Disputes may arise during and towards the end of projects over changes that have disrupted the works. Considerable reliance is placed on the evidence collected that demonstrates responsibility for the cause and the extent of the subsequent effect. An investigation into case law associated with delay and disruption claims shows that failing to identify the logical links between cause and consequence is a risky strategy, especially where it is difficult to attribute responsibility. If information on responsibility for cause and the subsequent effects are not collected and properly assembled the chances of sustaining a claim are substantially reduced. A small study was undertaken to determine the extent that project managers monitored the basic information that was considered fundamental to such claims. The results show that most of the project managers surveyed had a system for recording change and responsibility for change. Many of the respondents also attempted to predict the potential effects of change on the programme. The results are encouraging and suggest that the use of the basic change information collected and proactive approaches adopted by some project managers should reduced reliance on retrospective analysis and global claims. Those failing to manage change place themselves at risk of disputes and are collecting little evidence to assist them in the event of a claim.

Keywords: Change, claims, delay, disruption

INTRODUCTION

All project managers should have an understanding of the different approaches used in delay and disruption claims and their associated risks. Although some project managers may avoid confrontation with their clients, the disruption that results from client and third party changes can easily become a contentious issue, especially if parties do not accept responsibility. While not intending to make project managers claims conscious, knowledge of the basic ingredients necessary to successfully pursue or negotiate claims is useful.

Through a detailed investigation of judgements and obiter dictum, the legal consequences associated with delay and disruption claims are identified. By reviewing, at a very basic level, current practices of project management the potential for pursuing such approaches, if necessary, is uncovered.

Loss and expense
Standard forms of contract make provision for the contractor to be paid additional monies in certain circumstances, and common law has also developed remedies for the contractor who genuinely incurs costs over and above those which could
reasonably be built into the original tender (Newman and Whitfield, 1994). Thus, where one party, by breach or relevant event, causes another party to suffer loss this should be recoverable.

The standard approach for making a claim in court or arbitration is for the claimant to demonstrate that the loss suffered resulted from a default by the defendant (Murdoch and Hughes, 2000). A more risky approach is to express the loss as a global claim. A global claim is a method of calculating a contractor’s loss and expense by allocating a single sum to all the factors of delay rather than assessing accurately the link between individual events and loss attributable to a particular delay.

**Causation in construction disputes**

The courts have dealt with the situation where more than one event or party has contributed to the delay in a number of ways. Common law provides some support that a contractor would be successful in a claim if the contractor is able to establish that the cause for which the employer is liable is the dominant (effective) cause of the contractor’s loss (Yorkshire Dale Steamship Co. v. Minister of War Transport, 1942).

If part of the breach of contract is by the claimant s/he must show the exact extent of the damage caused by the other party that is not related to her/his own breach. Failure to show the extent of the damage, other than by her/his own breach, will mean that damages recoverable will be nominal; this approach was adopted in Government of Ceylon v. Chanfris (1965).

Although claimants often ignore the question of causation and proof, mere assertion of a contractual right is insufficient (Newman and Whitfield, 1994). The contractor must demonstrate by evidence that his or her loss was a consequence of the employer’s breach and that the consequence is an actual one rather than a theoretical argument.

Claims for delay and disruption are usually based on a comparison between the contractor’s anticipated programme of works and the programme that represents the works as built. Before any comparison is made it must be established that the initial programme was feasible. Even if viable, the comparison of programmes is difficult because of concurrent delays and use of float. Generally, float belongs to the first person to use it, be they employers, contracts or subcontracts (Ascon Contracting Ltd. v. Alfred McAlpine Construction Isle of Man Ltd., 1999). It is also significant to distinguish between events that are critical and those that may not have a direct affect on the completion date.

**Submission of evidence**

Although it is possible for awards to be made on a global basis it is prudent to monitor and track disrupting events and to predict the possible consequences. Providing that projects are planned and networked with resource and cost information the effect of an unexpected event can be projected with some accuracy (Pickervance, 2000). Many forms of contract require the claimant, following the occurrence of the relevant event, to provide information on the extra cost and delay likely to be incurred as a prerequisite for any claim for extension of time or loss and expense.

In the AG for the Falkland Islands v. Gordon Forbes Construction (Falklands) Ltd. No.2) the contract required the contractor to submit evidence of costs incurred for relevant events. The contractor did not submit this information during the contract, but relied on witness statements, which were presented to the court. It was held that the contract required primary evidence (e.g. day sheets and invoices) not secondary data, such as witness statements. Although the case has no precedence, it does offer
guidance. Many global claims are made on secondary data e.g. experts being used to develop critical paths. The submission of such evidence, under some forms of contract, may now have limited use. Similarly in the Scottish case of City Inn Ltd. v. Shepherd Construction Ltd. (2003, 20th March) the contract required estimates of the extension of time following the occurrence of a relevant event. As this information was not provided Shepherd could not claim extension of time and suffered liquidated damages.

**US methods of demonstrating delay and disruption**

Wallace (1996) and Pickavance (2000) both claim that there is much to be learnt from the American methods of demonstrating delay and disruption. Computer systems can be used to analyse delay and disruption. However, often those who prepare the analysis do not understand the legal requirements and the lawyers do not understand the planning techniques being used (Wallace, 1996). Pickavance notes that before computer based planning and tracking, and digital forms of communication, proving causation did not seem to matter so much, claims were often made without proper logical analysis. While critical paths were often mentioned there would be no evidence of how the critical logic was initially established or whether it changed.

Pickavance claims that only a few English cases of delay and disruption have been presented and discussed in public, whereas the US law reports on such issues have been widely promulgated. As well as having an advanced understanding of the legal issues surrounding causation, delay and disruption, the US is also advanced in the area of scientific planning and tracking techniques. The US courts have rejected the concept of global claims for establishing liability of delay. Although the UK cases that are not particularised may still be sustainable in law, the evidential difficulties, which such cases present, means that the claimant’s case is unlikely to be successful (Mid Glamorgan County Council v. J. Devnald Williams & Partner (1992).

Historically the courts have treated global claims with a great deal of suspicion (Bradley 2001). Some believe that global claims should not be submitted as they are a risky strategy (Brown, 1995; Collier, 2003). Wallace (1996) notes that there will rarely be any genuine factual justification for the use of global methods, and when such methods are presented they should be treated as a clear indication of a weak, exaggerated or non existent case. Wallace goes further to point out that such cases are unlikely to survive careful examination and that these claims will be embarrassing and an abuse of the court, justifying their being struck out and the action dismissed at the interlocutory stage. However, Collier (2003) notes that in the English courts it is unusual to strike out such cases.

**Is a reduced level of proof now more acceptable?**

Traditionally claimants were required to break down the claim, and adopt the strict requirement of proof of the quantification of loss (Bradley, 2001). This strict approach was used in McAlpine v. Property and Land Contractor (1995) where the word ‘ascertain’ (clause 26 JCT ‘80) was held to mean ‘find out for certain’ and where it was not possible to establish loss and expense with certainty a judgement could not be made.

However, if the courts are satisfied that there is evidence of loss and there has been a satisfactory attempt to link events to their consequences, the courts are realistic in the level of computation required to support the losses (Newman, 2001). Recent cases suggest that the courts may now be moving from the strict approach of proof that was
required in McAlpine v. Property (1995). In How Engineering Services Ltd. v. Linder Ceiling Floors Partitions (1999) the Judge held that the assessment of an Arbitrator, when quantifying loss and expense, was the same standard required by the assessment of damages, which needed no special standard of proof and did not have to be proved with absolute certainty. In this case the word ‘ascertained’ (JCT 80) had been achieved via the assessment of the tribunal. Also in Pegler Ltd. v. Laing (2000) the court made a broad assessment of the amount of loss, even though the claimant had produced very little evidence in support of a claim in excess of 1 million. However, in the earlier case of Tate and Lyle v. GLC (1982) (the point was unaffected at subsequent appeals in 1983) although the Judge accepted that a loss had occurred he would not adopt a broad-brush approach in the absence of any evidence as to the amount of loss. In Pitchmastic v. Birse (TCC – Unreported 19 May 2000), Birse sought to recover part of a sum that it had paid to another subcontractor, a proportion of the costs incurred were due to the actions of Pitchmastic (also a subcontractor). It was scientifically impossible to apportion the elements that Pitchmastic were responsible for, however, the Judge decided to make a best assessment and awarded Birse a percentage.

Provided the tribunals are satisfied with the merits of the case broad-brush assessments may be used. However, failing to demonstrate actual losses attributable to the parties may mean that the award is less than would otherwise be achieved. In all cases the claimant must provide evidence to show that a loss has been incurred.

**Excessive cost of particularising claims**

Bradley (2001) argues that historically contractors have always presented their cases on a global basis, and where cases did not go to court they were settled amicably. It is also claimed that the cost of de-globalising a complex claim may be so expensive and time consuming that it is disproportionate to the monies claimed. Central to the Civil Procedure Reforms are the requirements of the overriding objective and proportionality. Bradley proposes that the attitudes of cynics, who dismiss global claims, ignore the intelligence of those experienced in assessing claims, who are quite able to filter out the meritorious from the padding. Indeed he suggests that the Pegler and Pitchmastic cases offer examples of the court applying Civil Procedure Reforms.

**Claims and adjudication**

It is worth noting that a claim may never reach the court, being dealt with by an adjudicator. The very short timescales associated with statutory adjudication often necessitate board-brush assessments to be made on limited evidence (Bradley, 2001). However, if the evidence is vague the adjudicator should be careful not to reassemble the evidence such that s/he presents the case for the party. The adjudicator should also ensure a party has the opportunity to respond to any information presented. Rules of Natural Justice should be adopted. In Balfour Beatty Construction Ltd. v. The Mayor & Burgess of London Borough of Lambeth (2003) the adjudicator’s decision was not upheld as the adjudicator had undertaken his own investigation in order to determine the nexus of causation and the consequences of disrupting events. In RSL (South West Ltd.) v. Stansell Ltd. (2003) after the dispute was submitted to adjudication an expert provided a detailed programme, which the adjudicator used to make a decision. The decision was overturned as the other party was not offered the opportunity to respond to the case presented.
Should delay and disruption be referred to adjudication?
Dealing with disputes as they arise could reduce the chance of claims becoming complicated. The Society of Construction Law, in their Delay and Disruption Protocol advocates that if a dispute arises over applications for extension of time it should be quickly referred to an adjudicator. Such action helps track events, predicting the possible consequences, and may prevent claims becoming complex dealing with each issue as it arises. However, Cummins (2003) notes that this may not always be the most helpful course of action. Her main argument is that if in the event of referring a dispute to adjudication it turns out that the adjudicator’s decision was wrong, the parties might have taken a different course of action had they not been bound by the adjudicator’s decision.

Where a disagreement between the Contractor and the Contract Administrator over the liability and effect of an event occurs, the protocol proposes that that Contract Administrator’s decision should prevail until decided by the contract dispute resolution procedure. Cummings proposes that a contractor, even though they believe they are entitled to an extension of time, may commit additional resources to satisfy its obligation to meet the completion date. If in the circumstances the contractor’s attempts to mitigate the delay are reasonable and proportionate, the employer is notified of the additional costs that are likely to arise, and the Contractor can show after the event that it was entitled to an extension of time, there is no reason why the additional costs should not be claimed as disruption flowing from the employer’s risk event (Cummins, 2003). However, at the end of a contract it may be difficult to untangle events and the Contractor may face the risks associated with a retrospective global claim.

SCL Delay and Disruption Protocol
Cummins argues that the Society of Construction Law (SCL) protocol has many good parts, but is unworkable in many complex cases. The particular focus of the criticism is the way in which extensions of time should be dealt with. Cummins (2003) puts forward the view that the ‘time impact analysis’, suggested by the Protocol, may be insufficient to prove which events caused actual delay to completion and the amount of delay attributable to each. While suggesting that such analysis may offer intelligent extrapolation, it may be impressionistic.

A clear case to answer
The Wharf Properties Ltd. v. Eric Cumine Associates (1991) case emphasised that the claimant had a duty to plead the case with such particularity to alert the opposite party to the case the defendant would need to answer at trial. Furthermore, His Honour Judge Humphrey LLoyd QC insisted that the link between cause and the claim must be clearly and intelligibly pleaded (Bernhard’s Rugby Landscapes Ltd. v. Stockley Park Consortium Ltd. 1997).

In some cases the Judge has ordered the claimant to prepare a Scott Schedule, provide further information or better particulars. The Scott Schedule sets out the detailed substance of the case. The schedule is often divided into parts, each section dealing with a different aspect of the case making allegations more manageable. In the case of ICI plc. v. Bovis Construction Ltd. and others (1992) the degree of particularisation necessary in a Scott Schedule was discussed. The Official referee, His Honour Judge Fox-Andres QC (p.298) stated: “The factual matters relative to the alleged breach will be contained in the Scott schedule. It is essential that the case against each defendant is fully set out and properly particularised.” However, in GMTC Tools and Equipment
v. Yuasa Warwick Machinery (1994) Leggatt LJ (p113) said that “…the plaintiffs should be permitted to formulate their claims for damages as they wish, and not be forced into a straitjacket of the judge’s or their opponents’ choosing.”

The case law reviewed shows that claims that are not clearly broken down into individual events showing cause, effect and responsibility are not necessarily thrown out of court. However, such claims do present difficulties for those judging them. If it is not possible to show the extent that another party’s action has disrupted the process, or it is impossible to untangle the delays caused by others or one’s self from the claim, the damages awarded will minimal compared to those entitled. If a party is able to identify the actions and events of all of those involved and separate out each party’s actions and their resulting cause and effect, then such evidence will have more weight. If, by using project planning tools, a manager is able to forecast possible events as soon as changes manifest or when changes are proposed then the project manager will be in a better position for managing claims, serving prerequisite notices if required under contract or indeed negotiating with clients and subcontractors.

**RESEARCH METHOD**

A pilot study was undertaken to gather data on the planning and tracking activities undertaken by project managers. Perceptions were sought via questionnaires from practicing professionals attending project management training events in the North of England. Initially 18 delegates were asked for data on monitoring and tracking changes. Subsequently it was decided to introduce further questions in order to identify whether project managers attempted to predict and plan the consequences of change. Two groups consisting of 17 and 13 professionals completed the questionnaire, which contained the additional questions. A total of 48 delegates completed the questions on planning and tracking change of which 30 of the professionals completed the additional questions on predicting the consequences of change. All of delegates attending the course completed the questionnaire. Both closed and open answers were used in the questionnaire, however, for the purpose of brevity only the full results of the closed questions are presented in full here. The responses to the closed questions are measured by yes / no answers or a ‘sometimes’ response. When testing the questionnaire it was clear that some project managers did not monitor such issues all of the time and their needed to be a middle ground between yes and no answers.

The sample is not representative of the industry, but provides an indication of current practices adopted by practicing project managers. During this initial study information was collected to determine whether project managers were collecting the basic information required to build a logical development of changes and consequences. No attempt, at this stage in the research, was made to investigate the detailed nature of the information collected by the project managers and how, or if, it was used to project or monitor the consequences of the changes. Further research will be undertaken in this area.
RESULTS

PART 1: DO YOU RECORD CHANGES TO THE PROGRAMME OR SCHEDULE CAUSED BY:

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>Some of the time</th>
<th>No</th>
<th>No comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Client or employer?</td>
<td>73%</td>
<td>19%</td>
<td>6%</td>
<td>2%</td>
</tr>
<tr>
<td>No.</td>
<td>(35)</td>
<td>(9)</td>
<td>(3)</td>
<td>(1)</td>
</tr>
<tr>
<td>Your own workforce?</td>
<td>69%</td>
<td>25%</td>
<td>4%</td>
<td>2%</td>
</tr>
<tr>
<td>No.</td>
<td>(33)</td>
<td>(12)</td>
<td>(2)</td>
<td>(1)</td>
</tr>
<tr>
<td>Third parties?</td>
<td>65%</td>
<td>19%</td>
<td>13%</td>
<td>4%</td>
</tr>
<tr>
<td>No.</td>
<td>(31)</td>
<td>(9)</td>
<td>(6)</td>
<td>(2)</td>
</tr>
<tr>
<td>Do you have a record of all new information issued (instructions, drawings etc.)?</td>
<td>69%</td>
<td>10%</td>
<td>17%</td>
<td>4%</td>
</tr>
<tr>
<td>No.</td>
<td>(33)</td>
<td>(5)</td>
<td>(8)</td>
<td>(2)</td>
</tr>
<tr>
<td>Do you record all late information?</td>
<td>46%</td>
<td>29%</td>
<td>21%</td>
<td>4%</td>
</tr>
<tr>
<td>No.</td>
<td>(22)</td>
<td>(14)</td>
<td>(10)</td>
<td>(2)</td>
</tr>
<tr>
<td>Do you monitor the use of float within the programme / contract?</td>
<td>23%</td>
<td>13%</td>
<td>52%</td>
<td>13%</td>
</tr>
<tr>
<td>No.</td>
<td>(11)</td>
<td>(6)</td>
<td>(25)</td>
<td>(6)</td>
</tr>
</tbody>
</table>

Part 2: Predicting the consequences of change

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>Some of the time</th>
<th>No</th>
<th>No comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Do you attempt to predict the consequence of proposed or implemented changes?</td>
<td>67%</td>
<td>27%</td>
<td>0%</td>
<td>7%</td>
</tr>
<tr>
<td>No.</td>
<td>(20)</td>
<td>(8)</td>
<td>(0)</td>
<td>(2)</td>
</tr>
</tbody>
</table>

DISCUSSION

The results from part 1 show that some of the project managers are selective about who and what information is recorded. Over a quarter of the respondent either didn’t record changes or recorded changes some of the time whether caused by clients, their own workforce or third parties. It is interesting to note that more of the project managers are collecting information on changes caused by clients than their own workforce and third parties. While it is clear that most have a record of new information issued, less than half of the respondents recorded late information.

In the open questions, the respondents identified twenty-four different methods which they used to collect change information. Some of the tools used were highly complex automated systems whilst others were simple and paper based. While the systems identified in the open answers seemed quite comprehensive, the information provided
in the closed question suggests that some of the basic information required to develop a disruption or delay claim was not being collected.

Failing to maintain detailed information of disrupting events, those responsible and their effects may cause problems if disputes over delay and disruption manifest. To pursue a claim, the courts require detailed evidence of causation and proper logic should be shown which relates to money claimed, without any unrealistic assumptions (McAlpine Humberoak Ltd. v. McDermott International Inc., 1992; Mid Glamorgan v. J Devonald Williams, 1991). Such expectations place demands on building and developing realistic and achievable programmes, and the monitoring and tracking of potentially disrupting events as they unfold. For programmes of events to be realistic the initial estimates must be achievable, and any monitoring and updating of the programme must be accurate.

It is important that the parties can clearly identify the events and changes that have taken place and can clearly distinguish those events that are attributable to the party against which the claim is made (respondent) from any other events. It is prejudicial to a fair trial if the claimant is unable to particularise links between breaches and sums claimed; preventing the respondent from knowing what case s/he is to answer (Wharf Properties Ltd. v. Eric Cumine Associates, 1991). Failure to attempt to specify the logical network (nexus) between the wrong alleged and the consequential delay provides no agenda for trial (Lord Oliver, J. Wharf, 1991:126).

The results show that 25% of the project managers surveyed are not monitoring changes caused by the project manager’s own work force all of the time. Change events regardless of who is responsible for them may affect the schedule of works. If programmes produced are to be a realistic account of events and a genuine attempt at predicting future events all significant events should be monitored.

For a valid claim, the respondent’s breaches must represent the only causally significant factor responsible for the difference between the expected cost and the actual cost (Austrailina case, John Holland Construction & Engineering Pty Ltd. v. Kvaerner RJ Brown Pty Ltd. and another, 1996). Effective monitoring methods should record changes caused by all parties and be capable of forecasting the resulting effect of each change, such that the change caused by one party can be separated from previous or subsequent changes. The fact a delay has occurred does not necessarily entitle the claimant to an extension of time, it cannot be assumed that the delay of one item will delay the rest of the work (McAlpine Humberoak Ltd. v. McDermott International Inc., 1992). Any links introduced between cause and effect must be logical. A claim cannot be linked to a list of events, which does not show the logic to each event (nexus). If all but a minor event (e.g. repositioning a fire bell) were struck out it would be absurd that the global claim would still stand (ICI v. Bovis, 1992);

The issue of float within construction is often a contentious one. The common law stance that float belongs to the first person to use it (Ascon Contracting Ltd. v. Alfred McAlpine Construction Isle of Man Ltd., 1999) means that there can, if float is not properly managed, be a free-for-all with parties all claiming their right to use up float. Only 23% of the project managers monitored float. Float within the programme offers the parties some flexibility and it is useful to know what aspects can be allowed to slip, change or be rescheduled without any detrimental effect. Informing parties of changes that can and can not be accommodated within float may reassure the parties that float is being properly managed. As float belongs to the first person to use it project managers should be aware of the float available and keep others informed of
what has been used to accommodate changes. As the project managers are not monitoring float there is considerable potential for disputes to emerge. If float is not monitored and parties are not kept informed a party may believe that they have an entitlement to float that no longer exists.

CONCLUSION

Most project managers are collecting basic information that will be helpful in pursuing a claim if the need arises. In many of the legal cases identified, claims often fail because the evidence collected is insufficient to demonstrate cause, effect and responsibility. Where parties are collecting information on the changes caused by each party there is greater potential for a logical analysis of the various effects.

The results show that most project managers record changes and attempt to predict the possible effects. Such practices give the project manager the advantage of negotiating compensation before subsequent events are realised or the project manager can allow events to unfold and then pursue a claim. Those who fail to collect such basic information may have to undertake a retrospective analysis, which will be difficult to prove, or pursue a global claim, which will be somewhat flawed if cause and effect cannot be identified.

The case law reviewed suggests that a well-evidenced claim, supported by appropriate documentation, that properly establishes cause and effect and reasonably quantifies the losses for each event will probably succeed. The law rejects most claims where the causes cannot be identified separately; or, where the defendant is unable to identify the case against him; or, where the relevant events are not entirely the fault of the defendant; or, where the alleged breach cannot be linked to the delay or losses. Exceptionally, where extra costs have been incurred as a result of events, which result in consequences that are so complex that the relationship between events and consequences are impossible and impracticable to unfold, it may be possible to maintain a composite claim.

Clearly, failing to collect information on changes will limit the project managers’ ability to forecast events and adopt systematic project management procedures. Such practices will severely limit the quality of data that can be used in negotiations and may make legal disputes a non-starter.

Further investigations are required to explore the qualitative responses collected and undertake a more detail investigation to determine the extent that change information is used in network analysis, and in claims.

BIBLIOGRAPHY


