

CONSTRUCTION MANAGEMENT

Path to a good outcome or a sure way to blow the budget?

This paper is the report of the first session of the International Construction Projects Committee at the IBA in Sydney in October 2017, prepared by me and Jaime Gray, co-chairs of the session.

Report by Jaime Gray & John Walton, co-chairs

The first ICP session in Sydney was to examine the risks and benefits of adopting *construction management* as a procurement model for major projects. The panel comprised internationally recognised construction lawyers and advisers Peter Scott Caldwell (from Hong Kong), Eduardo Koch (from Argentina), Randy Hafer (from the US), Yasemin Cetinel (from Turkey) and Bill Barton (from the UK).

The initial consideration was to clarify what is meant by *construction management*. Are we talking about managing construction as part of good project management? Or direct contracting by the owner for trades and specialists, as with management contracting, from the days of old?

While many from civil law jurisdictions and from the US interpret construction management as being primarily concerned with effective project management, the accepted approach for the purposes of discussion was to look at construction management as a procurement model, with direct contracting, and ultimately cost and timely delivery, resting with the owner.

The positives were relatively easy to identify, and potentially seductive to those less familiar with the potential pitfalls:

- Accelerated program – overlapping design and construction, general acceleration due to construction manager's expertise, and standardisation of procurement processes
- Greater control through timely interventions
- Reduced final price
- Risk assessment and management
- Claims management and dispute avoidance

Pitfalls:

- The relatively informal contracting approach can result in work commencing prematurely, before informed decisions are made about design, properly budgeted cost and construction methodology
- Time – potential for greater bureaucracy and fast decisions often result in more variations
- Quality – poor management can mean that trade contractors' defective work goes un-remedied
- Cost – delays, rectification costs and liability related costs are for the owner

Peter Scott Caldwell took us on a delightful journey through history, starting with early shelters constructed by ice age man, through to the Code of Hammurabi, in 1750BC, which decreed:

If a builder builds a house for someone, and does not construct it properly, and the house which he built falls and kills its owner, then that builder shall be put to death.

Peter's message was KISS (keep-it-simple-stupid). He identified the hallmarks of successful project management as being (1) thorough preparation and planning at an early stage in the project, (2) well defined scope of works, (3) experienced and capable leadership and management, (4) realistic programmes and cost estimates, (5) positive and open relationships between stakeholders, (6) managed variations and changes, and (7) quick response to warning signs.

None of these are necessarily dependent on any particular delivery method, however, planning and collaboration are critical to project delivery. If the delivery method promotes this, then the prospect of a successful project is correspondingly increased.

Eduardo Koch and Bill Barton then took us on a tour of successful projects and others, namely the Holyrood development in Edinburgh, which were perhaps less so. The report on the Holyrood development is a sobering account of how not to conduct any major procurement project – the budget was poorly assessed (at less than a fifth of the final cost) and the project was commenced before any real preparatory work or definition of scope had been undertaken.

The conclusion to be drawn from the Holyrood project is not so much that the final cost was exorbitant. It probably wasn't. It was more an issue of creating realistic expectations at the outset and managing the entire procurement process efficiently.

Randy Hafer then outlined the importance of identifying and controlling uncertainty in tunnelling projects, by reference to the use of risk registers as a project management tool and geotechnical baseline reports for defining what was and what was not foreseen at the time of award.

Yasemin Cetinel then rounded out the discussion by considering the benefits of disputes boards as a means to keeping projects on track without being deflected by the traditional approaches of engineer's decisions and arbitration.

The consensus of the discussion was that, while direct contracting using a construction management model may have advantages, they are not for the faint hearted. Managing the various interfaces between the construction manager, the designers, main contractor and specialist suppliers and subcontractors can get messy, and the ability to lay off liability between each project participant is limited.

In order to capture the benefits potentially on offer through construction management, the owner needs to be very disciplined in the core requirements for all successful projects:

- engaging the right resources at appropriate times;
- investing time in defining the scope of the project and each appointment before it is made;
- using risk registers and proactive project management techniques to identify project risks at a time when they can properly be avoided or at least mitigated;
- properly establishing a reasonable project cost and monitoring progress of costs against budget at a time and in a manner which enables blow-outs to be avoided; and
- including a disputes avoidance regime which maintains a collaborative relationship throughout the project team.

The conclusion was that any procurement method alone is insufficient to achieve this.