

MDA PRESENTS



FIRST AID FOR CONTRACTS



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FIDIC 1999 RED BOOK SUB-CLAUSE 13.2 – VALUE ENGINEERING

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In the increasingly complex construction environment that we find ourselves in, contractors need to use whatever strategies are available to them to enhance their prospects of a contract award where often price is not the only criteria to assess the various bids received. Secondly, once awarded, to focus on delivery of the asset to the employer. Too often construction participants get side tracked from the objective of delivery of the project and become embroiled in conflict and disputes.

There has been a development in the past few years where the benefit of early contractor involvement (ECI) in projects during the design phase, prior to tenders being called for, is being recognised. A contractor's expertise in choosing construction methods that are easier and quicker without compromising quality and safety, has obvious benefits.

Many established contractors adopt an informal strategy by identifying prospective projects that match their skill sets and geographic footprint and enter into conversation with the consulting team. In this way, they can identify opportunities, suitable partners and subcontractors and even influence some of the design decisions that are being made.

This is not early contractor involvement (ECI) in the true sense, but the effect may be similar. The intention of this strategy being to enhance the prospects of a favourable tender award.

The FIDIC contract form (1999 Red Book first edition, sub clause 13.2) provides a facility for the engineer and employer to exploit the expertise of the contractor, although this is after award.

The contractor has the right under this provision, to submit proposals for variations which may accelerate completion, reduce the cost either of completing the Works or of their ultimate maintenance or operation, improve the efficiency or the value of the Works or otherwise benefit the employer.

The intention of this provision is to encourage contractors to apply their knowledge and expertise to the benefit of both themselves and the employer. The benefit to the contractor is that he receives 50% of the saving in the contract value achieved if his value engineering proposal includes a change in the design of part of the Permanent Works and is accepted.

Many observers criticise this provision since it may discourage contractors from submitting alternative (and less expensive) designs at tender stage. If the contractor submits a lower price based on such an alternative design, at face value, the employer will receive the full value of the alternative design.

If, however, the contractor waits until the contract has been awarded to submit his value engineering proposal (which would have been the basis for his alternative tender proposal), the employer gives the contractor back 50% of the saving. From the employer's perspective this is not a great deal!

Savings in cost, reduced construction time and a more durable (and therefore less expensive to maintain and operate) product, are not the only benefits to be gained from adopting and exploiting a value engineering opportunity. One of the less obvious benefits of the use of value engineering provisions is

that they can be used as a dispute avoidance mechanism, as they can facilitate collaboration and communication between the parties and avoid disputes over variations and their implications.

The use of value engineering proposals as a dispute avoidance mechanism remains underutilized but holds great potential, especially in collaborative contracting environments. By proposing value engineering proposals, contractors can take a proactive and collaborative approach to project delivery, working closely with the employer to identify areas for improvement and potential cost savings. This approach can help build trust and promote collaboration between the parties, leading to fewer disputes.

Value engineering proposals can also reduce the need for variations by proposing alternative methods or materials that meet the employer's requirements while reducing costs and time. This reduces disputes that often arise over variations and their time and cost implications. Moreover, value engineering proposals can improve the quality and function of the works, leading to better project outcomes. By proposing more efficient and effective methods or materials, contractors can deliver a better end product that meets or exceeds the employer's requirements.

In cases where disputes arise, or in situations where disputes seem likely, contractors need to handle the situation carefully in order to avoid costly legal battles that can significantly affect project delivery and the profitability of the contractor.

By using the clause 13.2 value engineering proposal, contractors can reduce the likelihood of disputes and minimize the impact of claims. For example, if the contractor notices an error in the employer's requirements that could result in severe costs and time implications, the consequences of which the employer is attempting to shy away from, they can submit a proposal suggesting an alternative method or material that would reduce the costs and time implications without compromising quality or function. If accepted by the employer, this proposal would become a part of the contract, and the lengthy claims procedure, as well as possible disputes, would be avoided.

Whilst there is no guarantee that the employer will accept the proposal, it is definitely worth a shot. At worst, the employer declines the proposal, and the contractor is no worse off than they were before. Clause 13.2 value engineering proposals are not going to magically lead to the avoidance of all disputes, but if utilised correctly, and in the correct circumstances, it can hold great potential benefits. It is a small mindset change contractors can affect to their approach to a project which could be the deciding factor in the project being profitable or the contractor remaining one step ahead of its competitors.