**Introduction**

We issued an update in October 2007 on the FIDIC Conditions of Contract (pre-press edition) for Design, Build and Operate Projects (DBO Contract, or Gold Book). Following that update, we now examine the design related obligations assumed under the Gold Book.

To recap, the Gold Book aims to build upon the advantages of the DBO procurement approach which combines design, construction and long-term operation and maintenance of a facility within a single entity (DBO Contractor). This was preferred by FIDIC over an approach which simply made use of the current FIDIC Yellow Book (design-build) and adding a new ‘operation’ portion.

**Gold Book – is it really that different from Yellow Book?**

However, at first sight FIDIC seems to have preserved the design provisions in clause 5 of the Yellow Book with minimal amendments, hence we raise the question — is the Gold Book truly pioneering a completely new DBO form, or merely making cosmetic changes to the essentially ‘design-build’ form of Yellow Book, by adding an ‘O’ element?

The sub-clauses in clause 5 Gold Book certainly appear to be similar to the corresponding clause 5 in the Yellow Book and its cousin, the Silver Book (Engineering, Procurement, Construction). The author uses ‘cousin’ simply because both the Yellow and Silver Books share similarities in allocating single point responsibility for design and build to the Contractor (the main difference being more risks are allocated by the Silver Book to the Contractor, it being intended for projects let on project finance basis). Clause 5 is of course not found in the Red Book, intended for use where design responsibility rests with the Employer.

So are the Gold and Yellow Books are any different?

**Designer’s ‘discussions’ with Employer’s Representatives (Sub-Cause 5.1)**

Sub-clause 5.1 sets out the DBO Contractor’s general obligation to ‘be responsible for the design of the Works’. This appears similar to Yellow Book. However, his obligation to ensure his designers are available to attend discussions with the Employer’s Representative does not end with the expiry of the Defects Notification Period (as in Yellow Book), but goes beyond that period. In fact, Defects Notification Period does not even exist as a concept under the Gold Book because of the nature of a DBO procurement, since there is no handover of the facility to the Employer upon completion.

This means the Contractor’s designers are never ‘off the hook’ but must remain responsible for discussions with the Employer’s Representative throughout not only design and construction, but also during the (say) 20 year operation thereafter.

If the DBO Contractor employs any specialist sub-consultants or suppliers, their contracts must expressly assume this obligation on a ‘back to back’ basis, which might cause some problems in practice, as a (say) 20 year period extends far beyond most applicable statutes of limitation (normally 6 years) or indeed insurance coverage. Also consider whether some limitation is needed, for example this obligation arising only upon a failure to achieve key output specifications (as opposed to a wider notion of ‘default’) during operation.

**Review of DBO Contractor’s design (Sub-Clause 5.2)**

The extent of the Employer’s review of the ‘Contractor’s Documents’ is often a sensitive and heavily negotiated issue. As with most forms of DBO, the DBO Contractor should in theory have some degree of freedom to adopt any design,
method, of construction or operational method, provided he delivers to the Employer’s output specifications, failing which he pays performance related liquidated damages.

One of the essence of a DBO procurement mode therefore is for the DBO Contractor to be given this room for innovation. The Employer is after all paying for a service, rather than a specified facility (or indeed the method of constructing that facility).

It is disappointing the Gold Book does not acknowledge the greater flexibility often afforded to the DBO Contractor; on the contrary it (arguably) curtails the DBO Contractor’s opportunity for innovation, in:

(i) increasing the complexity of the procedure for the Employer’s review of the DBO Contractor’s design, with different classes of design documents being subject to different levels of ‘inspection’, ‘review’ and ‘approval’;
(ii) enlarging the scope of documents subject to review and approval;
(iii) the imposition of a new requirement (not in Yellow Book) that the Employer’s Representative be ‘satisfied that the Contractor’s documents conform to the Employer’s Requirements’.

**Inspection, Review and Approval (Sub-Clause 5.2)**

Sub-Clause 5.2 is unnecessarily complicated. For example, Contractor’s Documents that are subject only to ‘inspection’ comprise all documents:

(a) specified as such in the Employer’s Requirements,
(b) those required to satisfy all regulatory approvals, and
(c) as built and O&M drawings.

However when it comes to ‘review’, only such documents in (a) are included and even then, only if ‘the Employer’s Requirements describe the Contractor’s Documents are to be submitted to the Employer’s Representative for review.’ (emphasis added).

Employers preparing their requirements sometimes overlook the subtle distinction between describing a document as a ‘Contractor’s Documents’ and stating that they are to be submitted for review. Equally Contractors are often in the dark about the distinctions, adding to uncertainty and increasing the likelihood for dispute.

To complicate matters further, FIDIC then requires that ‘the Contractor’s Documents which require approval from the Employer’s Representative shall be as listed in the Contract Data’.

The ‘Contract Data’ mentioned here is a 4 page document (akin to the Appendix to Tender) which forms part of the Particular Conditions; it is not part of the Employer’s Requirements. The parties preparing or implementing the Contract would in practice face a real challenge trying to ascertain which documents are to be inspected, which are reviewed and which are subject to approval. In practice this Sub-Clause would be revamped to remove the ambiguity.

**Other ‘tougher’ provisions for the DBO Contractor (Sub-Clause 5.2)**

In addition the Gold Book now expressly states that if as a result of any review the Contractor’s documents need to be re-submitted, not only does the DBO Contractor bears its own cost (as in the Yellow Book), in addition he has to compensate the additional costs incurred by the Employer.

If the Contractor needs to modify any design previously submitted for review or approval, not only must he give notice (as in the Yellow Book), that notice must now be accompanied by a written explanation of the need for such medication.

**Submission of O&M manuals by installments (Sub-Clause 5.6)**

The DBO Contractor is now allowed to submit O&M Manuals by installments, the first before commencement of commissioning tests, and the balance prior to the Commissioning Certificate (when commissioning tests have passed).

This removes the difficulties in practice where the Yellow Book is used, which arguably requires the Contractor to provide the entire set of O&M manuals even before commencing commissioning tests. This is not realistic. Conversely, from the Employer’s viewpoint it is unrealistic to expect no manuals to be provided (even in draft) before

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allowing the commissioning tests to commence. This staged submission satisfies both the Employer’s need for an interim O&M manual, and the DBO Contractor’s need to be allowed to ‘fine tune’ the O&M manuals up to the end of commissioning.

Changes in technology – new provisions (Sub-Clause 13.7)

There are new provisions dealing with adjustments for ‘changes in technology, new materials or products’. This differs from the Yellow/Silver Book’s adjustments for:

- changes in legislation i.e. change in law (which is retained in the Gold Book); and
- changes in costs (clause 13.8 in Yellow/Silver/Gold).

In Yellow/Silver/Gold Books, changes in law allows the Contractor to claim increased costs, but not for changes in costs. The Contractor is expected to protect against material cost increase through e.g. accumulation or by locking in his sub-suppliers, but he is not expected to foresee nor provide against changes in the law.

Why is there a need for a new change in technology regime? In a traditional project where the Yellow or Silver Book is used, the contract duration is relatively short (typically ranging from 18 to 36 months), such that a change in technology is unlikely to occur (or even if it occurs, it is not worth the while to effect the change). The Gold Book in contrast is intended for use with a say 20 year operation period – in such a long period it may be worthwhile to effect changes arising from advances in technology, say in the waste and water sectors where DBOs are prevalent.

Who controls the decision to effect a change, to take into account these changes in technology/materials? Obviously the Employer must benefit if he is to pay for effecting these changes. In clause 13.7 three situations for this change coming about are envisaged:-

- (a) the Contractor proposes the change as part of the value engineering provisions (clause 13.2);
- (b) Employer through his representative instructs the change;
- (c) Statutory requirement requires the Contractor to effect the change.

In (a) the Employer still controls the initiation for the change, since ‘value engineering’ (to improve efficiency, reduce maintenance costs or accelerate completion) is always subject to the Employer’s final decision.

In (b) the Employer clearly controls the change, but what about (c)? Changes initiated through mandatory statutory requirements lies beyond the control of both parties. That being the case the risk logically falls on the Employer, in the same way as changes in law.

Liability for errors in the Employer’s design

Upon receiving notice of commencement the Contractor is required (Sub-Clause 5.1, Yellow/Gold Books) to scrutinise the Employer’s Requirements, including design criteria and calculations. He is given a period stated in the Appendix (Contract Data for the Gold Book) to give notice of any error, fault or defect therein.

If he fails to do so and is subsequently affected by such errors, and an experienced contractor exercising due care would have made that discovery, he loses the right to claim any additional time or costs (Gold Book Sub-Clause 1.10, Yellow Book Sub-clause 1.9).

However the Gold Book goes on to say: ‘Notwithstanding the Contractors obligations to scrutinize the Employer’s Requirements under Sub-Clause 5.1, if the Contractor discovers an error in the Employer’s Requirements, he shall immediately give a written notice to the Employer’s Representative...’

This additional paragraph does not appear to change the allocation of risks as regards errors in the Employer’s Requirements, although an uncertainty may arise because Sub-Clause 1.10 says ‘Notwithstanding Sub-clause 5.1’. Sub-Clause 5.1 as mentioned above requires the Contractor to scrutinize the Employer’s Documents and notify of errors within a time period (often 42 days).

It is unclear whether the words mean that the Contractor’s duty to scrutinize and notify nevertheless continues after that period has lapsed, or conversely, if the Contractor notifies after that period has lapsed, he is nevertheless entitled to additional time and costs.

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Conclusion

Although there are enhancements such as new provisions dealing with the effects of a change in technology, the Gold Book suspiciously appears to be a cosmetic make-up of the Yellow Book, and some of the provisions (e.g. design review) are either unsuitable for DBO procurement mode, hampers the DBO Contractor’s ability to incorporate innovative designs, or else fails to sufficiently emphasise the nature of DBOs (output specifications assume paramount importance since the employer is paying for a service, not a product).

Substantial amendments will have to be made to counter these issues, in order to transform what are essentially design build provisions into a DBO procurement, and also to clarify the uncertainties raised.

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