### **EXPERT WITNESSES**

### THE EFFECTIVE USE OF EXPERTS AND EXPERT WITNESSES

Paul Buckingham, Barrister Keating Chambers, London

### INTRODUCTION

All construction projects are ultimately about using materials and resources cost effectively to get something built. In achieving those goals engineers and other construction professionals fulfil a wide variety of roles providing technical expertise, project management and contract administration. However, this will often require them to become involved in disputes whether in respect of certified sums, unpaid certificates, defective workmanship, defective equipment, defective materials, or performance shortfalls. In seeking to have those disputes resolved, engineers and other construction specialists can and increasingly do play a key role in the dispute resolution process.

In recent years, a growing range of preliminary dispute resolution procedures have become available which are very effective at screening out the vast majority of disputes. These are principally adjudication, mediation, dispute boards and early neutral evaluation. Many of these processes are consensual in nature and none leads to a final and binding decision (unless the parties agree).

However, there are three procedures which lead to final and binding decisions by a third party: expert determination. court litigation and arbitration. In the first procedure, it is the expert who actually decides the outcome of the dispute. In the latter two procedures, a third party (whether that be a judge or an arbitration tribunal) will decide the outcome of the dispute based upon the evidence before it, including consideration of any expert opinion evidence provided by expert witnesses.

As engineers and other construction professionals participate in these processes in two very different ways, this paper will seek to identify the primary differences between those roles. It will describe the role of an expert in the process of an expert determination, and then consider the role of expert witnesses in providing opinion evidence to assist a tribunal to reach its decision (whether by way of litigation or arbitration).

#### EXPERT DETERMINATION

The term 'expert determination' describes a process whereby the parties agree that a third party (the expert), who is independent of the parties, is to be engaged to answer a particular question or determine a particular dispute and that the parties are to be bound by that expert's decision. The expert determination process should, therefore, result in a fast, binding and final resolution of the dispute referred to the expert.

The key distinguishing feature of expert determination is that in general the expert is free to use his own knowledge, expertise and experience to investigate the question that has been referred to him, taking account of the submissions of the parties as he sees fit, whereas judges and arbitrators are required to decide on the basis of the submissions and evidence made by the parties. This is one of the greatest strengths of expert determination, particularly when the nature of the issue to be decided is technical, as the expert will have been carefully selected because of his relevant expertise. Therefore, the expert is not just appointed to hear the parties' various contentions and to select between them, but to investigate the facts and to apply his knowledge and expertise to decide the answer to the question that has been referred to him.

Expert determination is also very flexible. As it is based entirely upon an agreement between the

parties, they have an opportunity to control and tailor the process to suit their own particular circumstances or the facts and matters of the particular dispute. This flexibility allows expert determination to be used in a very broad range of matters, sometimes to avoid lengthy and complex disputes from arising and at other times to resolve disputes quickly and cheaply. It is not uncommon for parties to agree that the whole process shall be concluded in a matter of days after an expert has been appointed.

Having said that, the use of expert determination does carry risks. The advantage of a final and binding decision carefully has to be balanced against the risk of being unable to appeal or, subject to only few very limited exceptions, to challenge the expert's decision. The benefit of agreeing to a swift dispute resolution process must also be weighed against the risk of the procedure not allowing sufficient time for a full investigation that other procedures might have allowed. Although experts must be fair and impartial, they are not bound to observe due process or to comply with the rules of natural justice. Since an expert is not acting in a judicial capacity, the need for impartiality is also more limited in scope when compared to judges and arbitrators, with the result that an expert's decision will only be set aside if actual bias is proved.

This is illustrated in the recent case of *Owen Pell Limited v Bindi (London) Limited* [2008] EWHC 1420 (TCC), where the parties agreed to have their dispute determined by an independent expert. The defendant was unhappy with the decision and refused to make payment contending that the expert had not conducted himself in accordance with the principles of natural justice, was biased or gave the appearance of bias, and reached conclusions that were obviously in error or perverse. The court reviewed the authorities and held that the expert's decision was valid and enforceable, and that actual rather than apparent bias was necessary to challenge an expert's decision.

## Types of dispute suitable for expert determination

Although parties may decide that any dispute arising out of a project should be determined by an expert, it is more usual for the parties to identify in their contract defined questions, issues or subject areas about which a reference to an expert can be made. Since one of the most significant benefits of expert determination is that an appropriately gualified and respected expert will be engaged to answer a question within his field of expertise, it can easily be understood why this is the case. It may be relatively easy for parties to agree, for example, that guestions over whether a complex piece of engineering equipment should be accepted as complete could be resolved by an expert practising in the particular field in question. However, it is quite another thing for the parties to agree that every other potential dispute including, for example, a dispute over the liability for and consequences of delayed delivery should also be resolved by the same individual.

For these reasons, expert determination is usually considered most appropriate when narrow questions can be referred to an appropriate expert be that an engineer, an accountant, a surveyor or a lawyer. Some such issues can easily be identified at the time that a contract is drafted. For example, it may be foreseeable

... there are three procedures which lead to final and binding decisions by a third party: expert determination, court litigation and arbitration. In the first procedure, it is the expert who actually decides the outcome of the dispute. In the latter two procedures, a third party ... will decide the outcome of the dispute based upon the evidence before it, including consideration of any expert opinion evidence provided by expert witnesses.

that there could be a dispute over whether a project had progressed to the point where a completion certificate was due to an engineering contractor, or over the appropriate price for a variation, or deciding whether remedial work is required to engineering works, or the appropriate accounting principles applicable to a valuation exercise. By considering these issues pre-contract and by including appropriate terms in the contract, both parties can enter into the contract with the confidence of knowing that if certain disputes arise they have the right to resolve those disputes through a swift, relatively cheap and binding process, and that concerns over lengthy and expensive litigation or arbitration can be put to one side.

The Institution of Chemical Engineers (IChemE) has perhaps taken the lead in developing a suite of standard term contracts where expert determination is identified as a dispute resolution procedure available to either party, and its experience suggests that this has been very successful. Expert determination is expressly identified as being available to the parties in respect of disputes on subjects as diverse as objecting to a variation order, disapproval by the project manager of documentation provided by the contractor, whether a completion certificate or final certificate should have been issued, the cost and time implications of suspension orders and the amounts payable following termination. The IChemE contracts provide that any dispute concerning one of these identified subject areas shall be referred to expert determination if one party serves notice to that effect on the other. It also allows other issues to be resolved by expert determination if both parties agree.

# Agreements to refer issues to expert determination

Agreements that provide for an expert to answer a particular question or to resolve disputes on particular issues vary widely in their content and complexity. In the simplest of cases the parties might merely agree, for example, that if they cannot agree on the valuation of a particular property then the issue should be decided by an independent chartered surveyor acting as an expert and not as an arbitrator.

While such a simple agreement might be effective, experience shows that it would leave many matters open to debate, so that some of the benefits of expert determination could be lost. For these reasons, it is common for parties to use one of the standard forms to ensure that there is some certainty over the process and its effectiveness.

# The selection and appointment of an expert

Since the decision of the expert is to be final and binding, the importance of the selection as to who to appoint or how that person is to be selected cannot be overstated.

The courts do not have jurisdiction to select an expert for the parties, so provision should be made naming the expert (and possibly alternatives) in the contract or the contract should provide reliable machinery for the selection and appointment of a suitable expert. The former route (agreeing the identity of the person or firm which is to act as the expert) may be favoured if the subject matter of referable disputes is precisely framed before the contract is entered into.

The contract should provide what is to happen if either no person is selected in advance, or if that person becomes unavailable or unwilling to fulfil the role of expert. This is most commonly done by agreeing that an appropriate third party body (such as the president for the time being of a nominated professional institution) should appoint an expert if the parties have been unable to agree on the identity of an expert within a defined number of days of notification by one party of its desire to refer a matter to an expert. This latter route allows the parties to attempt to match the skills and expertise of the expert to the particular issue that has by then arisen between the parties, before approaching an appointing body to select the expert if agreement on the individual cannot be reached.

An external appointment obviously carries risks for both parties. Before selecting an appointing body care should be taken: first, to understand how the appointing body would select an expert; second, whether the appointing body would restrict itself to a list of potential candidates and, if so, whether that list would be likely to contain a broad selection of highly qualified people from whom a suitable expert could be selected and matched to subjects of a future dispute; and third whether the appointing body would receive submissions from both parties as to the relevant discipline for any potential expert to have before proceeding to make an appointment.

If the agreed process breaks down then, unless the mode of ascertaining a decision on the issue between the parties is an essential and indispensable part of the contract, the court will, if necessary, substitute its own procedure by, for example, ordering that there be an inquiry before the court as to the point in issue (*Sudbrook Trading Estates Ltd v Eggleton & Ors* [1983] AC 444). In *Ursa Major Management*  *Ltd v United Utilities Electricity Plc* [2002] EWHC 3041, the court held that the court would itself decide the issue in question after the parties had failed for fourteen months to agree how the reference to the expert should proceed.

It goes without saying that it is unlikely that the expert will accept the appointment unless at least one of the parties agrees to pay his fees and expenses. It is important therefore that the parties agree (preferably at the time of entering into the contract and before a dispute arises) whether such costs are to be shared by both parties and, if so, whether they are to be shared in a pre-defined ratio or whether the expert is to be empowered to decide which party shall bear the costs of the process. Parties might also seek to agree whether the expert could decide that one party should bear the other's costs, but since the expert determination is usually short this is not usual.

# The terms of an expert's appointment

The agreement between the parties as to which issues or disputes may be, or must be, referred to an expert is only one part of the contractual regime that governs an expert determination. The other part is the agreement of the expert to perform that role. The two parts must complement each other so that where the parties have agreed a procedure the expert must also agree that he will abide by the parties' agreement. There is therefore an overlap between the subject matter of the agreement between the parties and the agreement between the parties and the expert.

Several professional bodies are willing to act as an appointing body for expert determinations or publish standard terms for

expert determination clauses, procedural rules for expert determinations, and terms for the appointment of the expert. Reference has already been made to the IChemE. Its standard forms of contract, together with its published 'Rules for expert determination' ('the white book', now in its fourth edition, July 2005), provides a comprehensive code for expert determination. Annexed to the rules are standard terms for the expert's appointment. It should be noted that the fourth edition, unlike earlier ones, includes a provision that the expert has power to determine the extent of his own jurisdiction. The standard terms of engagement also provide a contractual exclusion of liability for the expert save in circumstances of bad faith, thereby mirroring the immunity provided to arbitrators under the Arbitration Act.

#### **EXPERT WITNESSES**

Expert witnesses assist the courts and various other tribunals in a variety of contexts, including criminal trials, civil and family hearings, planning tribunals, copyright disputes, as well as in the more familiar areas of construction and engineering hearings before Technology and Construction Court ('TCC') Judges and construction industry arbitrators.

In these various forums experts have an important role to play. In 2002 the Court of Appeal Judge, Dame Elizabeth Butler–Sloss, writing about expert medical witnesses, described them as 'a crucial resource. Without them we [the Judges] could not do our job'. The importance of the expert witness function applies equally in the construction engineering field, where, save for a few cases which depend upon, say, the interpretation of the contract, disputes invariably involve experts opining upon professional negligence, programming, extensions of time, and the like.

However, it is precisely because tribunals, whether court or arbitration, can often be dependent upon expert evidence in reaching the proper outcome that inappropriate behaviour by experts is fiercely condemned, and why a steady stream of more and more detailed procedures have been introduced to control and regulate those who hold themselves out as experts in the forensic arena. Certainly, when an expert is perceived to have behaved inappropriately the consequences can be far reaching.

In mid-2005 Sir Roy Meadow, who had given evidence in the Sally Clark trial, was castigated by the media. He was the paediatrician whose evidence contributed to the wrongful conviction of a mother for the murder of her two babies. Although it was accepted that Professor Meadows did not intend to mislead the court, in a subsequent disciplinary hearing by the General Medical Council he was found guilty of serious professional misconduct for giving erroneous and misleading evidence. It was said that statistical evidence he gave in court was outside his expertise as a consultant paediatrician. Although the General Medical Council's decision was subsequently overturned by the Court of Appeal, the damage to Sir Roy Meadow's reputation had already been done.

### Court guidance

Although the courts and other tribunals have long controlled the manner in which experts carry out their functions of meeting, reporting and, ultimately, giving oral evidence before the tribunal, a more systematic approach to such control and regulation can be dated from the landmark case ... the crucial difference with an expert witness and a factual witness is that an expert is entitled to express opinions on the facts. In doing so, the role of the expert is to give objective, unbiased assistance to the tribunal of fact on matters within the expert's expertise.

of The Ikarian Reefer–National Justice Compania Naviera SA v Prudential Assurance Company Ltd [1993] 2 Lloyd's Rep 68 (Commercial Court) [1995] 1 Lloyd's Rep 455 (CA). In that case Mr Justice Creswell of the Commercial Court listed seven duties and responsibilities of expert witnesses in civil cases, emphasising the following:

- the evidence should be independent;
- the expert's opinion should be unbiased and related to matters within his expertise;
- he should state the facts or assumptions on which his opinion is based, and consider facts which could detract from his opinion;
- he should state when a question falls outside his expertise;
- he should state if insufficient data is available;
- if, after exchanging reports, he changes his view this should be communicated to the other side and the court; and
- where he refers to any documents these must be provided at the time of exchanging reports.

However, problems remained with the consequence that further attempts have been made to bring experts under closer judicial control. The Civil Justice Council's 'Protocol for the Instruction of Experts to give evidence in civil claims', published in June 2005, now applies to all civil proceedings (the 'CJC Protocol'). Although the CJC Protocol is referable to court proceedings, it is likely to be followed in principle by most arbitration and adjudication tribunals applying English procedural law.

At about the same time a Code of Practice was produced by the Academy of Experts. This sets out the 'minimum standards of practice that should be maintained by all Experts'. It is a very short document which emphasises that experts must keep their knowledge up to date, remain independent, and be aware of their duty to the Court or Tribunal. Item 2 of the Code specifically states that an expert may not 'make his fee dependent on the outcome of the case'. It also requires him to have professional indemnity insurance. Finally, it requires the expert to comply with 'all appropriate Codes of Practice and Guidelines'.

The TCC has also issued the Second Edition of its 'Guide', revised with effect from 1 October 2007. Section 13 deals with Expert Evidence and states that particular attention should be paid to the CJC Protocol.

# Identifying the need for expert evidence

At the early stages of any dispute, consideration should be given for the need for expert witnesses. In doing so, it is important to identify where expertise is really needed to assist the tribunal. Courts and arbitration tribunals regularly determine complex matters without the need for expert evidence, relying upon the factual witnesses and submission made by the parties. Any complex terms and principles can often be explained readily by the parties themselves. Expert help is also unnecessary on matters relating to normal human nature and behaviour. The real question is therefore whether there is a matter of art or science which is likely to be outside the experience and knowledge of the tribunal of fact. If so, then expert witness evidence will be required.

There is a general rule that witnesses must state facts and not opinions because expressing opinions was regarded as an intrusion on the role of the tribunal. Therefore, the crucial difference with an expert witness and a factual witness is that an expert is entitled to express opinions on the facts. In doing so, the role of the expert is to give objective, unbiased assistance to the tribunal of fact on matters within the expert's expertise.

#### Selecting an expert

Whilst a party might feel very strongly about a particular technical issue, there is little to be gained in pursuing the matter through a lengthy dispute resolution process if that party's position ultimately will not be supported by an independent expert. Engaging a suitable expert at an early stage in the process allows a party to focus on the real areas of dispute and will ensure that if the matter does proceed to court or arbitration that its expert will support the case being made.

Whilst the parties or the tribunal sometimes appoint a single joint expert, it is more normal for each party to engage their own experts. Nevertheless, finding an appropriate expert can often be a difficult task, especially in very specialist areas where only a limited number of true experts operate, or where individuals do not want to act against fellow professionals or potential clients, or where an individual does not want to be seen to be taking sides with a particular party.

Since the evidence of an expert is likely to be carefully considered and relied upon by the court or tribunal, the importance of the decision as to who to appoint is crucial. In selecting an individual, expertise in the particular area is clearly a prerequisite. In addition, a party should consider factors such as whether the expert has previously given evidence, whether he will write the report himself or be assisted by a team, whether the expert has the capacity to meet the procedural timetable, and whether an academic is suitable

or a practising expert with greater knowledge of the commercial aspects. Ultimately, the real question is whether the tribunal is likely to be persuaded that the expert's opinions are right.

#### Potential problem areas

Concerns about experts tend to centre on two particular areas. First, where an expert acts like a 'hired gun' and is not independent, advocating his own client's case without offering an objective and balanced view. Second, when an expert does not have the particular expertise in the field in which he is offering his opinion.

Each of these two concerns has been addressed in the CJC Protocol for experts.

#### Independence

The CJC Protocol deals with the duties of experts, and emphasises that they have an overriding duty to help the court, and this overrides any obligation to their clients. Item 4.3 states:

Experts should provide opinions which are independent, regardless of the pressures of litigation. In this context a useful test of 'independence' is that the expert would express the same opinion if given the same instructions by an opposing party. Experts should not take upon themselves to promote the point of view of the party instructing them or engage in the role of advocate.

As part of this obligation to help the court and remain independent, item 4.5 in the Protocol requires that reports should set out the facts and material on which the expert has relied in forming his opinions. An expert should also (4.6) inform his clients immediately of any change in his opinion. Item 4.7 reminds experts that their clients and they themselves may be penalised by costs orders. In London Underground Ltd v Kenchington Ford Plc & Ors [1998] 63 ConLR 1, HHJ Wilcox criticised the lack of independence of one expert. He said that he 'ignored his duty to both the court and his fellow experts' and 'continued to assume the role of advocate of his client's cause'. The judge concluded that the evidence was invalid and unscientific.

In Great Eastern Hotel Co Ltd v John Laing Construction Ltd & Ors [2005] EWHC 181 (TCC), HHJ Wilcox also condemned one expert for lack of independence. At paragraph 111 he said:

I reject the expert evidence of *Mr. C as to the performance of* Laing as Contract Manager in relation to periods 1 and 2. He has demonstrated himself to be lacking in thoroughness in his research and unreliable by reason of his uncritical acceptance of the favourable accounts put forward by Laing. I prefer the evidence of Mr. W who was an impressive and conscientious witness who showed that he approached his role as an expert in an independent way and was prepared to make concessions when his independent view of the evidence warranted it.

In *Gareth Pearce v Ove Arup* [1997] 2 WLR 779, a case concerning copyright, the judge said:

58. ... in my Judgment Mr. W.'s 'expert' evidence fell far short of the standards of objectivity required of an expert witness. He claimed to have appreciated the seriousness of what he was saying but made blunder after blunder...

(e) He showed his biased attitude by looking for triangles in the early stages of the Kunsthal design ('keen to find the triangle' as it was 'an element alleged to have been copied'). His keenness

# resulted in his misreading a drawing and finding a vertical trapezium.

The judge concluded that Mr. W's evidence was 'So biased and irrational do I find his 'expert' evidence that I conclude he failed in his duty to the court'.

#### Expertise

Item 4.4 of the CJC Protocol reminds the expert that he may only provide opinions in relation to matters which lie within his expertise.

In *SPE International Ltd v PPC* (*UK*) *Ltd and John Glew* [2002] EWHC 881 (Ch), Mr. Justice Rimmer said:

*Mr. D's main difficulty is that he has no relevant expertise. I doubt if there has often been an expert less expert than he. He is an ex–RAF officer, who no doubt has a specialised knowledge and experience of many fields of human endeavour, but they do not include the field of shot blasting (the subject of the case).* 

#### Procedural considerations

Once appointed, there are generally three main stages in an expert's role: experts' meetings, exchange or reports, and the giving of oral evidence at the substantive hearing. Each of these is considered in turn.

#### Expert meetings

The tribunal will often direct, at any stage, a discussion between experts for the purpose of requiring them to identify and discuss issues and, where possible, reach agreement. It may specify the issues to be discussed and may direct that a statement be prepared showing issues agreed and not agreed. To facilitate frank discussion, section 35.12(iv) of the CJC Protocol expressly provides that the discussions shall not be referred to at trial unless both parties agree. It has been

common practice in the specialist tribunals to order parties' expert witnesses to identify those parts of their evidence which are in issue. It is usually profitable if the meetings take place as often as may be necessary before the exchange of the experts' reports, otherwise positions are taken too early to the detriment of proper discussions at such without prejudice meetings.

One area of difficulty that can arise is the extent to which parties are bound by agreements made by experts. Part 35.12(v) of the court procedure provides that where experts reach agreement on an issue during their discussions the agreement is not binding on the parties unless they expressly so agree. This is reflected in the CJC Protocol at item 18.12:

Agreements between experts during discussions do not bind the parties unless the parties expressly agree to be bound by the agreement (CPR Part 35.12[v]). However, in view of the overriding objective [to do justice], the parties should give careful consideration before refusing to be bound by such an agreement and be able to explain their refusal should it become relevant to the issue of costs.

The court procedure at Part 35.12.1 provides a salutary warning as to the likely approach of the court if a party refuses to be bound by an agreement reached by the experts:

... it could be very difficult for a party dissatisfied with an agreement reached at an experts' discussion, to persuade the court that this agreement should, in effect, be set aside unless the party's expert had clearly stepped outside his expertise or brief, or otherwise had shown himself to be incompetent. A party who refused to ratify an agreement on particular issues reached by experts when it subsequently turned out that was quite unreasonable and added thereby to the length of proceedings and the cost of the trial might find himself impugned in costs.

#### Expert reports

The CJC Protocol deals with the contents of experts' report in section 13. It starts by reminding experts of their overriding duty to the court (13.1) and that they must remain impartial at all times (13.2). This is reinforced by section 13.3 which reminds them that their reports should to be addressed to the court and gives detailed directions about the form and content. Paragraph 13.5 states that reports must contain statements that the author understands his duty to the court and has complied and will continue to comply with that duty. It also sets out the verification of true statements which is mandatory:

I confirm that insofar as the facts stated in my report are within my own knowledge I have made clear which they are and I believe them to be true, and that the opinions I have expressed represent my true and complete professional opinion.

Compliance with these provisions is crucial. It is important to ensure that an expert report only deals with the issues that require expert input and does so in a clear and concise manner, focusing on the important points. The report of a well known expert was criticised by HHJ Wilcox (*Skanska Construction UK Ltd v Egger (Barony) Ltd* [2005] EWHC 284 (TCC)) in the following terms:

166. Mr. P. prepared and served a long and complex report warranting the service of detailed responses by SCL. A further report was served by Mr. P., it could not be described as sensibly responsive to SCL's report. A further report was served by SCL indicating errors in the P. report. Sadly this assistance was not heeded. Indeed, Mr. P.'s opinion expressed in his report was neither supported by the pleadings or the evidence.

167. The evidence of Mr. P. generated a great deal of out of court time and expense and the subsequent hearing time was a red herring of little value.

The case reports show regular criticism of experts as regards their reports. In *Gareth Pearce v Ove Arup Partnership & Ors* [1997] 2 WLR 779 the Judge stated, amongst other things:

60. At the end of his report, Mr. W. said he understood that duty (CPR 35.3: the duty to help the court, which duty overrides the obligations to the client). I do not think he did.

The Judge also criticised the expert as follows:

58(a) Notwithstanding the seriousness of the allegation, he did not visit the Kunsthal before making his report yet did not mention that fact in his report. It may be that there were funding difficulties. But it certainly would have been fairer to say he had not actually seen the Kunsthal.

#### Oral evidence

The CJC Protocol also deals with the attendance of experts at court. It states that experts have an obligation to attend court if called upon to do so, although where appropriate they may give evidence via a video–link (19.2(c)). If necessary, they may be compelled to attend by a witness summons.

Certainly, judges find cross– examination an essential tool for testing the usefulness of expert evidence.

In EPI Environmental Technologies v Symphony Plastic Technologies [2004] EWHC 2945 (Ch) it was held that it was essential for judges to evaluate the evidence of witnesses, including experts, in its entirety, and witnesses must be challenged with the other side's case. The judgment states that a judge is rarely helped by competing experts' reports expressing an opinion not tested or maintainable by reference to supporting material. Accordingly, cross-examination will be essential for any matter which proceeds to a substantive hearing, and any expert should be aware that he might well be subject to detailed cross-examination on his report.

#### CONCLUSIONS

Experts play an important part in the dispute resolution process, whether that be in determining the dispute itself (through expert determination) or providing expert opinion evidence to assist a tribunal in reaching its decision.

When selecting and appointing an expert for either role, parties should carefully consider what issues require expertise and ensure that any expert appointed has the requisite expertise and knowledge. Although there are a significant number of matters to consider, guidance can be found in the relevant court protocols and in a number of the standard forms of contract issued by a number of professional bodies.

### REFERENCES

Academy of Experts, Code of Practice, 22 June 2005

*EPI Environmental Technologies v Symphony Plastic Technologies* [2004] EWHC 2945 (Ch)

*Gareth Pearce v Ove Arup Partnership & Others* [1997] 2 WLR 779 *Great Eastern Hotel Co Ltd v John Laing Construction Ltd & Ors* [2005] EWHC 181(TCC)

London Underground Ltd v Kenchington Ford Plc & Others [1998] 63 Con LR 1

National Justice Compania Naviera SA v Prudential Assurance Company Ltd [1993] 2 Lloyd's Rep 68 (Commercial Court); [1995] 1 Lloyd's Rep 455 (CA)

*Owen Pell Limited v Bindi (London) Limited* [2008] EWHC 1420 (TCC)

*Skanska Construction UK Ltd v Egger (Barony) Ltd* [2005] EWHC 284 (TCC)

*SPE International Ltd v PPC (UK) Ltd and John Glew* [2002] EWHC 881 (Ch)

Sudbrook Trading Estates Ltd v Eggleton and Others [1983] AC 444

The Civil Justice Council, 'Protocol for the Instruction of Experts to give evidence in civil claims', published in June 2005

The Institution of Chemical Engineer, 'Rules for Expert Determination' (3rd ed. 2001)

The Technology and Construction Court Guide, (2nd ed. revised with effect from 1 October 2007)

*Ursa Major Management Ltd v United Utilities Electricity Plc* [2002] EWHC 3041

Paul Buckingham's paper was previously delivered at the Institution of Civil Engineers' Fourth International Conference on Forensic Engineering in London on December 2008. Reprinted with permission.