



Contracts go international

Gordon Bateman casts his eye over IChemE's newly-launched International Forms of Contract



ICHEMÉ is about to launch a suite of process plant contracts for international use. This follows the 2005 publication of the consultation edition of the international form for lump sum process plant contracts (the *International Red Book*).

The process industries have for many years operated internationally. A significant number of countries are now developing a process industry for the first time and need to find their way in overcoming the inevitable problems and achieving successful project execution. IChemE is committed to promoting best practice around the world; this year's Global Forum in London illustrated both the need and the desire for IChemE to have a major international presence and influence.

IChemE's existing forms of contract, designed for use in the UK, are highly regarded for facilitating the delivery of process plants, which they have done since the first form was published in 1968. Almost 40 years later, it is most appropriate that IChemE publishes a suite of forms for international contracts.

In this context, an international contract is considered to be one where at least one of the parties is contracting outside his home country and/or where the parties recognise that a major part of the plant will be constructed from materials imported into the country where the site is situated.

So what is so special about a process plant contract that it needs conditions of contract which are different from those for other engineering and construction contracts? Most engineering and construction projects cater for the provision and construction of a major structure (highway, dam, bridge) or mechanical and electrical plant (pumping station, mechanised transport system). There are many published forms of contract for these kinds of projects, including contracts for international use. A process plant is different because its end product is

a chemical and/or biological process: if the process itself does not work correctly as a complete system, the plant is of no value. That means that the many activities of the contractor in designing and constructing a process plant must be focussed on creating a plant which will reliably deliver product to the required standards.

Thus a process plant contract will typically have at least four distinct sets of tests, which can be summarised as follows (this description does not include a pilot plant that may be built in advance of the main plant):

- **Off-site and pre-installation tests:** Often referred to as factory tests, they establish that individual materials or elements of the plant are of a satisfactory standard such that it is likely that the process will work.
- **On-site completion of construction tests:** Similar in overall approach to the off-site and pre-installation tests, these tests will establish that the construction and erection work done at site is of a standard such that it is likely that the process will work and that the plant and its products and by-products will conform to all legal and contractual requirements.
- **Take-over tests:** In contrast to the earlier tests, the take-over tests pose the fundamental question: does the process work? If the answer is "yes", the purchaser can take over the plant and have beneficial use. If not, the contractor must put the plant into a condition such that it will pass the tests.
- **Performance tests:** Such is the nature of process plants that there is often an overlap of process commissioning and operation, with final testing of the performance of the plant against contractual guarantees taking place after the plant is put into service. Remedies for failure of a performance guarantee will depend upon the nature of the guarantee and may be liquidated or general damages.

The above series of tests have consistently been a major feature of IChemE's process plant forms of

contract, along with the many other provisions that go to make a well-rounded contract.

IChemE's international suite of contracts states such vital matters as the applicable law and provides a framework into which additional provisions can be included as necessary.

IChemE has consistently structured its contracts to consist of:

- an agreement;
- the conditions of contract;
- the specification; and
- the schedules.

While the number of schedules has grown over the years, the basic approach has been that the specification is the technical description of the plant and the schedules describe everything else, including stating facts and details (eg time for completion) referred to in the conditions of contract.

In the UK forms, the conditions of contract have been the published general conditions and any *ad hoc* special conditions drafted by the parties to supplement or supersede the published general conditions.

In the new international forms, the conditions of contract are in two parts:

- Part I: the (published) general conditions; and
 - Part II: the particular conditions.
- The particular conditions, drafted for the individual contract, are an essential part of the whole, and not an optional extra. In a number of instances the general conditions specifically refer to the particular conditions, ie the users are given the flexibility to state certain matters according to how they wish to structure their contract. Without appropriate particular conditions, the contract will be incomplete. Equally, the particular conditions allow the contract to be written to meet the specific requirements of the applicable law and other obligations of the purchaser. Example particular conditions are provided, together with guide notes as to their use.

Topics for the particular conditions

include:

- care of the works – possibly varying the obligations in the general conditions;
- insurance – possibly varying the obligations in the general conditions;
- costs of defect rectification after the issue of the acceptance certificate;
- a sole arbitrator rather than a tribunal of three;
- expert determination;
- dispute review board;
- tax and duty;
- conditions precedent; and
- any lender's requirements.

Some topics do not lend themselves to example clauses, eg tax and duty, conditions precedent, or lender's requirements. In these cases there are guide notes but not example clauses.

Certain matters are considered to be of such importance that they should be stated in the agreement – the document which both parties sign to make the contract. The form of agreement therefore provides for the insertion of key matters (eg the law of the contract; the limits of the contractor's liability; and, in a lump sum contract, the contract price).

In drafting a suite of standard clauses for use in an unidentified jurisdiction it is inevitable that the general conditions may include something which is of no effect in that jurisdiction. There are clear statements in the various guide notes that the user should take appropriate advice on the application of the chosen law of the contract.

Reflecting the UK forms, IChemE is publishing three forms of international main contract:

- *The International Red Book*, for lump-sum main contracts;
- *The International Green Book*, for cost reimbursable main contracts;
- *The International Burgundy Book*, for target cost main contracts.

There is also a form of international subcontract for process and M&E subcontracts – *The International Yellow Book*. There are no plans at present to publish an international version of the successful *Brown Book* for civil engineering subcontracts as such subcontracts are generally awarded in-country and therefore based on a local form of contract.

Clients take differing views of the appropriateness of lump sum vs cost reimbursable or target cost, and an analysis of the differences is included in the introductory notes of all three main contract forms. As well as attitudes to risk, factors such

as the extent to which the detailed requirements of the proposed plant have been developed will have a major influence on the choice of payment and risk regimes, and hence the form of contract.

All three types of main contract have established their position in the UK market, and have been used as has been considered appropriate. While a lump-sum approach is much preferred in many sectors, when it comes to major process plant contracts many clients prefer the cost reimbursable or target cost approach.

Where it is appropriate to use the same language in more than one form, the words are identical. Users, and particularly the professionals, who move frequently from one form to another will find the commonality of clause and sub-clause numbers and of text very convenient. Wherever possible the language has been simplified to make it more accessible to those users for whom English is not their first language. The *Yellow Book* equally follows the same language so far as is possible, and is of use equally under any of the three main contract forms.

Two further important features of the IChemE forms of contract deal with the contractor's overall risk exposure and with disputes, or rather their avoidance.

The cost of a process plant failing to deliver the required outputs can be immense, with the cost of lost or reduced production over the lifetime of the plant being many times the multi-million pound cost of the plant itself. For the contractor to guarantee that the plant will work in all circumstances is generally beyond his financial resources. Traditionally, most forms of contract, particularly construct-only contracts in the civil engineering sector, leave the contractor's liability to achieve the required outputs unlimited: whatever it may cost the contractor to get things right, he will only be paid what is due under the contract. Design-and-construct contracts tend to take a different view, and this shift in approach is even more evident in the process sector. The traditional clients of the process industries have long since recognised that the contractor will only be able to deliver on realistic and competitive prices if his liability is capped, probably to contract price or less.

The other key feature of the IChemE forms of contract has been the non-adversarial approach to the various provisions and the variety of dispute resolution mechanisms included within

the contract. The former has been enhanced in recent times, and in the International forms, with a provision for co-operation.

Traditionally, the forms provided for the project manager to decide contested issues. The hope is that this will facilitate dialogue between the parties, and in any event crystallise the dispute. If necessary, this can be followed by arbitration or expert determination.

While arbitration is regulated by statute in most countries, expert determination is contractually based: the parties agree in contract to be bound by the decision of the third party who is to use his own expertise in deciding the answer to the dispute. Valuation disputes are an example of where the expert uses his own expertise to decide the value, and does not approach the dispute as an arbitrator.

Adjudication is another mechanism for dispute resolution that has been applied in the UK and elsewhere, especially in the construction industry, where it is the statutory dispute resolution mechanism. While primarily focussed on the building and construction industries there is some overlap with contracts in the process industries.

But throughout, the approach of the IChemE forms of contract has been to reflect best practice in the industry, which is to avoid disputes wherever possible. If that is not possible, best practice is to have a suite of dispute resolution procedures from which the most appropriate for the particular dispute can be selected.

IChemE's international contracts are a natural development from the UK forms, and should make a major contribution to the achievement of best practice throughout the process industries.

In conclusion, it is to be noted that each of the contract handbooks contains introductory notes; a form of agreement; the general conditions; guidance on and example clauses for the particular conditions; guidance on completing the agreement and on drafting the schedules; and guide notes on the main contractual issues detailed in the contract conditions. **tce**

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IChemE's International Forms of Contract will be launched on 22 November 2007 at IChemE's London Office at Portland Place. For more information, or to reserve a place, contact Jacqui Cressey on + 44 (0) 1788 578214 or jressey@icheme.org Buy the Forms of Contract Suite via www.icheme.org/shop