

The new FIDIC EPC BOT contract

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The new standard form of construction contract produced by the well respected International Federation of Consulting Engineers aims to provide a fair risk allocation between the Contractor and the Project Company specifically for BOT projects. If it succeeds, it will save time and money for everybody. It is likely to be seized upon by participants in international privately financed projects - but does it achieve its goal? Bruno de Cazalet and Rupert Reece, Avocats j la Cour, Gide Loyrette Nouel, Paris.

The road to the Silver Book

The International Federation of Consulting Engineers (FIDIC) has been publishing standard forms of construction contracts which have been widely used in the international construction industry since 1957. Contractors participating in international infrastructure projects have frequently used FIDIC's Conditions of Contract of Works of Civil Engineering Construction, the famous Red Book, or the Conditions of Contract for Electrical and Mechanical Plant, the Yellow Book, as the basis for the contracts they offer to the client. Likewise, owners or Employers, often public authorities in a wide variety of countries have issued invitations to tender incorporating contracts based on the same books (although often with a deliberate reallocation of risk back to the Contractor).

With an increasing number of projects being financed privately through Build Operate Transfer or concession type structures, lenders financing on a limited or non-recourse basis have also come to know the FIDIC books. The fact that the construction contract for such a project is based on a FIDIC model has often been a source of comfort. Is the EPC a FIDIC?" the lenders' counsel may ask, an affirmative answer will win a nod of approval. However, none of the FIDIC books in circulation until now have been specifically aimed at BOT projects. In addition, the Red and Yellow Books were originally drafted for different aspects of construction works. The Red Book was intended for civil works, with limited supply of plant and equipment, while the Yellow Book was geared towards the supply of equipment. This meant that both forms required significant amendments for use in a project where sponsors and lenders would require the Contractor to do just about everything from detailed design through civil engineering to supply, installation and testing of the turbine before handing it over to the project company.

In 1996, FIDIC went some way towards responding to these needs by publishing a form of Design - Build and Turnkey contract under which the contractor is to perform all aspects of the work necessary to provide a fully operational power plant, water treatment plant etc. - the Orange Book. Now, on Thursday September 23, 1999, FIDIC published a harmonised suite of four contracts including the first edition of "Conditions of Contract for EPC Turnkey Projects" - distinguishable, like the other books, by the colour of its cover - the "Silver Book". The Silver Book is, for the first time, expressly aimed at

providing a fixed price, date certain, engineering, procurement and construction ("EPC") contract with a risk allocation which is suitable for projects being financed by private lenders on a limited or non-recourse basis. If it works, this is a very important contribution to the industry.

The EPC contract in a BOT project

In a typical BOT project, for example the construction and operation of a gas-fired power plant, the EPC contract is fundamentally important. It is the means by which the project is provided with its only money-making asset. The price paid to the contractor is usually the largest capital expenditure incurred by the project company. The contract is also, unfortunately, the most likely source of significant cost overruns. The economic viability of the tariff under the offtake contract depends on the EPC price remaining unchanged or at least limiting the possibility of any overruns and their impact on the project company.

Sponsors expecting a return on equity will obviously look closely at the contract. Sponsors also know that the more secure the terms of the EPC contract, the less direct or indirect support they will be asked to give to the project by lenders.

For its part, any lender planning to accept an amount of project risk will need to check the terms and risk allocation under the EPC contract carefully before committing itself to financing. This is particularly so if the contractor, as is often the case, is an affiliate with one of the sponsor shareholders of the project company.

Lastly, but not insignificantly, the result of the EPC contract is, after the level of the tariff under the offtake contract, probably what interests the host government, concession grantor and/or off taker (collectively the Grantor) most about the project. The EPC contract will produce the piece of infrastructure that will be handed over to the Grantor at the end of the concession period. Thus even if the host authority is, in theory, not legally concerned by the relations between the project company and its contractor, in practice it will at least require a copy of the EPC contract for information and will often want to follow the work on site closely to make sure it is getting what the Grantor will pay for through the tariff.

The above factors conspire to pressurise the contractor to take an increasing level of responsibility and risk. Hence, the contractor will usually be required to offer a fixed price, himself taking the risk of any fluctuations in the cost of labour or materials (including as a result of exchange rate variations). He will classically be required to take the risk of any additional costs arising out of any climatic risks against which he can insure himself (damage by lightning etc.) but also of any adverse sub-soil conditions being discovered. The contractor will also be required to guarantee completion by a certain date and, furthermore, that the equipment he supplies will meet various performance criteria. Here, by way of exception to the general rule that the contractor is not liable for the loss of profits suffered by the employer, the contractor will be required to pay liquidated damages which compensate the project company (and therefore the lenders) against a delay or failure to meet the performance guarantees.

Contractors are obviously not keen on accepting these risks which are often contrary to traditional company policies and which are frequently assumed in the context of an international invitation to tender where they have had a limited opportunity to investigate the conditions in which the work will have to be performed. However, in an environment where more and more projects around the world are being privately financed, contractors are being forced to accept these terms. Inevitably they accept them at a price which is then passed through to the project company and ultimately consumers (of electricity, treated water, toll roads etc.).

Ultimately, the above factors lead to a significant amount of time being spent negotiating the EPC contract and then reviewing it with the lenders. It is not unusual for the EPC contract to find itself on the critical path to achieving financial closing. It is also not unusual for the contractor to be required to start work even before the contract has been signed, or at least approved by lenders.

Therefore, if the parties can start from a standard form of EPC contract, produced by an institution which they know and respect, which already sets out a pattern of risk allocation which should be acceptable to all parties, that could save everyone time and money. We will now look at whether the Silver Book achieves that goal.

The Silver Book's two party approach

In the Silver Book, FIDIC, no doubt somewhat to the dismay of its members, removed the engineer. In the Silver Book, the employer may, but is not obliged to, appoint a representative as a point of contact for the Contractor. Now all claims, whether made by the Contractor or the Employer, are submitted to the Employer, not an independent Engineer, for an initial fair determination in accordance with the Contract. However, under the Silver Book the Employer's determination is only binding until it is contested by the Contractor and referred to the Dispute Adjudication Board.

This two party approach is consistent with the reality of the relations between the project company, as Employer, and a contractor in a BOT project. In fact, the project company will normally engage a professional engineer to review and advise on the progress of the work but the engineer will work for and report to the Employer only. He is not required to be an independent entity. On that basis, there is no reason for the engineer to be involved in the legal relations with the contractor.

Similarly, the project lenders will appoint an engineer to monitor the work for them, issuing progress reports for disbursements of the loan and generally advising on issues affecting the financing. The lenders will require, in the financing documents, that the Employer refer invoices and significant claims for additional costs or extensions of time, to the lenders' engineer for approval. Accordingly, the Employer will have to remember not to give his consent to the contractor on such issues until the approval of the lenders' engineer has been obtained. However, although the contract should mention the lenders' engineer as one of the people who should be allowed access to the site and to attend test etc. and, in order to save time, may provide for copies of documents to be submitted by the Contractor with a copy directly to the lenders' engineer, it is

not necessary to involve the lenders' engineer any further in the legal relations between the Employer and the Contractor.

Risks allocated to the Contractor

Like the Orange Book, the Silver Book gives the contractor the full responsibility for all aspects of the work. The contract envisages the creation of a document of Employers Requirements in which the employer will set out the particular requirements for the completed works on a functional basis rather than by detailed technical specifications. For a BOT project, the Employer's Requirements are a crucial element of the contract and will usually be a combination of the technical requirements, if any, that are included in the contract which binds the Employer to the Grantor, together with any more stringent requirements imposed by the sponsors, the designated operator or the lenders.

The Contractor is required to perform all work necessary to satisfy the Employer's Requirements and as necessary for the safe and proper operation of the completed Works. The Works are also required to be fit for their purpose as defined in the Contract.

A particularity of the Silver Book is that the Contractor is, for the first time, deemed to have scrutinised the Employer's Requirements and take responsibility for their accuracy as well as the design criteria and calculations used. Unless specifically stated in the contract, the employer does not accept any responsibility for the accuracy or sufficiency of site data or other information provided to the contractor, either in the Employer's Requirements or otherwise. In a BOT project, this is probably the right approach as the contractor will be the best qualified person to take this risk.

Similarly, the silver Book does not (unlike previous FIDIC models) allow any cost or schedule relief to the Contractor for the discovery of adverse sub-soil conditions on site, even of conditions which could not have been foreseen. (However, the contract does make an exception for the discovery of fossils and things of archaeological interest. Strangely, this exception is on wider terms than the equivalent clause of the Orange Book). In the notes for guidance, the authors of the Silver Book suggest that if the works include tunnelling or substantial sub-surface construction it may not be appropriate to place this risk on the contractor. Certainly, contractors will always be reluctant to accept this risk, but in a BOT project the question will, to a large extent, be resolved by the terms of the contract between the employer and the grantor. If the Employer has been able to negotiate the right to schedule relief and an adjustment in the tariff in the event of discovery of adverse site conditions, then the Employer can pass the benefit down to the Contractor.

On the other hand, if the project company gets no relief in those circumstances, the contractor will have to accept the same fate. Otherwise, the Silver Book provides a limited number of events which might give rise to a right for the Contractor to recover additional costs or claim an extension of time. The events are, generally speaking, uninsurable for the contractor and no wider than the risks which project companies and lenders have become used to taking (or rather passing on to the Grantor) in BOT projects for some time. The Silver

Book also makes it clear that the Contractor shall not be entitled to additional costs or extensions of time in circumstances other than those set forth in the contract.

The allocation of risks to the contractor under the Silver Book is not without limit. The contractor is not liable to compensate the employer financially for loss of use arising from a defect in the works, even one arising during the contractual defect liability period. Similarly, even on repair or replacement of defective materials, the defects liability period may not be extended for more than 2 years. The contractor's liability is, furthermore, always limited to 100% of the contract price (except in certain circumstances - fraud etc. - which appear narrower than those provided in the Orange Book).

Changes to be back-to-back with concession

The Silver Book is drafted as a stand alone contract, without any reference to up-stream contracts which the Employer might have concluded. This is understandable since obviously not all EPC Turnkey contracts are destined for BOT Projects. However, in a BOT Project, the EPC contract's primary reason for being there is in order to enable the project company to satisfy the requirements of the concession (or off take) contract that it has concluded with the grantor. It is invariably necessary to adapt the drafting of the EPC contract accordingly. At the very least, the contractor should acknowledge the existence of the concession contract and that the operation of, for example, the Power Plant under the concession contract is the purpose for which his Works must be fit.

On the other hand, because of the inherent differences between the EPC contract and a concession contract (eg. payments to the Contractor occurring as the works progress vs revenues for the project company being generated only after the works are finished and being spread over, say, 20 years) it will not be possible to treat the EPC contract as a pure subcontract to the concession contract. The accepted philosophy is that the EPC contract should be drafted so as to be "back-to-back" with the concession contract. This means that the EPC contract should, as far as possible, be consistent with the Employer's obligations under the concession contract, and should cleanly pass through to the contractor the obligations and risks relating to construction.

There are a number of clauses in the Silver Book which are likely to be affected by the need to be back to back with a concession contract concluded by an employer in a typical BOT project and which would need to be amended accordingly. Classic examples are the definition of Force Majeure and Change in law. The employer cannot allow the contractor cost or schedule relief in circumstances where the employer does not have a similar entitlement under the concession contract. The clauses presently proposed in the Silver Book are not inappropriate in themselves, it is simply that they will have to be made to correspond, almost word for word, with the definitions in the concession contract. Similarly, the definition of the events which give rise to termination of the EPC contract should work within the framework of the termination provisions of the concession contract and any limitations that may apply on the replacement of a defaulting contractor. On a day to day level, the rights for the representatives of the Grantor to inspect the work and attend tests should be

reflected in the EPC contract. The procedures for testing and taking over under the EPC contract must match the procedures for testing and entry into commercial operation under the concession contract. The sponsors or the lenders may also seek to impose on the contractor "if and when" type clauses, for example providing that the contractor's claims should only be allowed if and when the employer has succeeded in recovering appropriate compensation under the concession contract. This would involve a number of modifications to the Silver Book clauses relating to claims.

Lastly, in an attempt to avoid the risk of conflicting decisions and to save time and money, the employer may wish to try to find a way of involving the contractor in dispute resolution proceedings with the grantor or otherwise to oblige the contractor to accept findings made in such proceedings. Either approach would involve significant amendments to the dispute resolution clauses.

Lenders' issues

We have already mentioned that certain amendments may be required to the Silver Book conditions to allow the lenders' engineer access to the site and works. Otherwise, the interests of lenders should generally be aligned with those of the Employer himself. Since the lenders in a BOT project will, generally, be taking an assignment of the Employer's rights under the EPC contract, their review of the EPC contract should be limited to ensuring that the Employer's rights are, in their view, properly protected. In addition, and this is not touched on in the Silver Book, the lenders will usually require the contractor, in a separate document, to acknowledge and consent to the assignment which the lenders will have taken over the employer's rights. The contractor may further be asked to acknowledge the provisions of the principle loan and security documentation and to undertake not to do anything which may be contrary to lenders interests under those agreements. Lastly, and this could be included either in the EPC contract itself or in a separate direct agreement, the contractor may be asked not to undertake a termination of the EPC contract for default by the employer, without giving the lenders an opportunity to cure the default or substitute a new employer.

It is interesting to note, from the acknowledgements at the front of the Silver Book, that although a number of lenders' usual consultants have reviewed previous drafts, the input from private commercial lenders was apparently limited. However, subject to resolution of the above issues and the adaptations necessary to make the contract back to back with any given concession contract, lenders should be pleased with the new model. contractor is not liable for loss of profits suffered by the employer, the contractor will be required to pay liquidated damages which compensate the project company (and therefore the lenders) against a delay or failure to meet the performance guarantees.