Life' contracts become a hot topic

he hottest topic in the construction industry is "whole of life" costs. Many owners with major building, civil engineering, and equipment projects in mind are tarming to the idea of – or keen to try – hat are known as design, construct and taintain (DC&M) contracts.

This interest, which is widespread throughout both the public and private sectors, makes, sense. Imagine knowing "up front" how much will cost you to design and construct your roject — and how much it will cost to laintain during its entire working life or some other specified period.

If you take the idea outside the construcon industry and, say, into defence procuretent, a government could know on "day ne" how much it would cost to buy a fleet of fighter aircraft and maintain them during their 20-year operational life.

This would provide politicians, managers, ecountants and others with much more retainty than buying each aircraft for a fixed im and having to sign blank cheques for years to come.

In a traditional "construct only" contract, is largely up to the owner and its consultants get things right.

The contractor has only to deliver the design and once the defects liability period comes to and end, its liability for defects or omissions is fairly limited.

In design and construct (D&C) contracts, hich are also popular, the owner's influence limited to a "design brief" which it prepares for tenderers.

Because one objective of this delivery ethod is to shift the design risks to the instruction contractor, the owner relinnishes most of its control over the design.

It's only natural that the contractor will do what it can to minimise the costs and time it invests in the project.

If the design brief leaves the choice of light albs to the contractor, there's a strong emptation to choose the cheapest bulbs even if they have to be replaced twice as often. In short, D&C contractors have little otivation to design products which, though more expensive to start with, deliver

What if builders were responsible for the life-time performance of their projects? **Doug Jones** examines the possibilities of design, construct and maintain contracts.

lower operating and maintenance life-cycle

DC&M contracts, on the other hand, seek to ensure the contractor has a commercial interest in how well the infrastructure or equipment performs for a significant part of its life.

The contractor is usually required to carry out all preventative, routine replacement and corrective maintenance.

The theory is that this approach motivates the contractor to design a product with an "owner's" interest in both delivery and life-cycle cost and performance. Whether or not this benefit is delivered, depends largely on how the contracts are structured.

If an owner goes down the DC&M path, it must brief tenderers very clearly on exactly what it wants done and the extent to which the whole-of-life costing will be taken into account when assessing the tenders.

Despite the need for detail, the owner must avoid over-prescription or it will stifle the tenderers' search for innovative approaches. However, the owner must clearly scope the maintenance element so that tenderers can submit truly responsive prices.

Care also needs to be taken when choosing who will carry out the maintenance tasks. Some contractors already have their own integrated maintenance arms. Others have developed links with companies that are, or profess to be, specialists.

It's important that the maintenance services are provided not only by someone who knows what they're doing but also by someone who's still going to be in business during the, say, 20 year life of the contract. Given this, owners may consider obtaining a performance bond or some other form of "balance sheet" security to guarantee the contractor's performance.

The interaction between the maintenance contractor and the product's operator also needs addressing carefully.

The operator's needs should be considered at the design stage because the DC&M contractor is not inherently motivated to design from an "operability" perspective. Owners also need to give adequate thought to the standard of performance that the maintenance contractor will be required to achieve.

To avoid a contractor skimping on preventative maintenance as the maintenance period draws to a close, the contract can provide for monitoring by the owner or clauses which specify what type of pre-handover work must be carried out.

Finally, and perhaps most importantly, owners need to be careful that they don't undermine the whole attraction of DC&M — as far as the contractor is concerned — by being too tough.

Obviously, contractors should not be rewarded for carrying out maintenance tasks which are necessitated by their own substandard design or construction.

However, they need to be adequately rewarded for satisfactory performance. This calls for an alliance approach which reduces tensions between the parties.

Lump sum remuneration for the maintenance is the most rigorous risk transfer but it is often not commercially sensible.

Innovative, performance-based approaches to remuneration are worth considering. These can include arrangements where the contractor shares in any savings achieved. Benchmark pricing, with financial incentives if the benchmarks are met (but not necessarily with penalties if they are not) can also cut overall costs.

This is particularly so if the benchmarks are reviewed in such a way as to encourage continuous improvement.

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Maintenance can be difficult on Centrepoi Tower, Sydney's tallest building.

Spotlight on negotiations

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cataclysmic battle," Mr Taylor said Certainly the politics is more measure than in the past.

The CFMEU's response to last week industry statement by the Minister for Construction, Mr John Moore — particularly the creation of a national consultative forum excluding the building unions — habeen muted and conciliatory.

Similarly Mr Reith has made no publireaction to the CFMEU wage claim unveiled last week.

No-one wants to be blamed for a halt to the Olympic work.

And after the experience of the earl-1990s, the CFMEU is conscious of the bigge picture; the need for training and longer term employment.

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