



CURTIS DAVIS GARRARD

International Lawyers at London Heathrow

Offshore Construction Disputes The Key Issues





CURTIS DAVIS GARRARD

International Lawyers at London Heathrow

OFFSHORE CONSTRUCTION DISPUTES THE KEY ISSUES

CONTENTS

INTRODUCTION	3
THE KEY ISSUES	4
Company Provided Items	4
Other Company Provided Equipment	5
Variations	5
Dispute Resolution	7
CONTRACT ADMINISTRATION	8
Implementing the Contractual Procedures	8
Document Management	9
“DELAY AND DISRUPTION” CLAIMS	10
The basis of the claims	10
The component parts of the Claim	12

CURTIS DAVIS GARRARD



CURTIS DAVIS GARRARD

International Lawyers at London Heathrow

INTRODUCTION

Complex and expensive litigation is now increasingly a feature of the offshore construction industry. In particular, contracts for the construction or conversion of sophisticated, technologically advanced drillships, semi-submersible drilling and production rigs, FPSOs and other offshore Units are frequently subject to substantial disputes over delays and costs overruns.

This booklet examines the legal issues that arise in such disputes and considers, from an English law perspective, the key contractual provisions. It also considers the procedures the parties should adopt to “manage” their contracts, and examines the work the Contractor and the Company will be required to undertake to prepare effectively either to pursue or defend the most commonly occurring dispute, that for additional costs incurred by the Contractor resulting from “delay and disruption” to completion of the project.

Disputes of this nature are relatively rare in conventional ship construction where the vessel will usually be constructed to the Contractor’s own standard design. By contrast however, offshore construction projects are, for a number of reasons, prone to disputes of this type. At the heart of the project will often be a functional specification issued by the oil company employer for its prospective field. The Company or the shipyard Contractor (or sometimes both) must then translate these functional requirements into a working design specification.

Moreover technological advances now permit the exploitation of much deeper and more hostile waters, and the design of the Unit will frequently be highly innovative. The project may also be constrained by the need to achieve “first oil” within a very tight timetable. As a consequence the project is frequently inadequately “engineered” and extensive changes will be needed to the design specification to enable the Unit to fulfil its intended functions.

In addition the Unit will frequently be a marriage of offshore construction technology and the latest drilling or processing technologies. Many key critical path items will be supplied (and installed) not by the Contractor, but by a supplier nominated by the Company. The successful and timely completion of the Unit therefore requires co-operation between a number of suppliers and contractors.

Each of these factors can be a source of delays and increased costs and can lead to disputes between the Company and the Contractor regarding the allocation of responsibility for these. In such disputes the Company will typically wish to assert a claim for liquidated damages for the late delivery of the Unit while the Contractor will seek to recover additional costs it has incurred in completing the project.

The form of the contract used by the parties may also be significant. There are a number of standard form newbuilding contracts in use in



CURTIS DAVIS GARRARD

International Lawyers at London Heathrow

the conventional shipping industry¹, and at least one in the North Sea offshore engineering sector². However, these forms are little used in the context of projects for floating (as opposed to fixed platform) construction and they are in any event inappropriate for offshore projects (including many FPSO and FSU projects) which involve the conversion of existing units. The project may therefore be based on a customised contract negotiated between the parties.

THE KEY ISSUES

Company Provided Items

- (i) In a conventional shipbuilding contract, the Contractor will usually assume responsibility for the design of the Unit, particularly where this is constructed without significant amendment to a Contractor standard design³.

In an offshore construction contract, the position will typically be more complex. The Contractor will often be reluctant to assume full responsibility for fulfilment of a functional specification or will, at least, require a significant amount of time to review and test the viability of this specification. To expedite the project, the Company will frequently undertake, using specialist third party contractors, the task of producing at least the initial design package but will require the

Contractor to produce the detailed working drawings.

The Contractor will have only limited time in which to review and test the basic design package and the parties will often therefore agree to apportion the design responsibility. A careful consideration of the contractual consequences of this apportionment is critical. The contract should seek to identify and describe the responsibilities of the Company and the Contractor, considering in each case the consequences where these responsibilities are not fulfilled.

This should include for example a clear statement as to:

- (a) the extent of the initial design package;
- (b) the time limits for provision of the same and for responding to and resolving any queries that may emerge; and
- (c) who is responsible for obtaining the approval of Class or other regulatory bodies for this package and the subsequent detailed drawings.

The Contract should expressly entitle the Contractor to an extension to the Delivery Date and compensation for any additional cost incurred where the Company has failed to meet its obligations.

The further responsibilities, if any, of the Contractor for the initial design package also need to be considered carefully.

¹ Most obviously those of the Shipbuilders Association of Japan (SAJ) and the Association of European Shipbuilders and Shiprepairers (AESS)

² NF 92 (Norwegian) Fabrication Form

³ See for example the AESS and SAJ forms



CURTIS DAVIS GARRARD

International Lawyers at London Heathrow

The Company will usually wish to ensure that the Contractor accepts responsibility at least for (i) verifying the initial package, (ii) confirming its “constructability” and (iii) notifying the company of any errors or omissions in the same. The Company will also be concerned to ensure that the Contractor assumes responsibility for production of working drawings based on the Company’s design.

Ultimately, the extent of this process of “verification” will be a matter for negotiation between the parties.

(ii) **Other Company Provided Equipment**

A similar situation may arise in relation to other items of Company Provided Equipment. Where the timetable to achieve first oil is tight, the Company will frequently seek to expedite the project by ordering certain critical “long lead” items, such as the processing plant (in the context of an FPSO conversion project) or the thrusters in the context of a semi-submersible drilling Unit.

Where these items are ordered directly by the Company, the Contractor will in accordance with general contractual principles have no liability for any delays or defects in these. The contract should obviously set out the dates by which these items must be delivered and the standards to which they must conform. The Contractor will seek to ensure that he is entitled to (i) an extension to the Delivery Date and (ii) where

appropriate, an adjustment to the Contract Price and other guaranteed performance criteria where any items of Company Provided Equipment are delayed or defective.

The Company will however want the Contractor to assume responsibility, at least, for inspecting such items on arrival and for notifying the Company of any apparent defects. The Contractor may also be required to carry out specific tests and trials to ensure the condition of these items. If the Contractor fails adequately to discharge these tasks he will usually be unable to recover compensation for any additional costs and delays that result from his omission.

If however the Contractor agrees to treat the equipment supplier as his own subcontractor, he will generally assume full responsibility for delay and defects in these items irrespective that the supplier was originally selected by the Company⁴.

Variations

This issue is at the heart of most offshore disputes. The contract will generally require the Contractor to undertake the construction or conversion work in accordance with the specification and contract for a lump sum Contract Price and to deliver the Unit on an agreed future date. The contract will however reserve to the

⁴ Leslie & Co. Ltd v The Managers of the Metropolitan Asylums District (1901)



parties the ability to vary the terms of the specification and to adjust the Contract Price, Delivery Date and other key contractual terms as a consequence.

This facility is necessary to take account of any changes in the rules or regulations of the Classification Society and other regulatory bodies to which the Unit will be subject. In addition however, in an offshore project, the Company will generally seek a much wider right to vary the scope and nature of the specifications. The Norwegian Fabrication Contract 1992, for example provides that:

“The Company has the right to order such Variations to the Work as in the Company’s opinion are desirable. Variations may include an increase or decrease in the quantity, character, quality, kind or execution of the Work or any part thereof, as well as changes to the Contract Schedule⁵”.

These changes may originate from the oil company employer who will have extensive rights to require modification to its original functional specification or simply from the evolution of the design process referred to earlier.

It is important in these circumstances that the contract contains clearly defined procedures by which Variations are to be submitted and agreed or determined. These procedures should specify the representatives from each

party, usually the project manager, with the necessary authority to agree “Variations”.

In addition, the procedure will usually include, at a minimum, the issue by the Company of a Variation order request, the provision by the Contractor of an estimate detailing the likely costs and other contractual consequences (if any) of the proposed Variation, and the issue of a formal Variation order. Each of these steps must usually be completed within defined periods of time. These periods must be both sufficiently long to enable the Company to evaluate the consequence of issuing a Variation order and yet sufficiently brief to avoid delays to the construction process while the Company conducts this evaluation.

Where the parties are unable to agree the terms of the Variation but the Company nonetheless instructs the Contractor to proceed, the contract will usually permit either party to refer the dispute as to the terms of the Variation to a “technical expert”, court or arbitration.

Finally the contract may seek to “disallow” any claim by the Contractor for additional costs or adjustment to other contractual terms if he does not submit a formal written request within the time periods specified.

⁵ Article 12.1



CURTIS DAVIS GARRARD

International Lawyers at London Heathrow

Dispute Resolution

The increasing prevalence of litigation makes it important for the parties to consider carefully the form of their dispute resolution clause. This needs to be sufficiently flexible to accommodate both the substantial “delay and disruption” dispute that will inevitably include a large “technical” element, and the various other contractual disputes that may arise.

The principal choices confronting the parties are, at least where they wish to make use of English dispute resolution procedures, two-fold. Firstly they should decide whether any, and if so which, disputes are to be determined by a “technical expert” and secondly they must select either arbitration or the High Court as the forum in which to determine the balance of their disputes.

(i) The Technical Expert

It is often very helpful for disputes to be determined as they arise during the course of construction and not in later proceedings, with a view to clarifying in particular the contractual Delivery Date of the Unit and the instalment of the Contract Price payable at delivery. These disputes will often have a substantial “technical” content but will not necessarily involve substantial sums of money.

For these reasons the parties may seek to refer some disputes at least to an expert either agreed between the parties or nominated by a person authorised by the contracting parties. The expert will often be granted considerable freedom to determine the dispute as he see fit, without the need for formal legal procedures. He can, for example, determine the dispute by visiting the Unit to see for himself the extent of the work required.

Typically, as in the AESS form, the contract will provide that the decision of the expert “shall be final and binding” upon the parties. A provision for expert determination is recognised, in principle, in English law as effective to oust the jurisdiction of any arbitrator or court. The consequence of this will be that the decision of an expert instructed in such circumstances is truly “final”, even if clearly wrong, unless it can be said that the expert has departed from his instructions in a material respect⁶.

Although it is important that the expert is able to reach his

⁶ see for example *British Shipbuilders v VSEL Consortium plc* [1997] 1 Lloyd's Rep. 106



CURTIS DAVIS GARRARD

International Lawyers at London Heathrow

decision speedily and efficiently, the parties will also be concerned to ensure his decision is fair and predictable. Increasingly it is the vogue to incorporate complex provisions in an attempt to guarantee the effectiveness of any expert determination. Such provisions are well intentioned, but have two potential disadvantages:

Firstly the procedures can simply be too onerous in which event they will hinder any resolution of the dispute;

Secondly they can increase the possibility of a judicial challenge to the expert's decision on the basis that he has departed materially from his instructions.

(ii) High Court v Arbitration

Although the parties may be willing to permit an expert to determine relatively small scale and technical disputes, it is unlikely that they will allow such an expert to determine a fully fledged "delay and disruption" dispute where the sums at stake can run into millions of dollars.

In the offshore sector the parties will generally agree that such disputes should be determined in the High Court rather than in Arbitration. Although Arbitration has the

distinct advantage of confidentiality, in our experience, the High Court is able to produce a faster, more efficient resolution of the disputed issues at the same or a lower cost than arbitration.

Moreover the newly introduced rules of court, the Civil Procedure Rules have lead to a greater degree of control and management of litigation by the Courts which now provide, in the Technology and Construction Court at least, an experienced, and highly able judiciary capable of determining such disputes quickly and efficiently.

CONTRACT ADMINISTRATION

Implementing the Contractual Procedures

Although it is important to ensure that the terms of the contract are clear and comprehensive it will often be equally critical that contract administration systems of both parties are equal to the task of implementing these contractual procedures. The contract management systems should ensure as a minimum that:

- (i) Firstly, the contractual time limits are strictly adhered to;
- (ii) secondly, the impact of every Variation request or order is assessed and communicated promptly; and



CURTIS DAVIS GARRARD

International Lawyers at London Heathrow

- (iii) thirdly, an agreement is reached as to the extent of this impact or, if no agreement is possible, the dispute resolution procedures are promptly invoked.

These objectives are easy to state but will, where the project is subject to a significant level of Variations, require a major commitment of resources by the Contractor to achieve. In particular calculating the impact of Variations on the Contract Price and Delivery Date will often raise issues of considerable complexity. The Contractor will generally be obliged in any event to prepare, and update, a "critical path" analysis and there is a range of sophisticated software tools available to assist in this process. The operation (and on the Company's side the assessment) of these systems however demands the availability both of skilled and highly trained personnel and accurate information as to the construction process.

Even where the Contractor has the necessary skills and information to operate these systems effectively it may nonetheless be unable to estimate accurately the "disruption" the Variation will engender, and may wish to reserve his position until the extent of this becomes apparent.

It is important to emphasise that, although the onus will be placed initially on the Contractor to measure the impact of the proposed Variation, the Company will effectively be required to undertake its own assessment to enable it to agree or dispute the Contractor's claims. In particular, although the Company has the advantage initially of simply reviewing the Contractor's proposal, in the event the Company requires the Contractor to proceed

with the Variation, it will in due course be required to provide its own calculations of the impact of the dispute on the critical aspects of the Unit's construction.

Document Management

The documentary evidence available to the parties will form the foundation of their calculations of the impact of Variations. These documents are likely to include (i) day to day routine communications, including minutes of meetings, activity reports, project schedule analyses and correspondence, (ii) documents specific to the dispute, and (iii) data showing the project costs for men, materials and plant.

Contemporaneous communications are an important starting point. A contemporaneous fax notifying the Company of anticipated delay will carry more weight than a fax sent only when the Contractor is facing a claim for liquidated damages for delay in delivery. The quality of the reasons advanced by the parties in support of their positions may also affect the credibility of their witnesses, when the consequences of the Variations are later dissected.

However the nature of the data showing the project costs will in the long term be equally critical. Both parties should routinely monitor the quality of this data to ensure that it meets the requirements of the project and any prospective disputes. This data will almost invariably be challenged and the parties should therefore also ensure that their quality assurance systems are capable of demonstrating the reliability of the data produced. In addition a regular review of the accuracy of the data available will encourage a realistic approach to the assessment of the impact of the Variations,



CURTIS DAVIS GARRARD

International Lawyers at London Heathrow

and may enable the parties to “plug” gaps in their documentation to date.

This information should be systematically accumulated, logged and monitored. As we consider later, oral evidence is a flimsy and unreliable basis on which to contest a “delay and disruption” claim. If the necessary documentation is not available that party may simply be unable effectively to contest such a claim.

Moreover each party’s personnel will need to have access to the documents both to prepare the initial contractual estimates of the impact of the Variations and, if necessary at a later date, to mount or defend a “delay and disruption” claim. Both the original documents and the ensuing calculations should therefore be available for later analysis in a specific dispute file.

Finally both parties should bear in mind that all correspondence may potentially be available to a Court, and that technical staff and project managers need to exercise care in the terms of both their external and internal correspondence.

"DELAY AND DISRUPTION" CLAIMS

The Basis of the Claims

“Delay and disruption” claims will arise primarily in two situations. Firstly where the parties, utilising the contractual mechanisms, are unable to agree the extent of the Variations in the contractual terms due to the Contractor. Secondly, where the Contractor considers it has carried out work additional to that envisaged by the original specification but the Contractor fails

to request, or the Company fails to issue, a Variation order. This may be the case, for example, where the Company or its supervisors instruct the Contractor to carry out work they consider falls within the terms of the specification, and for which they refuse to issue a Variation order.

In this second case, the general rule, though this will ultimately depend on the terms of the contract, is that in the absence of written orders or other formalities which are conditions precedent to payment, the Contractor will not be able to recover any additional costs incurred. This will be so even though the Company has received the benefit of the additional work⁷ though there are certain limited exceptions to this rule:

Firstly, if the Company insists that the work is undertaken even though he knows or is told that this will cause additional cost he may be taken to have waived his contractual right not to pay for additional work unless he has issued a Variation order. In these circumstances it may, even though no formal Variation order is issued, be possible to imply into the contract a promise by the Company to pay for such work. Indeed it has been said that it is difficult, without attributing dishonesty to the Company, not to infer a promise of this nature⁸.

Secondly where the additional work is of a kind so peculiar and so different that it is outside the contract it will not be governed by the terms of the contract and need not, therefore, be ordered in writing. The Company will, provided there is a necessary implication that it has agreed to pay, be liable to pay a reasonable

⁷ Kirk v Bromley Union (1848)

⁸ Molloy v Liebe (1910)



price for such work carried out at its request on a quantum merit basis⁹.

It is important however to stress the limited nature of this exception. In particular it is unlikely to be sufficient for a Contractor to claim after the works are completed that the additional work is outside the terms of the contract.

Thirdly unless the terms of the contract indicate otherwise a term will generally be implied into the contract “*that neither party shall prevent the other from performing it*”¹⁰. Such a term will not be implied into the contract where it conflicts with an express term.

Fourthly where the Company prevents completion of the works, the Company will, unless he makes a valid extension of time in respect of the delay he has caused, be precluded from claiming liquidated damages¹¹. It is not necessary that the Company’s acts should constitute a breach of contract. The principle will operate where the Company exercises its right to order additional works, without permitting further time for delivery of the Unit¹². In these circumstances time will be treated as “at large” and the Contractor will only required to complete the Unit within a reasonable time¹³.

The Size of the Task Irrespective of how the dispute arises, the number and extent of the changes to the original design and specification will often outstrip the ability of the parties to agree (or indeed to measure) these. Similarly even where the contractual mechanisms are

invoked properly, the scale of the dispute may be such that the court or “technical” expert does not have sufficient time to determine the extent of the permissible Variation before delivery of the Unit.

In these circumstances the parties will often find themselves in dispute at delivery or afterwards as to the extent of the “delay and disruption” costs recoverable by the Contractor. If this dispute proceeds to trial, the size of the task that will face both parties is graphically illustrated by the judgement of Lord Justice Lloyd in McAlpine Humberoak Ltd v McDermott International Inc. (1992) where he described it in the following terms:

“When the defendants’ witnesses came to give evidence, they undertook the task which was never undertaken by the plaintiffs, of tracing the impact of every drawing revision, VO and TQ...the [first instance] judge dismissed [McDermott’s] approach to the case as being “a retrospective and dissectional reconstruction by expert evidence of events almost day by day, drawing by drawing, TQ by TQ and weld procedure by weld procedure”...in our view [McDermott’s] approach is just what the case required.”

McAlpine Humberoak concerned the construction of nine steel pallets forming part of the weather deck for a tension leg platform in the Hutton Oil Field in the North Sea. It is likely however that the Courts will expect the same investigation to be conducted in any substantial delay and disruption claim in the offshore sector.

⁹ The Cape Hatteras (1982)

¹⁰ Cory Ltd v City of London Corp (1951)

¹¹ Holme v Guppy (1838)

¹² The Cape Hatteras (1982)

¹³ Thornhill v Neats (1860)



CURTIS DAVIS GARRARD

International Lawyers at London Heathrow

A retrospective day by day analysis of events that took place several months or even years before, drawing by drawing, technical query by technical query, is an enormous task. The Contractor will generally bear the burden of proof and may be required to establish in relation to every drawing and Variation Order (i) the extent of the additional work involved, (ii) the time spent by each and every shipyard worker, (iii) the materials used, and (iv) the impact of the additional work on the critical path of the Unit's construction. The Company will in turn be required to undertake a similar task in order to defend the Contractor's claims.

The Component Parts of the Claim

There are two distinct, though interrelated, aspects to this task, (i) the factual enquiry and (ii) the expert analysis. Although each party will often instruct a "*delay and disruption*" expert to present his claims, his evidence will be largely dependent on the facts that underpin the delay. If these "facts" are in reality nothing more than opinion as to what actually happened the expert's analysis is likely to be of little value.

In McAlpine Humberoak the evidence of the Claimant's expert (the logic of whose approach the Court of Appeal otherwise admired) as to the delay caused by the late issue of 22 contract drawings, was undermined by the Defendant's response that the admittedly late issue of these drawings did not hold back fabrication for the simple reason that the Claimant was not yet in a position to commence fabrication.

The "facts" can be established either by oral evidence or by documentary evidence. Oral evidence of such matters is notoriously unreliable. Memories fade, witnesses change jobs and their recollections are affected by

subsequent events. While witness evidence obtained immediately after the events in question may be important evidence obtained years or even months later will be a dangerous basis on which to formulate a claim.

The documentary evidence will therefore be critical. In particular it is the data showing the additional project costs for men, materials and plant incurred by both the Contractor and his subcontractors that will provide the foundation for any delay and disruption claim. The Contractor's time records must be sufficiently sophisticated to distinguish for each worker on a day by day basis the time spent on each additional item of work encompassed in each Variation order. A work code that records, for example, only steel work will be insufficient to enable the expert to identify the additional time spent on steelwork or to allocate it to individual Variations orders. The work codes must also be capable of explaining (at least in conjunction with other available evidence) the extent of the additional time spent. A thirty minutes welding job may occupy the welder for far longer if he is also required to spend time locating and transporting welding equipment which he has previously discarded. Similarly the records for plant and materials must distinguish in each case the additional expense involved in performing the additional work.

Even if the Contractor does have adequate data showing the additional costs involved, he must also have a quality assurance system capable of demonstrating that this data is reliable. A welder at the end of a long day may not be inclined to spend the necessary time filling out his records with due care. The Contractor must therefore be able to demonstrate, through his quality assurance system, that the recording systems



CURTIS DAVIS GARRARD

International Lawyers at London Heathrow

are monitored carefully and their accuracy assessed regularly.

It is important to emphasise that although the dispute is likely to focus initially on the Contractor's records, the Company must either accept the data provided by the Contractor or compile his own data. If he selects the latter course, he will need to be able to demonstrate that his own data is more comprehensive and more accurate than of the Contractor.

Once the information is available the analysis can begin. Delay and disruption cannot be measured simply by the additional time required to perform a specific task. It is the interaction of each item of delay on the construction process that is important. Each party's own analysis should, in a project facing substantial delays or costs overruns, be supported at an early stage by independent expert analysis. Such an analysis can provide an early evaluation both of the strength of the Contractor's potential claim and a realistic critique of the value of its recording systems and the extent to which these need improvement. It will also assist in analysing the "disruption" element of his claim.

The ultimate goal of this analysis must be to demonstrate the effect on each element of the construction process of each Variation. This will often best be achieved by a fact based cause and effect analysis rather than by a more theoretical investigation.

CURTIS DAVIS GARRARD

Curtis Davis Garrard is an international law firm based at London's Heathrow Airport. Founded in 1996, the practice was established and designed around the needs of its internationally orientated clients. Curtis Davis Garrard specialises in providing expert commercially led legal advice to the shipping, offshore and energy sectors and also advises on a wide range of commercial disputes. The firm has a simple business philosophy aiming to provide clients with the highest quality, commercially-led legal advice at a sensible cost.

The Curtis Davis Garrard team has extensive experience, combining in-depth knowledge with an informal yet highly effective style and its lawyers are rated as leading experts in their field. Consistent with their aim of providing high standards of service they have invested in the latest information and communications facilities to ensure that they provide a fast, responsive and efficient service to clients. The firm is one of the few commercial firms to be awarded Quality Assurance accreditation under ISO 9001.

The firm has the unique advantage of being based at London's Heathrow enabling it to offer a more convenient location for its international clients and take advantage of the lower cost environment than the City.

This guide is not intended to represent in any way a substitute for specific advice in relation to matters involving existing or anticipated arbitration proceedings in England and Wales. We would be pleased to assist further in this regard as required.

Further information regarding the firm may be found on our web site at www.cdg.co.uk

Bedfont Cross Stanwell Road Heathrow Airport Feltham TW14 8NY UK
Telephone +44 (0)208 400 2400 Facsimile +44 (0)208 400 2420/1
Video conferencing +44 (0)208 400 7102
Email cdg@cdg.co.uk