

Using EPC Contracts

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The overriding objective is for production facilities (“facilities”) (such as factories, refineries, power plant and desalination plants) to satisfy prescribed performance and efficiency requirements. Depending on the desired outcome, there is a range of different contract approaches that can be adopted including EPCM and ‘traditional’ construct only.

However, engineering, procurement and construction (“EPC”) remains the preferred form of procurement for facilities.

EPC obligations

Under an EPC structure, the contractor is responsible for the design, construction and completion of the facility for a fixed contract price and by a fixed time for completion. In other words, on completion the owner is simply required to ‘turn a key’ to start operating the facility, which should satisfy the output requirements as set out in the contract.

EPC contracts are typically used because they are ‘bankable’. Indeed, transferring most of the construction risk to the contractor means that, in a properly drafted EPC contract, the contractor should have limited ability to bring claims for extensions of time and additional cost.

Such certainty is highly desirable from a lender’s perspective as this means that the facility should be completed on time and within budget. If this is not the case, the consequences of time and cost escalations should be borne by the contractor (who is likely to be liable for performance and delay liquidated damages) and not the owner (i.e. the borrower).

Although ‘bankability’ will vary depending on the specific nature of the facility, the EPC contract will typically be required to address the issues listed below.

- Single point responsibility – The contractor should be solely responsible for all design, procurement, engineering, construction, testing and commissioning of the facility. This means that the contractor will be liable for any defects or problems with the facility, removing the possibility of the contractor seeking to deflect blame to a third party. If the contractor consists of more than one entity (which is frequently the case in large scale projects), it is important that each entity is jointly and severally liable to the owner.
- Full design responsibility – The contractor is usually fully responsible for the entire design of the facility. The contractor will thus be responsible for errors in any preliminary design or FEED (even though the preliminary design or FEED is likely to have been prepared by separate design consultant engaged by the owner). It is equally likely that the contractor will be required to provide a fitness for purpose warranty (which should be covered by professional indemnity insurance). This is consistent with the fundamental principle that the facility is, as an absolute obligation, required to satisfy the output specification as set out in the contract.
- Employer’s Requirements – As the contractor takes on the design risk the owner will control what is to be delivered by a document usually titled “Employer’s Requirements”. This will describe the facility and standards to be achieved as well as the performance requirements. The more detailed the Employer’s Requirements the more likely that the owner will get the facility it wanted. However, the owner will also be more exposed to claims for variations and extensions of time for changes to the Employer Requirements.
- Fixed contract price – The risk of cost overruns (and equally savings) are normally on the

contractor's account. As such, the contract price should only be subject to increase in specific and narrowly defined circumstances (such as variations and acts of prevention by the owner).

- Fixed completion date – The contractor should be under an obligation to complete the facility (including satisfying all tests on completion) by a prescribed date. Failure to complete should entitle the owner to claim delay damages (which are typically subject to an agreed cap). As with escalations in the contract price, the time for completion should only be extended in certain narrowly specified circumstances.
- Tests on completion – The requirements which need to be satisfied in order for the Works to be taken over need to be clearly stated. The tests on completion should be used to demonstrate that the prescribed output requirements of the facility have been satisfied. As a minimum, the contractor should also have obtained all consents and approvals (including the building completion certificate) for the facility to be legally operated for its intended purpose as a condition precedent to take over.
- Performance guarantees – Revenue will only be generated if the facility is effectively operated and satisfies the prescribed output requirements (including in terms of reliability and efficiency). It is therefore important that EPC contracts contain guarantees and that these guarantees are backed by performance liquidated damages if the required standards are not met. As with delay damages, performance liquidated damages are typically subject to an agreed cap.
- Caps on liability – Many contractors will not enter into any contract which does not contain an aggregate cap on liability (which may be the contract price or a percentage of it) with certain categories of loss excluded from that cap (i.e. public liability claims, gross negligence as well as consequential and indirect losses). Caps on and exclusions of liability are typically subject to commercial negotiation but in most jurisdictions in the GCC there may be scope for agreed liability caps to be opened up and reassessed by the competent court or arbitral tribunal so that the compensation payable equates with the true loss suffered. However, in our experience, such agreed liability caps are typically respected and upheld.
- Performance security – The contractor is normally required to provide an unconditional payable on demand performance bond, as security for the owner should it have a claim against the contractor, including for delay or performance liquidated damages. A parent company guarantee may also be required if there are concerns regarding the financial strength or technical capabilities of the contractor.
- Intellectual property – It is imperative that the owner has clear rights (i.e. through the granting of a license or the transfers of IP rights) to use the contractor's designs for any purpose in respect of the facility (including in respect of the maintenance and the expansion of the facility). The contractor should indemnify the owner against any loss suffered arising out any intellectual property breaches.
- Contractor's Rights of Termination/suspension – The contractor typically has limited rights to terminate (i.e. in respect of non payment, prolonged suspension at the owner's convenience and force majeure) with the exercise of any such right by the owner usually being subject to the lender's step-in rights.
- Owner's Rights of Termination/suspension – The owner usually has far broader rights of termination, including in respect of any material breach (which has not been remedied upon the expiry of the relevant cure period) or upon the exhaustion of the cap on delay or performance liquidated damages. The owner may also have a right of termination for convenience. Additionally, the consequences of termination (including the payment/compensation regime and practical steps) should be set out. The Owner will also typically require the right to suspend the works to take into account unforeseen circumstances which occur during the construction phase (i.e. the unavailability of financing).
- Defects liability period – A defects liability period of between 12 and 24 months is common. However, the defects liability period is sometimes extended if defects are corrected during the defects liability period and it is important that the owner ensures has adequate security in place (i.e. retention monies or a performance bond) that it can call upon if the contractor fails to remedy defects during the defects liability period. Owners should also be aware of attempts by contractors

to exempt themselves from all further liability regarding the facility on the expiry of the defects liability period, which is contradicting statutory limitation periods.

Other key facility documents

The facility needs to be looked at holistically and there are various other documents, in addition to the EPC contract, usually need to be in place. These documents may include:

- Finance documents.
- Supply agreements for the operation of the facility. For example, a supply of natural gas will usually be required to operate a methanol plant.
- Offtake agreements for the sale of the product produced by the facility. A power purchase agreement is likely to be entered into with the local power provider if the facility is a power station. If the offtake agreement is on a 'take or pay' basis, it is vital that the facility is in a position to deliver the product from the commencement date under the offtake agreement otherwise it is likely that financial penalties will be imposed.
- An operation and maintenance agreement to ensure that the facility continues to operate effectively and to meet the desired output specification.

It is therefore imperative that the EPC contract is not drafted in isolation. Any EPC contract should, contain specific drafting to address the interface between the EPC contract and the other project documents.

Take home comments

Whilst there are considerable advantages to using an EPC contract (particularly on account of the contractor's single point responsibility), EPC contracting tends to be an expensive method for the construction phase of procurement as the construction risks which the contractor accepts (which may or may not materialize) are inevitably priced and contingencies are built into the contract price. On the other hand, the owner should not be required to make significant payments to third parties (such as designers) if EPC procurement is adopted on the basis that the contractor offers a convenient 'one stop shop'.

A sensible approach to risk should be adopted and specific risks should be accepted by the party best placed to manage a risk. For example, the owner may be accept the risk of ground conditions if it has undertaken a detailed site investigation report but, alternatively, the owner may be happy to pass this risk to the contractor (and accept the premium charged by the contractor) if the ground conditions cannot be easily determined.

EPC contracting remains a tried and tested method of delivering facilities, which is likely to increasingly be the case for the foreseeable future.

Al Tamimi & Company's Construction & Infrastructure team regularly advises on EPC contracts and all other construction related documentation. For further information please contact, Scott Lambert (s.lambert@tamimi.com) or Euan Lloyd (e.lloyd@tamimi.com).