Concurrent and Parallel Delays

To determine whether an event delayed the completion date, it is important to determine whether the intervening event affected the current critical path\(^1\) and which party is responsible for managing the consequences of the delay.

Non-excusable delays are the responsibility of the contractor and the contractor bears the consequences, including liability to pay damages if the overall project finishes late.

Excusable delays are those against which the contractor is entitled to extension of time under the terms of the contract. Excusable delays are either ones for which the employer is responsible and compensation will be paid in addition to an authorised extension to the contract completion date (EOT); eg, variations required by the employer, or delays that are outside the control of both parties for which the contractor will receive an appropriate EOT, but no compensation; eg, exceptionally adverse weather conditions\(^2\). Compensability concerns the issue of whether the contractor is entitled to extra payment on account of the delay\(^3\) and the precise apportionment of these risks between the parties is usually defined in the contract.

It is also important to distinguish between “critical” and “non-critical” delays. The former are those that cause delay to project completion date whilst the latter affect progress but not overall completion. Most contracts require that in order for delay to warrant an EOT, it must affect the completion of the project (i.e. the delay must be critical). This is a relatively simple issue where there is only one delay occurring at a time, it becomes far more complex when there are multiple delays.

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2 For more on methods to calculate the effect of a delay see [Assessing Delay and Disruption - Tribunals Beware](http://www.mosaicprojects.com.au/Resources_Papers_035.html)

3 For more on the calculation of delay costs see [Delay, Disruption and Acceleration Costs](http://www.mosaicprojects.com.au/Resources_Papers_035.html)

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For each delay, it is important to validate the true extent of the occurrence (intervening event), this is best done by developing an accurate CPM schedule with its status just before the delay started and then:

1. Submit a schedule fragnet modeling the delay.
   - Accepted?
     - Yes
     - No
     - Select the appropriate update schedule.
       3a. Insert fragnet into schedule. Reduce delay durations to zero, and do network calculations.
       - Do all calculated dates match the original schedule?
         - Yes
         - No
         - Is the delay period long or has mitigation occurred?
           - Yes
           - No
           - 3b. Perform either procedure.
             - Redesign logic to reflect an optimum response.
             - Reduce durations to that at the end of the delay period.

4. Insert approved durations into delay activities and recalculate the CPM.
5. Identify the activity that will be used to measure the time impact.
6. Determine the total time impact to the project.
7. Determine the actual dates of delay.
8. Eliminate delay dates already awarded.

The terms independent delay, serial delay and concurrent delay are used to describe delays based on the interrelationship between the delays with respect to their duration and time of occurrence.

- **Independent delays** are delays that occur in isolation or without other consecutive or simultaneous delays.
- *Serial delays* occur in sequence consecutively and not overlapping with each other on a particular network path.

- *Concurrent delays* refer to two or more delays in which either their time of occurrence or their effects overlap (see below).

The resolution of concurrent delays is a contentious legal and technical issue. This is largely due to the fact that resolving them requires consideration of the interaction of a number of different factors including:

- The time of occurrence of the delays,
- The duration of the delays,
- Their critically,
- Argument over a concurrent delay by the contractor being a *delay-pacing strategy* where the contractor optimised its work effort in the knowledge of a pre-existing delay caused by the employer,
- The legal principles of causation and float ownership.

Unfortunately there is a lack of any uniformly accepted definition among practitioners as to what concurrent delays actually mean! The general definition of a concurrent delay is the situation in which two or more delays occur at the same time either of which had it occurred alone, would have affected the ultimate completion date of the project but this is far from precise.
The SCL Protocol defines a true concurrent delay as “the occurrences of the delays, one an employer risk event and the other a contractor risk event, at the same time, and their effects felt at the same time”. However this occurrence is extremely rare in practice and many authorities take a more pragmatic approach where the requirements for delays to be considered concurrent include balancing a combination of:

- The delays must independently affect a critical path to project completion,
- The delays must occur contemporaneously, although to be considered concurrent, the delays may not need not commence at precisely the same time,
- The delays may affect the same activity on the same critical path or may exist in different activities on parallel critical paths.
- There is a concurrent effect caused by the occurrence of two or more delay events at different times but where their effects are felt (in whole or in part) at the same time.

There are a number of different approaches that can be used to assess which of the delays takes precedence and the consequential entitlement to an EOT and/or compensation. Unfortunately there is no clearly defined precedent as to which option is best.

**First cause defines liability**

This approach argues that liability must rest with the party responsible for the first delay encountered and that subsequent delays occurring during the period of the first delay should not affect liability. This first-in-time principle of resolving causation in concurrent delays seems to operate based on the ‘but for’ test. By this test, a party seeks to lay responsibility for project delay on the other party by arguing that the delay would not have occurred but for the latter’s actions or inactions which occurred first. Although such argument is often made they have received unsympathetic receptions making this an approach that no longer has a wider appeal.

**Dominant cause approach**

This approach argues that the claimant may recover its damages if it can establish that the delay for which the defendant must assume responsibility is the overriding or the ‘dominant’ cause of the loss suffered. Which cause is dominate is a question of fact which is not solved by the mere point of order in time, but is to be decided by applying common sense standards. The problem with this approach is determining a ‘dominant cause’ where two approximately equal causes exist.

**The American approach**

The general view in US case law on concurrent delays in which the employer and the contractor are both responsible for delays to project completion, is that neither party will recover financial recompense unless they can segregate delay associated with each competing cause. However, the contractor will be entitled to a non-compensated EOT to remove his liability for damages for delayed completion during the course of the employer caused delay. The concept of pacing-delays becomes important here; if the contractor can demonstrate its delay was to pace the work within an identified time window caused by the employer’s actions, then the effect of the employer’s delay is segregated from the contractor’s and the contractor is entitled to compensation for the delay.

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4 See the Society of Construction Law (UK) *Delay and Disruption Protocol* (SCL Protocol) [http://www.eotprotocol.com/](http://www.eotprotocol.com/)


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The SLC Protocol approach

The general principle used by the SLC Protocol is that provided one of the causes of delay in any given concurrency situation affords grounds for extension of time under the contract, then the contractor should be given a time extension notwithstanding any default on his part. The approach supports the prevention principle that states a person asking another to do something cannot insist upon a condition if it is his own fault that the condition has not been fulfilled. Therefore, denying the contractor a time extension in such circumstances could make him liable to the payment of damages even though the project would have been delayed anyway due to employer’s default.

Commentary

The SLC Protocol and the American approach have very strong precedents for resolving the time delay aspect of concurrent delays. What is far from clear though is the entitlement to prolongation, delay and disruption costs.

To read more on Concurrent Delays see the resources at:

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