

# Package Based Delivery Model

## Construction Procurement Guidelines

October 2019

### Overview

Package-based delivery models allow an earlier on-site start and enable the tender process and construction to overlap with the design. They've developed to provide faster project delivery times while still allowing the client to retain control over the design, and therefore quality. Management methods break down a project into small packages that can be tendered as and when the design for each package is complete.

There are two approaches to packaging:

- construction management
- management contracting.

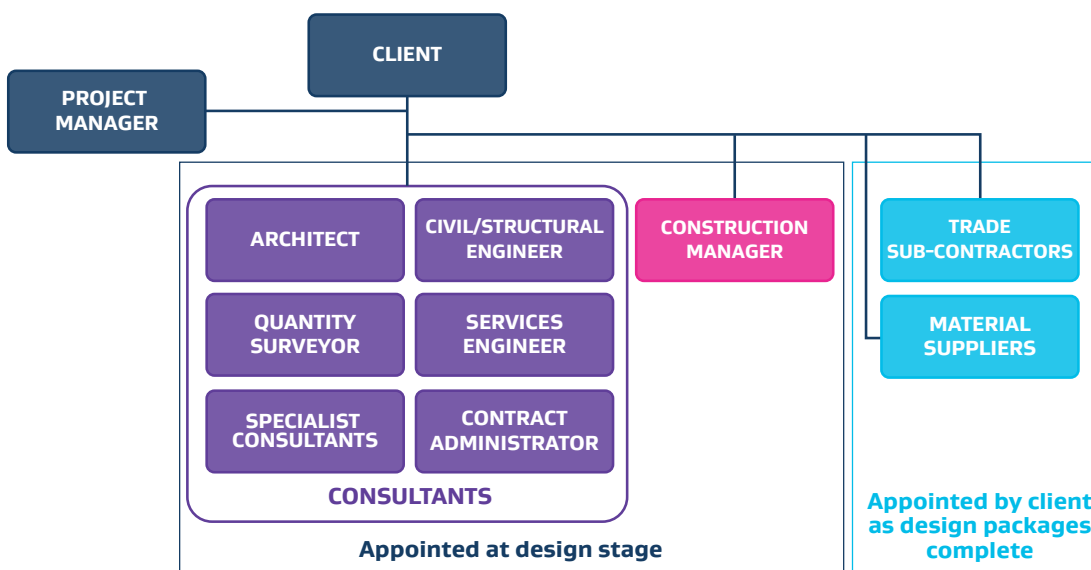
Each involves significantly different risk to the client due to the different contractual relationships involved. With construction management, the client enters into direct contracts with trade contractors and engages a construction manager to manage the trade contractors. In management contracting, the client engages a management contractor who will enter into direct contracts with each trade contractor.

The construction management approach presents slightly more risk to the client as there's no single contractual point of responsibility for trade contractors.

With both methods the construction manager and management contractor are engaged early in the design phase to advise the designers on the constructability of the project. With good constructability, projects can enjoy savings in cost and time and have enhanced quality. The construction manager or management contractor also manages the breakdown of the project into smaller packages, supervises the tendering process for each package, and manages the contracts once awarded.

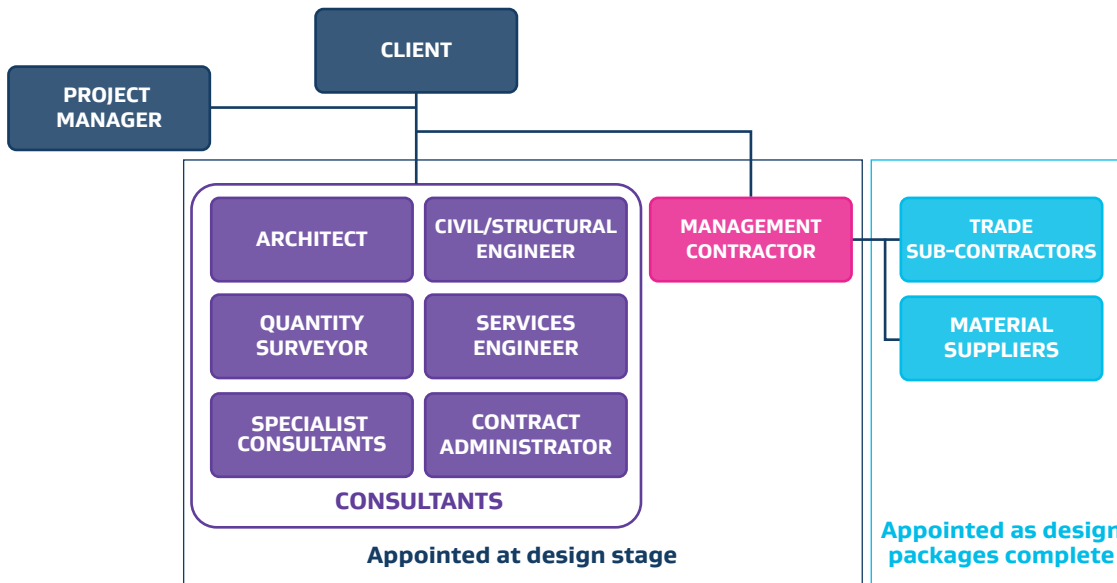
### Construction management contractual relationships

*This diagram shows a typical contractual relationship for the construction management method.*



**Management contracting contractual relationships**

*This diagram shows a typical contractual relationship for the management contracting method.*



With both methods, the work is bid for based on a percentage management fee. The management contractor takes more risk under management contracting, therefore the fees tend to be higher than for construction management. Although there may be cost certainty for each package, there’s no final price at the outset for the entire project. The final price isn’t known until the last package is awarded. Responsibility for ensuring that the project is within the overall budget lies with the client, and therefore management methods require the client's involvement throughout the process.

If a trade package comes in over budget the client will need to work with the construction manager or management contractor to identify potential areas where savings could be made. This can be achieved by making alterations to the design or specification. The lack of price certainty before commitment to build can leave the client exposed to the inflationary effects of the construction market. It is important therefore to ensure there is adequate contingency in the project budget at the start, to avoid any potential cost overruns or a reduction in the intended quality of design and construction.

## At a glance - Package Based Delivery Model

### Guidelines for use

This model is best used when:

- the client wants to retain overall control of the project, including design aspects, to ensure flexibility to amend the design without incurring excessive cost, for example, where ability to incorporate the latest technological developments as the project progresses is important
- the project is of a specialised nature, for example, a project with a large proportion of highly-complex specialist services that cannot be purchased through a single contractor
- the risk of potential cost overruns is acceptable, where completion is critical to the client's operational needs (eg a manufacturing facility)
- there are complexities that warrant expert advice from an experienced construction manager or management contractor who can provide constructability advice on the design, and can coordinate and administer delivery of the construction works
- the works can be readily broken down into separate packages
- a fast-track approach to design and construction is required to achieve the earliest possible completion.

### Potential benefits

- Client has continuity of designers.
- Management and coordination risk to the project is reduced.
- Contract administration is done by the construction manager or management contractor, reducing time and cost for clients.
- Client retains a high degree of control over the project, with management, coordination services and general expertise contributed by the construction manager or management contractor.
- The design can be varied with relative ease after the construction contract(s) have been awarded.

### Points to note

- The construction management approach carries slightly more contractual risk for the client than that under a management contracting approach due to the individual trade sub-contractors being appointed directly by the client, rather than through a single contracting entity which is the case with the management contracting approach.
- The client needs to commit considerable time and be proactively involved throughout the process to manage overall project time, quality and cost risk.
- Arrangements can be administratively complex and problematic in terms of liabilities, insurance etc, particularly for the construction management approach where there is no single contracting entity with overall responsibility for the works.
- There may be some uncertainty to clients regarding final construction costs, and the management fees add an extra element of cost to the project.
- The client owns the risk of the design team being able to meet the requirements of the construction manager or management contractor's programme to complete the necessary design information required for tender packages.