

Programme for building design and construction

Programmes describe the sequence in which tasks must be carried out so that a project (or part of a project) can be completed on time.

Programmes will often identify:

- Dates and durations allocated to tasks.
- A critical path (the sequence of critical tasks upon which the overall duration of the programme is dependent).
- Tasks which can only be carried out after other tasks have been completed.
- Tasks which can be carried out simultaneously.
- 'Float' within tasks that are not on the critical path (that is, delays that can be incurred without affecting the critical path). Identifying float can be helpful in highlighting where it may be possible to transfer resources to tasks that are on the critical path.
- The need for specific resources such as plant, services or materials and their lead time.

Preparing a programme should not be a paper exercise that simply records what has already happened or what is likely to happen. For a programme to be effective, it must be used as a tool to help plan activities, monitor progress and identify where additional resources may be required.

Programmes can be prepared for a number of different purposes:

- The client's overall programme, which may include more than one project, activities leading up to the appointment of consultants, works outside the scope of the main contract (such as the supply of equipment), migration strategy, and an ongoing programme for operation and evaluation once the development is complete.
- A design programme scheduling tasks from the appointment of the consultant team to the appointment of the contractor. This might be a simple gantt chart incorporating each consultants planned resources for each stage which is then monitored and reported to the client.
- Information release schedules, setting out when the consultant team should issue production information to the contractor in order for the works to progress and when information produced by the contractor (or their sub-contractors) should be issued to the consultant team for comment and integration into the overall design.
- The contractor's master programme, scheduling construction activities.

On large projects, the client may appoint a programme consultant to prepare a detailed programme for the project (including an outline programme for construction). Once the contractor is appointed, they will take responsibility for programming the works.

When preparing a programme, particular attention should be given to:

- Long-lead items.
- Pre-contract works (such as demolition or site clearance).
- Prefabricated elements.
- Works outside of main contract (such as work by statutory undertakers).
- Relationships with other projects.

- Phasing and sectional completion.
- The 'CDM planning period'. This is now a requirement of the CDM regulations, intended to allow contractors sufficient time to assess health and safety issues and plan their works before commencing construction. Duty holders will need to ensure that time is allowed for this in the programme, both for the appointment of contractors and sub-contractors. The client must include details of the CDM planning period in pre-construction information.
- Decision points (gateways). Decision points often appear as milestones on programmes, with no consideration given to whether the individuals required to make the decision will be available, or how long it might take to make that decision. Wherever possible key client decisions should be programmed to take place at existing meetings, with briefing material issued in advance, enabling the client to make informed decisions.

The contractor's master programme is not part of the contract documents, and is not enforceable under all forms of contract. The completion date (and perhaps stage or sectional completion dates) are enforceable and failure of the contractor to meet the completion date may lead to a claim by the client for liquidated damages.

Contracts will generally require that the contractor progresses the works regularly and diligently and failure of the contractor to meet the dates on the master programme might be evidence that this is not the case.

The completion date indicated on the contractor's master programme may be earlier than the completion date entered into the contract.

A design programme defining deliverables might be incorporated into consultant's agreements, however, this is difficult to enforce (due in part to activities of third parties outside the consultant's control such as planning authorities, client or stakeholder actions, consultation processes, etc.), and generally, the only recourse the client has is to threaten termination for non-performance in the event of consistent programme failure.