com

admin@mbmconsult.com



Project Planning & Scheduling

Technical Services Information



Contents

| | |
|--|---|
| What is it? | 3 |
| When do you need it? | 3 |
| Why do you need it? | 4 |
| How do we carry it out? | 5 |
| What value does it bring to our Clients? | 6 |
| How much does it cost? | 6 |
| Our successes | 7 |
| Why choose MBM Consulting? | 7 |

What is it?

Project planning (or scheduling as it may often be referred to internationally) is a vital project management tool for the effective management of the works. Planning provides a means by which the scope of works is mapped out over the required period from which the progress of the works can be monitored against the duration of the project. At any point in time the programme ought to be able to establish if the works are being built according to the planned timescales and whether they will complete by the completion date.

Effective planning however should do much more such as identifying the forecast and actual effect of planned or implemented changes, earned value analysis, resource requirements, over allocated resources and modelling various “what if” scenarios for example establishing the effects on programme of changes to resource levels, materials delivery dates and subcontractor lead in periods etc.

Correct project planning provides a central function by which all parties involved in the construction process, can actively manage the construction of the works.

Planning is not just operating programming software. A planner ought to be an integral function of a successful project which would include being able to accurately establish progress through such means as progress measures, marked up drawings, labour records etc. It is this information that provides the base data for use in the contract or updated programme.

When do you need it?

Project planning should be implemented throughout the project. Starting with an effective tender programme, and continuing through the development of the contract programme, through to progress and other more specialist programmes (e.g. completion or acceleration programmes)

The contract programme may have contractual status, as with an ECC Accepted Programme. Once a suitable contract programme is agreed this will form the basis of future progress planning, which should be carried out throughout the duration of the project.

Why do you need it?

Recently, project planning has taken on greater importance. Consequently some contracts, particularly ECC, make planning central to the administration of the contract. Failure to implement effective planning can have serious financial consequences.

Planning should provide fundamental control and information to assist the management of the works as well as commercial administration. Effective planning should, as a minimum:

- Identify the critical path and manage this accordingly.
- Identify lead-in periods for key items and sub-contracts.
- Manage resource requirements.
- Monitor time risk allowances and review project risks.
- Establish if the project is on progress at any point in time but more specifically at each reporting period.
- Identify specific activities in delay.
- Establish when specific delays started and finished.
- Establish the causes of the delay.
- Establish the effect on the critical path.
- Establish the effect of actual and forecast change.
- Allow risk scenarios and modelling of potential changes.

The planning function should produce the necessary supporting information and evidence that demonstrates how such conclusions have been arrived at. The planner ought therefore to have the answers to support a timely extension of time request (e.g. the extent of delay to completion, the causes etc) allowing notice to be given at the earliest possible opportunity. This would also identify periods of delay for any prolongation submissions made by the commercial team.

Frequently contractors get to the end of a project without knowing what has caused project delay. This failure in planning leaves the contractor at considerable risk. He may not have complied with notice requirements and may have to spend significant monies trying to establish the cause of delay retrospectively, without knowing if such delay is compensable or not.

Effective project planning will also allow organisations to forecast future activities and adjust programme to reflect changed requirements, for example the effects of change or the effect of accelerative measures.

How do we carry it out?

MBM has considerable experience preparing contract programmes and their use for ongoing planning. Initially we seek to understand the specific requirements of the contract such that the process complies with the contract. On this basis we develop a suitable programme having fully interrogated the project team to understand constraints, sequences, restrictions and scope of work. Time risk allowances are established and identified with activity durations calculated based on known outputs. The programme is then fully stress tested to ensure all logic is correct, robust and complete. The critical path and critical programme points are reviewed to analyse and mitigate potential risk areas. This is discussed and optimised fully with the project team to ensure collective acceptance and buy-in by all.

Using this baseline MBM would review progress against each activity at agreed intervals. MBM strongly advocates the collation of accurate records and may include progress measurement, site photographs, labour, plant and material records etc. MBM would base the progress update on the work remaining on specific activities rather than notional percentages which are often inaccurate. When used correctly this allows true earned value to be established and permits accurate monitoring and forecasting of labour costs for each activity. It also ensures results obtained are based on objective rather than subjective data.

MBM would update the contract programme to include relevant progress percentages against each activity. MBM also establishes the effects of project change through introducing new or updating existing activities. The programme can then be rescheduled to establish the effect of the progress achieved on the programme including the critical path and project end date.

After the programme has been updated, MBM reviews the causes of programme change and slippage and recommends what actions can be taken where necessary, for example issuing timely delay notices, re-sequencing or further programme optimisation.

What value does it bring to our Clients?

Effective planning is of immense benefit to our Clients, reducing risk and increasing potential value recovery. It allows:

- Efficient planning and control of the works throughout the project lifecycle.
- Assessment of progress achieved to date based on objective accurate data rather than subjective percentages.
- Management of programme risk including materialised risk to mitigate any project delays.
- Identification of causes of programme slippage as the project occurs.
- Management of resources, subcontract procurement and packages.
- Assessment of change to be managed and cost consequences accurately established.
- Allows productivity to be monitored and causes of reduced productivity to be identified.
- Reduces risk and gives greater potential to recover both time and additional cost.

How much does it cost?

The complexity of the project, contractual requirements and, to some extent, choice of programme software, will partly determine the overall cost. MBM would review the project to establish the extent of involvement and provide a competitive fee. MBM always seeks to act proportionately, preparing documentation commensurate with its intended purpose.

Our successes

Our experience carrying out successful project planning covers projects of all sizes such as:

- Jubilee Line Extension
- Channel Tunnel Rail Link
- Medmerry Managed Alignment
- Barbican Centre
- Harrods Restaurant
- Locog London Olympic
- Goldman Sachs

Why choose MBM Consulting?

MBM has a wealth of experience providing planning and scheduling services. We understand construction processes, scheduling requirements and can utilise various project management software packages. Our experience has been gained on major projects in the UK and overseas, including Ireland, the Middle East and Canada and in sectors such as build, rail, utilities and oil working for major contractors and subcontractors.

If you would like to know more, please do not hesitate to contact:

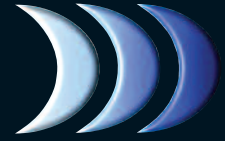
Tim Ellis *BSc (Hons) MRICS, ACI Arb*

timellis@mbmconsult.com

+44 (0) 1892 557290



**Comprehensive construction,
civil engineering and
engineering consultancy**



+44 (0) 1892 557290
www.mbmconsult.com
admin@mbmconsult.com



Extension of time preparation
Critical path analysis
NEC Accepted programme preparation
Productivity analysis
Labour and resource disruption
Money claims
Financing claims
Compensation event preparation
Resource solutions
Project improvement and turnaround
Arbitration services and support
Training & seminars

Forensic delay analysis
Tender planning
Progress monitoring and progress updates
Measured mile analysis
Prolongation claims
Head office overhead claims
Acceleration claims
Commercial management
Contentious account management
Adjudication services
Expert witness services