

### CONCURRENT DELAYS IN CONTRACTS

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#### INTRODUCTION

'Time is money' is an often heard statement in the construction industry, a statement that drives and motivates every player engaged in the construction industry. Ironically it is the dual elements of time and money that cause some of the most time and money consuming disputes.

One of the most troubled and complicated area is that relating to the concept of concurrent delay, which is a strongly contested topic in the building and construction industry. Both parties to a construction contract regularly use concurrent delay as an excuse to avoid responsibility for extension of time claims and the assessment of liquidated damages.

To date there has been no uniform application of legal principles to the concept of concurrent delay. This is largely due to the fact that the answer to the concurrent delay dilemma is complicated because it requires consideration of the interaction of different factors.

The following is a non-exhaustive list of examples of these interacting factors:

- contractual provisions;
- legal principles;
- technical assessment of the construction program;
- methods for proof of delay claims;
- float ownership; and
- definition of criticality.

The aim of this paper is twofold. The first is to identify the variety of principles or methodologies that may be followed in resolving parallel delays disputes arising out of a construction contract. To this end, the first part of this paper will examine the standard form contracts and other legal and technical methodology or

principles adopted or applied by courts in dealing with parallel delays disputes.

The second is to outline the various practical aspects relating to dealing with concurrent delays disputes. The second part of the paper will examine methods of assessing concurrent delays, categories of information that must be sourced in resolving parallel delays disputes and practical contractual management techniques in securing relevant and contemporaneous information to deal with the consequences of parallel delays within a construction contract.

#### PART 1

#### STANDARD FORM CONTRACTS

An attempt to address the issue of concurrent delays has been made in some standard form contracts in Australia. Clause 35.5 of the AS2124-1992 is an example of the an attempt to deal with the issue of concurrent delays, which provides:

Where more than one event causes concurrent delays and the cause of at least one of those events, but not all of them, is not a cause referred to in the preceding paragraph, then to the extent that the delays are concurrent, the Contractor shall not be entitled to an extension of time for Practical Completion.

In effect this clause operates to wholly deprive the contractor of an entitlement to extension of time during a period where a delay for which the contractor is not contractually entitled to an extension of time (and which may but not necessarily be caused by the contractor) occurs concurrently with any other delay for which the contract might be contractually entitled to an extension of time.

This clause quite clearly fails to provide a balanced approach to concurrent delays based on apportionment between culpable and non-culpable delays.

Notwithstanding the above, a contractor may (subject to the interpretation of the express wording of the contract) still rely on the application of common law remedies to overcome any deficiencies in contractual remedies.

## METHODOLOGY IN AUSTRALIA

In Australia, the courts are likely to rely on the factual issue of causation 'by applying common sense to the facts of each particular case'.<sup>1</sup>

In considering the issue of causation the question that is asked is whether a particular act, omission was so connected with the delay that as a matter of ordinary common sense and experience, it should be regarded as a cause of it.

In *Thiess Watkins White Construction Ltd v Commonwealth* (unreported, Giles J, NSW Supreme Court, 23 April 1992) causation was viewed as follows:

To take a simple example, if an owner-caused delay of 5 days commencing on day 15 means that a contractor which would have completed the works on day 20 still has 5 days work to do, and there is a neutral delay on day 23, I see no difficulty in concluding that the time based costs incurred on day 23 were caused by the original delay.

The decision in *Thiess* supports the position that an extension of time claim by the contractor should be allowed for the full period of 6 days, even though for 1 day of that period there operated a second concurrent neutral cause of delay. This case is arguably good authority to

rely upon in pursuit of certain excusable delay claims where an initial delay caused by the principal is prolonged due to a neutral event.

In *Armstrong Construction v Council of the Shire of Cook* (unreported, White J, QLD SC 25 February 1994), the Supreme Court of Queensland came to an opposite conclusion to that of Giles J in *Thiess* on the issue of causation.

In *Armstrong Construction*, the contractor initially encountered a delay caused by latent condition and thereafter further delay due to wet weather (a neutral event). White J considered that the contractor was entitled to compensation for delay and disruption arising from the encountering of the latent condition but not for the 'flow on effect' caused by the neutral event.

It has also been argued that the approach in *Thiess* may not be useful where the concurrent cause of the delay is attributable to the contractor rather than a neutral event. In this instance, it may be more appropriate to apply the 'common sense' test adopted by the High Court in *March v Stramere* (1991) 171 CLR 506, which will recognize both causes as contributing to the delay.

Another issue that has been considered by courts in Australia is that relating to the 'prevention principle'.

The principles in relation to delay in construction contracts under the 'prevention principle' have been stated as follows:<sup>2</sup>

1. Given an extension of time clause applicable to principal's culpable delay, together with a contractual regime or mechanism therefore, actual principal's delay has the effect that an extension of time should be granted and time is not put at large;

2. Such principal's delay must be actual, rather than potential;

3. Similarly, there must be actual causation of delay; and

4. The overall impact of the principal's delay must be ascertained as an issue of fact.

Justice Rolfe considered<sup>3</sup> that the 'prevention principle' should apply only in circumstances in which the principal had caused the actual delay. It was not sufficient that the principal potentially cause delay to completion of the work and that the delay must be 'judged in all the circumstances of the case'.

In addition, Australian courts have attempted to qualify the effects of the 'prevention principle' in situations of concurrent delay attributable to both the principal and the contractor. It has been held that a contractor, who has been prevented from fulfilling its contractual obligation by the conduct of the principal, cannot rely upon the failure by the principal if the contractor itself could not have complied with its contractual obligation in any event.<sup>4</sup>

## METHODOLOGY IN THE UK

There have been significant recent developments in the UK in relation to concurrent delay claims. While not binding on Australian courts, these decisions may be persuasive and therefore worthwhile to briefly examine.

### Causation Test

Under English common law, causation of damage claimed to arise from a breach of contract will not be established unless:

- (i) there is a causal connection in fact between the defendant's breach of contract and the claimant's loss ('but for' test); and
- (ii) the defendant's breach of contract is the 'effective or dominant' cause of the claimant's loss ('effective cause' test).

Accordingly, it has been argued that to establish causation under English law, the claimant would have to satisfy both the 'but for' and the 'effective cause' tests. Given that the 'but for' test lends itself to the determination of delay claims based on the first in time principle, the requirement to satisfy the 'but for' is no longer a method that has wide appeal.

### (1) Effective or Dominant Cause Approach

Under the dominant cause approach, where there are two causes of delay, one the contractual responsibility of the defendant and the other the contractual responsibility of the claimant, the claimant will succeed if it can establish that the cause for which the defendant is responsible is the effective dominant cause. Which cause is dominant is a question of fact.<sup>5</sup> The factual conundrum is not solved by the mere point of order in time but is to be decided by applying common sense standards.<sup>6</sup>

*H Fairweather & Co v London Borough of Wandsworth* (1987) 39 BLR 106, is a case that involved dispute over the act of an arbitrator adopting the dominant cause approach to a contractor's delay claim under a 1963 Standard Form of Building Contract. In its decision the Court considered obiter that this approach was not correct referring to *Henry Boot Construction v Central Lancashire* (1980) 15 BLR 1 and *London Borough of Merton v Leach* (1985) 32 BLR 31.

### (2) Malmaison Test

More recently, *Henry Boot Construction (UK) Ltd v Malmaison Hotel (Manchester) Ltd* [1999] 70 Con LR 32, Dyson J in ratifying an agreement reached between the parties on the issue of responsibility where there are concurrent delays, said:

If there are two concurrent delays, one which is a relevant event and the other not, then the contractor is entitled to an extension of time for the period of delay caused by the relevant delay notwithstanding the concurrent effect of the other event.

Dyson J cited the following example by way of explanation of the above view:

If the contractor suffered a delay of a week because of exceptional weather, a relevant event and the same period of delay because of the shortage of labour, not a relevant event. Then if the architect feels it fair and reasonable to do so, he could grant an extension of time and he cannot refuse to grant one on the grounds that the delay would have occurred anyway because of the shortage of labour.

The Malmaison test is quite similar to the approach by the NSW Supreme Court in *Thiess Watkins White Construction Ltd v Commonwealth*.

It is interesting to note that the Delay and Disruption Protocol issued by the UK Society of Construction Law supports the position adopted in Malmaison and subsequently in *Royal Brompton Hospital NHS Trust v Hammond & Ors* (No 7) [2001] 76 Con LR 148.

The above cited decisions in Australia and the UK provide some indication on the possible acceptable principles for dealing with the issue of concurrent delay, though it is important to note that:

1. each specific case of concurrent delays will still be viewed on its own merits;
2. the adoption of appropriate procedure to assess the cause and effect will depend on the specific case of concurrent delays; and

3. there is no consistent line of case law as to the accepted legal principles for dealing with concurrent delays disputes.

In the circumstances, the maintenance of properly updated programmes and contemporaneous records become particularly pertinent to dealing with the consequences and resolution of concurrent delays disputes within a construction contract.

## PART 2

This part of the paper will examine three practical areas relating to concurrent delays disputes. The first section discusses the various methods of assessing concurrent delays.

The second section addresses the categories of information that are relevant and required in resolving concurrent delays disputes.

The final section deals with practical contractual management issues in collating relevant information to deal with the consequences of and resolve concurrent delays within a construction contract. In this section, the structure of the Delay and Disruption Protocol published by the UK Society of Construction Law will be discussed.

## SECTION 1—METHODS OF ASSESSMENT

### (1) Bar Chart

This method is appropriate for projects with few activities with linear type relationships between the activities. This method involves comparison between an as planned bar chart with an as built bar chart.

One of the biggest set backs with this method is that while it highlights delays it does not identify the cause(s) of the delay and thereby the party responsible for the delay.

Further, it is unsuitable and/or of limited assistance (without extensive evidence) in contracts involving:

1. modern and complex projects;
2. a variety of activities;
3. containing complex logic relationships (predecessor, successor and concurrent); and
4. varying resource requirements and availability.<sup>7</sup>

## (2) But For/Collapsed As-Built

This method is based on actual events on the projects. It allows comparison between the plans for performance with as-built schedule. This in turn allows identification of variance between the planned and the actual works carried out. This method enables the identification of causes and effects of the variances.

However, fact that the method engages a retrospective approach falls short of the need to address the issue of time extensions on a contemporaneous way and the insertion of 'after-the-fact' logic which may be contrary to the thoughts of the superintendent during actual performance.

This method proceeds along the following steps:

1. comparison between the reasonable planned schedule and the as-built schedule with all delay encountered on the project;
2. removal of delay of parties (not involved in the dispute) from the as-built schedule;
3. review the collapsed as-built for anomalies representing 'why hurry up and wait' type of activities (rescheduled due to prior delays);
4. make appropriate adjustments to remove the anomalies
5. arrive at an adjusted 'but for' CPM analysis of the project delays relating to the particular contractor.

## (3) Time Impact Analysis

This method works with the as-planned critical path method. It is designed to show the effects of each individual delay and the contractor's actual progress. Therefore the difference between the two networks, immediately before and immediately after each event, is solely caused by the delaying event.

The method takes into account the original planned method, progress and events to date and direct cause and effect of single events as they occur. Under this method the work is broken down into specific items; usually a single trade and preferably less than 14 days in duration. The resource, costs and values are assigned to that particular activity.

The method proceeds along the following steps:

1. evaluation of the project by taking into account performance prior to the onset of a delay which is the subject of the dispute;
2. identification of the specific location in the critical path;
3. original as-planned schedule is modified from the above point onwards, incorporating time impact;
4. time impact may or may not cause a project extension based on the location of the critical path and its relation to the delay in question.

It should be noted that when the next delay is evaluated, the above process is repeated based on the revised as-planned schedule which took into account the previous delay. Therefore, the second delay is introduced into the network to view the result it may have on the critical path. This method has been widely accepted and has significant merit.<sup>8</sup>

## (4) Window Analysis

This method is a variant of the cumulative approach under the

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time impact analysis method. Under this method, there is an examination of the status of the project immediately prior to the delay. Thereafter, the actual events and delays are taken into account within a window of time.

The focus of this method is to distil each delay as it impacts upon the critical path to determine concurrency based upon a specific window of time.

Care must be taken to ensure the window chosen does advantage one party.

### OWNERSHIP OF FLOAT

Quite apart from the various technical methodologies in determining the cause and effect of concurrent delays, the issue of ownership highlights that one should only take into account delays that affect critical path and factor out delays that may have been absorbed by float.

In multiple delay situations, one has to determine whether either delay is affecting the critical path or if both of them are. If only one delay is affecting the critical path and the other delay is only using up available float, then it could be argued that the non-critical delay is not delaying the project. The entirety of the project delay is due to whichever delay is affecting the critical path.

However, such an argument again depends on the merits of each case, which will involve consideration of contractual clauses and the specific facts of the case.

Of particular importance is the resource constraint that may affect a project and the contractual impact of absorption of the float may have on the risk profile of the contractor. A contractor may argue that to deflect any of his spare and already allocated resources is to cause a critical delay even when the initial impact is on non-critical activities.

## SECTION 2—CATEGORIES OF INFORMATION

The second section addresses the categories of information that are relevant and required in resolving concurrent delays disputes.

To be able to effectively deal with the consequences and resolution of the concurrent delays disputes, adequate, relevant and contemporaneous facts and information is necessary. The responsibility of collating and maintaining such adequate, relevant and contemporaneous information necessarily is often shared between the contractor and principals or the relevant contract administrator.

The categories of the required information should be able to answer the following questions:

1. Which activity did each delay affect?
2. What caused each delay?
3. Who was responsible for the act or omission that caused each delay?
4. When did the each delay occur?
5. How long did each delay last?
6. Which particular day or days did it affect and to what extent?
7. What notice was given formal or informal?

It is necessary to identify the delayed activity to establish its effect on the completion date. Generally a delay to a critical path activity will have a direct effect on the completion date. However, delays to a non-critical path activity are traditionally seen as not having an effect on the completion date. This generalization may be further complicated in situation of concurrent delay that interrupt one or both critical and non-critical path activities.

The cause of and responsibility for each delay is directly relevant to the issue of time and cost

entitlements. Generally or ideally, construction contracts will clearly set out an exhaustive list at best or a category based list of the type of delays for which each party is culpable and consequently the corresponding time or cost entitlements. Further, it will be necessary to establish if the cause of a delay is a neutral event, which may negate any cost and time entitlements to either of the parties.

The timing of each delay may be relevant particularly in light of test such as the flow-on effect and the effective/dominant effect tests. It is particularly relevant in establishing if the delays had any flow on effect on float entitlements and prevention of the other party from carrying out its obligations.

The need to establish accurately the length of each delay is self-explanatory in light of the information sought above.

## SECTION 3—PRACTICAL CONTRACTUAL MANAGEMENT STEPS

### The Protocol

The Society of Construction Law in the UK has attempted to deal with issues of time and cost in the construction industry by publishing in October 2002 (reprinted in March 2003) a protocol which aims to provide guidance in these areas ('the Protocol').

The Protocol contains several core principles relating to delay, extension of time and compensation in relation to the three main stages of construction work, which can be divided as follows:

1. preparing and maintaining programmes and records;
2. dealing with time, delay and cost related issues during the project; and

3. dealing with delay analysis disputes after completion of the project.

The Protocol proposes the preparation of a programme by the contractor to show the manner and sequence of works and thereafter to keep the programme up to date to record progress and extensions of time. In particular is the suggestion that the parties reach an agreement of the requirements for updating and saving the accepted programme and the software to be used to produce the programme.

The Protocol also provides various suggestions for both the contractor and the relevant contract administrator to carry out timely reporting, assessment and allowances in relation to time and cost related claims during the project.

Finally, the Protocol deals with various recommendations for assessment of time and cost entitlements and after the event delay analysis. To a large extent, the practicality or viability of these suggestion largely depend on the quality of the documentation and evidence and the good will available. It is important to realise that after the event analysis may not substitute for the clarity of the reasons relevant to a decision made contemporaneously. However, in some cases it is only in the cold hard light of hindsight that some causes and consequences of delay can be identified..

## CONCLUSION

As with all disputes the viability and success of any claims or defences in relation to concurrent delays is largely dependent on the facts and evidence of any particular case and the clarity with which they are articulated.

Time, effort and money involved in after the fact analysis and

resolution of concurrent delays disputes may be largely pre-empted or minimised if contract documentation is vetted and prepared for each individual project setting out effective and feasible methods of programming, recording, reporting and updating the progress and events in a construction project in a timely and cost effective way.

Quite apart from setting down contractual obligations, mechanisms and frameworks, the 'human factor' which underpins the success of a system must be emphasised. A good understanding, knowledge of and adherence to the requirements of the system coupled with open and frank communication between the parties goes a long way in minimising or even averting time and cost consuming disputes.

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## REFERENCES

1. *Stapley v Gypsum Mines Ltd* (1953) AC 663, per Lord Reid at 681 which was cited with approval by the Australian High Court in *March v Stramere* [1971] 171 CLR 506
2. per Rolfe J in *Turner Corp Ltd (in provisional liquidation) v Co-ordinated Industries Pty Ltd* (1995) 11 BCL 202 and on appeal (1996) 12 BCL 33; followed in *Australian Development Corp v White Construction* (1996) 12 BCL 317
3. *Ibid*
4. See *Turner Corp Ltd (in provisional liquidation) v Coordinated Industries Pty Ltd* (1995) 11 BCL 202. Confer the opposite proposition adopted in *Perini v Greater Vancouver* (1966) 57 DLR (2d) 307
5. See *Leyland Shipping v Norwich Union* [1918] AC 350 at 358, 359, 363 and 369 HC

6. See *Yorkshire Dale Steamship v. Minister of War Transport* [1942] AC 691 HL; and *Galoo Ltd v Bright Grahame Murray* [1941] 1 WLR 1360 CA

7. See *Al Johnson Construction Co v United States* 854 F.2d 467, 470 (Fed Cir 1988), in which the Court of Appeal for the Federal Circuit affirmed the criticism of this method.

8. See *SAE/American-Mid Atlantic Inc GSBCA Nos. 12,294, et al 98-2 BCA ¶130,084* (1998)

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