1. Introduction

The International Federation of Consulting Engineers (FIDIC) has just published the latest in their series of Contract Guides, this time in relation to the new Design, Build and Operate form (FIDIC "Gold Book"). FIDIC Gold Book remains the only internationally recognised design, build and operate standard and so not surprisingly was the subject of much discussion from industry commentators when first published (in 2008). At the time, criticism was directed in particular to the clauses dealing with project operation (a first for FIDIC), the fact that it is reserved for greenfield projects and that it has no funding element. It was hoped that the Contract Guide might address some of these issues and in doing so widen its potential application for future projects.

In this [Newsflash/article] we examine several of the key criticisms raised against the Gold Book and consider whether these have been addressed in the Contract Guide.

2. Applicability for Brownfield Sites and BOT/PPP Projects

FIDIC Gold Book states in its introduction that it is applicable only to greenfield sites and has no provision for upgrade of existing facilities. As these types of projects make up only a relatively small portion of DBO projects in general, it was hoped that the Contact Guide would include the much promised changes to make the Gold Book suitable for brownfield sites as well. However, we will have to wait a bit longer for this as according to the Contract Guide: "FIDIC intends to publish a separate document for the brownfield scenario."
Another key issue noted when the Gold Book was first released (particularly in the UK), was the lack of any financing element, which ultimately makes the form unsuitable for PPP/BOT projects. Likewise, provisions to adapt the Gold Book for PPP/BOT are not included in the Contract Guide. It is also doubtful that the form could be used even as a subcontract in a BOT/PPP project, since such subcontracts would need to be on a back-to-back basis with the overarching project agreement, and so would only be suitable following substantial amendment.

3. Contractor Obligations Over the Operation Period

In the Foreword to the Gold Book, FIDIC envisaged that it would be used by separate construction and operating companies acting as the "Contractor" under a joint venture/consortium agreement. However, imposing obligations on the JV/Consortium as a whole causes particular problems in a DBO project. Consider Sub-Clause 4.1 of the Gold Book. This imposes a duty on the Contractor to ensure that the Works are "fit for the purposes for which the Works are intended as defined in the Contract" and states that the "Contractor shall be responsible for ensuring that the Works remain fit for such purposes during the Operation Service Period" [Emphasis added]. Construction companies have a business model that relies on design/build risk being significantly decreased on issue of the completion certificate. Such companies will have to consider carefully their continuing exposure over the 20 year Operation Service Period. Operators have a long term risk model, but are reliant on the design and build expertise provided by the constructor and would not ordinarily assume fitness for purpose in their O&M contracts (which are service contracts that are output focussed after all). Operators would therefore find it difficult to model the construction risk without guarantees from the constructor, with such guarantees dependent on the projected financial viability of the constructor over the 20 year Operation Service Period.

In addition, under Sub-Clause 4.2 of the Gold Book, performance security must be provided by the Contractor throughout both the design-build and operational phases of the project. Despite the value of the bond being reduced 1 year following the completion of outstanding construction works, this provision may be onerous to the Contractor (depending on the type of project and value of the bond). It has been questioned whether an institution will provide such long term guarantees, and whether the reduced risk following commissioning still justifies such protection. This is especially the case when Sub-Clauses 4.25 and 15.2(e) already provides a mechanism under which the Contractor must report any adverse changes in its financial situation and allows the Employer to terminate the contract if the Employer believes the Contractor will not satisfy its financial obligations. Therefore a Contractor renewing the necessary bond coverage not only faces the increased cost of renewing, but should such cost be prohibitive, the Employer has the right to terminate. Thankfully this is one issue which the new Contract Guide does
address. The Guide acknowledges that: "some Employers may choose not to require a Performance Security during the Operation Service Period as they may see this phase of the Contract as being equivalent to a "service contract" where a Performance Security is not appropriate". This provides strong justification for a Contractor to resist providing a performance security for the Operation Service Period.

4. Reporting Criteria

The Contract Guide is less helpful on the interpretation of provisions dealing with monthly reporting. The position is clear during the construction period. Sub Clause 4.21 states that during the design-build phase monthly progress reports are to be submitted and that "reporting on progress shall continue until the Contractor has received the Contract Completion Certificate". However the contract is silent on frequency during the operations phase. The clause goes onto say: "Details of the content of the progress reports for the Design-Build Period and the Operation Service Period shall be as specified in the Employer’s Requirements" and later on, that “the particular reporting requirements during the Operation Service Period shall be specified in the Employer’s Requirements.” The drafting is therefore ambiguous as to whether the progress reports are to continue to be provided monthly during the Operation Service Period or at some other frequency.

The Contract guide does not discuss frequency and so it would be prudent to ensure that the Employer’s Requirements specify the frequency of operational progress reports (as well as the content).

5. Design Obligations

Sub-clause 5.1 of the Gold Book states: "The Contractor undertakes that the designers shall be available to attend discussions with the Employer's Representatives at all reasonable times". However when applied to a 20 year operation period this could prove to be an onerous obligation.

Whilst the Contract Guide acknowledges that: "if the Employer's Requirements contain any immutable provisions or require that any part of the design...be carried out by a third party... then the responsibility for those provisions or parts must be clearly separated from the general responsibilities...However if such third party is designated as a nominated designer (Nominated Subcontractor) then according to the provisions of Sub-Clauses 4.4 [Subcontractors] and 4.5 [Nominated Subcontractors], responsibility for the design will remain with the Contractor", it does not address the issue of when this obligation should cease. A design team is never going to be available for the full 20 year Operation Service Period. A better approach would be to clarify that obligation expires on the issue of the Commissioning Certificate.
A further criticism of the design requirements is levelled against Sub-Clause 5.2, which relates to the Contractor’s Documents. It has been argued that there is undue complexity in distinguishing between those Contractor's Documents that are open to inspection, from those submitted for review for "consent" and those submitted for review "for approval". For example, for a document to be reviewed for approval the Employer must: (i) describe in the Employer's Requirements that the document should be submitted for review; and (ii) list the document as requiring approval in the Contract Data. Sub-Clause 5.3 provides that should the Employer require further Contractor's Documents, they should be produced at the Contractor’s own cost. However, as these documents will not have been described in the Employers Requirements as requiring review, and/or added to the Contract Data, presumably a variation would be required for them to be subject to review and consent/approval.

The Contract Guide doesn't clarify matters; its only comment is: "As the [Contractor’s Documents] form such an important part of the work to be done by the Contractor, the Contract gives the Employer's Representative and/or his Personnel, the right to inspect, review, comment upon and give consent to the Contractor’s Documents, and the Contractor is not permitted to proceed until such consent is given... Any consent (or where specified, approval or review) shall not relieve the Contractor of any of his responsibilities as to the correctness of such documents and his ultimate obligation that the Works be "fit for purpose".

Of course, a broader question is whether adopting the Yellow Book approach to design review for a DBO form is suitable at all and whether a more service-based approach, relying on the output specification, would encourage more innovation from the Contractor. Whilst it is understandable that the Employer would wish to approve certain Contractor's Documents (e.g. that relate to planning or similar high profile consents that may be in the name of the Employer), given that the consent procedure (c.f. approval procedure) does not act to transfer risk, one could argue that its inclusion in the design review procedure therefore seems superfluous. Under the Gold Book, the Employer "gives his consent to a document when he is satisfied that the Contractor's Documents conform to the Employer's Requirements". As there is a requirement to pay the Employer's subsequent review costs should a Contractor’s Document be rejected following first review, a Contractor will be wary of providing innovative designs for fear of the Employer rejecting them, especially where the Employer's Requirements have not been drafted to allow for service based output requirements. Moreover, the review procedure is designed for the Employer's control of the design, and to the extent that the Employer wishes to review design documents, perhaps that should be at the Employer's cost; as the Employer is best able to control such expenses.
6. Value Engineering

Another factor influencing innovation is the Value Engineering provisions – dealt with under Sub-Clause 13.2. Again, the DBO provision is essentially standard FIDIC (Yellow Book). The Contractor may submit proposals at its own cost that may accelerate the Works, decrease costs, improve efficiency or “otherwise benefit the Employer”. It is questionable whether this will be utilised by the Contractor considering that preparation of the proposal will be at the Contractor’s cost and for the Employer’s benefit.

The Contract Guide tries to address this conundrum but by simply reiterating that “the benefits foreseen by the Contractor must be benefits to the Works or to the Employer. Benefits to the Contractor in the way of cheaper design or modified function are, by themselves, not enough”. The Guide points out that the Contractor will be financially motivated to perform value engineering because: “If there are savings resulting from the value engineering, the share of this saving should be agreed prior to instructing the variation. Alternatively, it is even better if the Special Provisions fix these proportions” – so encouraging the Parties to address this issue pre-contract.

7. Adjustments for Changes in Technology

With the pace of new technology, it is not surprising that the Gold Book (at Sub-clause 13.7) allows the Employer’s Representative to instruct the use of new technology, new materials or new products to be used during the duration of the Contract. Of course, this incentive only works if there are actual financial savings. The Contractor is entitled to an increase in time/cost during the design-build phase, and increased costs during the Operation Service Period so no issue there, but a prudent Operator will always want to consider the impact of such new technology/materials/products on the quality of the operational service. Sub-Clause 13.1 only allows objection to the variation on the grounds that it “will have an adverse effect on the provision of the Operations Service”. That is not the same as "may have" and so gives the Contractor very limited rights, especially where changes in technology during the design phase may impact on the Operation Service Period (and so the actual impact will not be known at this stage).

This issue is not addressed in the Contract Guide except to state "if the [Technology Change] occurs during the Operation Service Period, the Contractor is entitled to receive financial compensation". A prudent contractor should therefore consider including more detailed provisions protecting the Contractor from changes in technology that could affect operational quality.
8. Adjustments for Changes in Costs

Cost escalation over the 20 year operations period is addressed in the Gold Book under Sub-Clause 13.8, which provides that "the Contract Price...Rates and Prices shall be adjusted in accordance with the Schedules of cost indexation included in the Contract". There have been questions as to whether indexation is the most appropriate mechanism to protect the Contractor from cost escalation or whether periodic reviews (perhaps with occasional benchmarking against local market prices) are more appropriate.

The Contract Guide is quite helpful here. It notes that it is normal "for a long-term DBO contract to contain some provision for cost escalation, especially during the Operation Services Period" and goes on to say that "the inclusion of a "hardship" clause may even be justified and appropriate during the Operation Service Period given its long (20-year) duration. In such a clause, the Parties recognise that it may be impracticable to make provision for every contingency which may arise, and state their intention that the Contract shall operate between them with fairness and without prejudice to the interests of either of them." It is a pity that the Guide did not go on to suggest particular drafting. Wording along the lines of “fairness” or not so as to “prejudice to the interests of the parties” are likely to lack the necessary certainty to be enforceable. Contractors should also ensure that the Schedules of indexation are included as the Contract Guide makes it clear that there will be no mechanism for cost escalation if they are not.

9. Operational Risk

As regards the allocation of risks during the Operation Service Period (Sub-Clauses 17.3 and 17.4), the Gold Book does not allow for the effect of any Employer input into the operational services (say for example the Employer is responsible for influent or control of waste materials in a wastewater treatment or waste recycling plant). Whilst the Contractor is not responsible for delays/interruptions unless he has caused them (sub-Clause 10.6), what about actual damage to the process? The Contract Guide does not specifically address this. It simply says: "If a risk arises and the Parties cannot agree where the risk lies, the matter will be decided by the Dispute Adjudication Board (DAB), and the risk will be carried or shared by the Party or Parties named by the DAB" over which the Contractor has no control.

Sub-Clauses 10.6 and 10.7 of the Gold Book deal with delays to service during the Operation Service Period and failure to reach output specifications. Whilst the Contractor is liable for all losses (including loss of revenue, loss of profits and overhead losses) resulting from delays or interruptions during the
operation period which are caused by the Contractor, such losses are hard to calculate and prove and are subject to a liability cap. The Contractor is also liable for performance damages on failing to achieve the production outputs and must take all steps necessary to restore the output to the required levels. If underperformance continues for more than 84 days, the Employer may terminate the contract or make reduced payments for the Service as calculated under the determination provisions. While providing some recourse to the Employer, the loss/damage mechanism is unsophisticated compared to key performance indicator/liquidated damages mechanisms provided for under contemporary DBO contracts. Unfortunately the Contract Guide is silent on this point.

A further consideration is the use of insurance to spread the risk of operational failure. Despite the risk allocation to the Contractor during the operations phase, business interruption insurance is not mandatory under the Gold Book. It will benefit both Parties for such risks to be covered under business continuity insurance where available, but a Contractor will have to consider carefully when including the cost of such in its tender for fear of being under-bid. Further, as under Sub-Clause 10.9 ownership of any output and revenues is the exclusive property of the Employer, does the Operator have an insurable interest in the Employer's loss of revenue? The Contract Guide does address this issue stating that: "If there are additional operational insurance which the Employer requires the Contractor to take out...the Employer must make sure that such requirements are given in the Contract Data. Provided he does this, the Contractor is responsible for including such requirements in prices...Examples of insurance cover which might be required...are Machinery Breakdown, Loss of Profits and Loss of Profits following Machinery Breakdown." Depending on the project, it may be beneficial for an Employer to require insurance to protect against interruption during the Operation Service Period, but consideration should be made as to the cost of renewing such insurance over the 20 year period. A mechanism where the Employer shares in the burden of any increase in the premium above inflation would probably be the best way to address such costs.

10. Contractor's Liability

One criticism of the Gold Book liability provisions (which largely mirror Yellow Book) are that they are unclear when read alongside the new provisions dealing with operational liability in Sub-Clause 10.6.

Sub-clause 17.8 is a broad exclusion clause which, subject to certain express exceptions, excludes liability for "loss of use of any Works, loss of profit, loss of contract or for any other indirect loss or damage". However, one of the express exceptions to the 17.8 exclusion is Sub-Clause 17.9 which provides for an indemnity from the Contractor to the Employer that arguably covers the majority of
indirect losses that may be suffered by the Employer. Such is the extent of the indemnity under 17.9 that commentators have noted that the consequential loss exclusion under 17.8 may as well be solely to the benefit of the Employer.

Commentators have also noted potential overlap between the indemnity under Sub-Clause 17.9 which covers "all errors in the Contractor's design of the Works and other professional services which result in the Works not being fit for purpose or result in any loss and/or damage for the Employer" and Sub-Clause 10.6 where: "if there are any delays or interruptions during the Operation Service which are caused by the Contractor or by a cause for which the Contractor is responsible, the Contractor shall compensate the Employer for any losses including loss of revenue, loss of profits and overhead losses". This is important as liability under 10.6 is subject to a determination (and most importantly, a liability cap) while the indemnity under 17.9 is not.

Disappointingly, the Contract Guide doesn’t specifically address these drafting issues although it says: "it is very difficult for a Contractor to assess his risk exposure if he carries unlimited financial liability for the consequences of certain events occurring" and so FIDIC does recognise that a Contractor would require that it has a limit to its exposure to indirect risks.

11. Conclusion

The Contract Guide follows the traditional, narrow approach of such guides – providing a commentary summarising the provisions of the Gold Book and re-stating their intent. As such, it does address some issues of interpretation and provides a more detailed explanation of the mechanisms that are used in the form. Perhaps not surprisingly, the Contract Guide does not provide alternative clauses or wording to address criticisms that have been levelled against certain provisions. These will need to be dealt with by the parties themselves – in the Particular Conditions/Special Provisions. There is a small section on "Preparing Special Provisions" in the Guide but FIDIC make it clear that the reasons for change should be limited to:

- where the General Provisions indicate that alternate wording may be used (e.g. Commencement Date in Sub-Clause 8.1);
- where the insurance provisions need to be changed;
- where there are legal or other requirements not reflected in the General Conditions; or
- if there are particular project features which render certain of the General Conditions inappropriate or unacceptable

Nor does the Guide widen the Gold Book’s applicability to brownfield projects, a subject that we hope FIDIC turns to next.