Extension of Time (EOT) principles

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EXPERT in FORENSIC PLANNING (Delay/Disruption/Production/Acceleration)
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Education

• Master of Laws (Commercial & Corporate) LL.M London
• Master of Science (International construction Management) M.Sc. NTU S’pore
• Bachelor of Laws LL.B (Hons) London
• Bachelor of Engineering B.Eng. (Civil) NU S’pore

Working Experience

• 27 years of leadership and management in the construction industry
• 19 years as Construction Contracts Commercial Consultant
• 19 years lecturing in the areas of law, management, business, finance & insurance
Extension of Time (EOT) principles

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Delays are of 3 types

• Caused by the Contractor

• Caused by the Employer and/or its Representatives

• Caused by Events outside control of both the Employer and the Contractor
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CLAIMS FOR DELAY AND/OR DISRUPTION
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Delay To Contractor - Reminder

The Contractor can be delayed by:

- Events attributable to the Contractor – contractor’s risk
- Events attributable to the Employer – excusable events
- Events attributable external factors – neutral events

Under most contracts the Employer takes responsibility for excusable events and for specified neutral events

A delay may not delay the Time for Completion if there is float time

Only delays on the critical path will affect Time for Completion

Duty to mitigate
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Causes Of Cost Increase And Delay In Progress

Events attributable to the Contractor

Events attributable to the Employer/Engineer

External factors
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Delay To Contractor

Typical Cost Curves

- Planned Cost Curve over Time
- Actual Cost Curve over Time
- Projected Cost Curve over Time

Prolongation Costs

Period of Delay

Acceleration Cost

Period of Acceleration

Mitigation Savings
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Basic Schedule Terminology

Milestone

Activities
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Basic Schedule Terminology

Logic link - Links between the activities required to derive the sequence of works. Can include:

Finish to Start (1)
Start to Finish (2)
Finish to Finish (3)
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Schedule Terminology

Activity
Element of work to be undertaken or task. Typically depicted in a bar format. Depending on the level of detail this can range from a bar for a phase of works such as ‘Detailed Design’ (one activity) down to the preparation and review of each individual document (hundreds or thousands of activities). Same scope – different levels

Milestone
Key event/date to be met which the contractor may be liable to pay liquidated damages if missed. May also be a payment milestone or access date. Tend to be fewer of these.
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Critical Path

- Steel Work
- Pipework PR-12
- Ductwork
- Electrical Services
- Insulation/Painting

Even though this string of activities are in delay and critical they are not the critical path but a sub-critical path as they do not drive the Contract Milestone.

Delay to the Contract Milestone

Float

Delay to the overall Contract Milestone is the greatest with this sequence of activities and this means that it is the longest critical path.
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Critical Path

Red denotes critical path

Contract Commencement

Steel Work

Pipework PR-12

Ductwork

Electrical Services

Insulation/Painting

Delay Period A

Delay Period B is bigger than A and therefore the dominant delay and true critical path

Contract Completion

Extent of the delay to the project completion
Extension of Time (EOT) principles

Critical Path

Time

Steel Work

Pipework PR-12

Pipework PR-14

Ductwork

Electrical Services

Insulation/Painting

Delay period in commencement by Owner due to unavailability or this area to install pipework

Delay period in commencement by Contractor due to lack of materials for this area

Time Now line and time at which EOT Analysis takes place

Contract Commencement

Contract Completion

Delay Period A is equal to Delay Period B and therefore concurrent for both of these paths

Extent of the delay to the project completion
Obligations of the Parties

• The Contractor’s obligation to complete the works within the time stipulated in the contract operates on the premise that the Employer does not do anything which has the effect of impeding the Contractor’s progress.

• A breach of this by the Employer constitutes an “act of prevention”.
Two further obligations of the Contractor are:

- that the Contractor shall commence work promptly within a reasonable period from a designated point in time

- for the Contractor to “regularly and diligently proceed with the works”. This imposes an obligation on the Contractor to maintain an adequate rate of progress on the project
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Implied Conditions

• Where the construction contract does not expressly prescribe the time within which the works are to be completed, the court may be prepared to infer that the parties intended the works to be completed within a reasonable time.
In *Charnock v Liverpool Corporation [1968] (UK, Court of Appeal)*, where the inordinate length of time taken for the completion of a contract was due to an inadequate number of employees being employed on the job, the failure on the part of the Contractor to take necessary measures to deal with foreseeable understaffing conditions was rejected as an excuse for a longer construction period.

However, before the court takes this position, it must consider the contract as a whole and the circumstances surrounding it.
Significance of EOT

• The Contractor’s liability for Liquidated Damages

• The Contractor’s Claim against the Employer

• The fact that extensions of time are granted on account of delays attributable to some act of prevention by the Employer may afford a basis for a claim by the Contractor against the Employer for time related damages and disruption losses
Notice Of Delay (by the Contractor) being “Condition Precedent” to the Architect’s or Superintending Officer’s (SO’s) or Engineer’s granting of Extension Of Time (EOT) to the Contractor

- The Courts seem to take very little notice of these notice requirements
In that case, Tropicon was engaged by Lojan as Contractors for a condominium development on terms based on the SIA-80 contract.

The contract date of completion was fixed at 14 May 1984, but the works remained uncompleted as late as 18 February 1985 when Tropicon applied to the Architect for an extension of time (EOT).

On 6 March 1985, the Architects extended the completion date to 31 December 1984 in respect of the main building works and to 18 February 1985 in respect of the swimming pool and external works.

On this basis, the Employers originally claimed an amount of $362,000 as liquidated damages for delay on the part of the Contractors in completing the works.
Subsequently by their letter of 2 December 1987, the Architects decided that the completion date be extended only by 17 days to 31 May 1984 and cancelled the earlier extensions of time (EOT), holding that the earlier extensions were “null and void”. The reasons cited by the Architects for this revision was that the Contractors had not given the requisite notice in compliance with clause 23(2) of the conditions.

The Architects contemporaneously issued a Delay Certificate in which they certified that the extended completion date was 31 May 1984. The amount of liquidated damages was recomputed on this basis and increased to $792,000 which the Employers claimed before the High Court.
Extension of Time (EOT) principles

*Tropicon Contractors Pte Ltd v Lojan Properties Pte Ltd [1989] (Singapore, High Court)*

- **Thean J** ruled, in a passage of his judgment which was approved by the Court of Appeal (Singapore 1991), that the ground cited by the Architects for deciding that their earlier extensions of time to 31 December 1984 were “null and void” — namely because the Contractors had failed to serve the requisite notice — was utterly unsustainable.
Thean J considered that while the requisite notice from the Contractor under the SIA form is a condition precedent to the grant of an extension of time (EOT) by the Architect under clause 23(2), the clause must also be construed to necessarily imply that such notice is not a condition precedent if the Architect has already informed the Contractor of his willingness to grant an extension of time (EOT). In this case the Architects’ letter of 6 March 1985 informing the Contractors that they have been granted an extension of time to 31 December 1984, clearly falls within this construction so that “it is not open to [the Architects] to declare such an extension as ‘null and void’ on the ground of absence of the requisite notice.”
The learned judge Thean J observed:

“Plainly on the true construction of that clause [Clause 23(2) of the SIA-80 form], the Architects are not obliged to give any extension of time (EOT) until the plaintiffs [Contractors] have given the requisite notice thereunder. But once an extension of time (EOT) is given by the Architects, it matters not whether such requisite notice has been given by the plaintiffs.”
Effects of Employer’s Acts of Prevention

• An *act of prevention* operates to prevent, impede or otherwise make it more difficult for a Contractor to complete the works by the date stipulated in the contract. It includes any breach of contract by the Employer as where the Employer interferes improperly through the agent in the carrying out of the works or where he fails to give timely possession of site.

• The expression “*act of prevention*” is also frequently taken to extend to acts which are, in fact, authorised or at least fall within the range of events contemplated by the contract, such as the ordering of extra works or a failure on the part of the Employer’s Consultants to provide plans and drawings expeditiously.
Effects of Employer’s Acts of Prevention

• The legal consequence of an act of prevention is that the date for completion originally stipulated in the contract ceases to be the operating date for the completion of the works.

• Unless an **extension of time provision exists** which can substitute a new date for completion for the original completion date, the principle is that there is no longer a date from which liquidated damages can run and the Employer thereby loses his right to enforce the **liquidated damages provisions** i.e. this operated to set **time at large** and to **render inoperative the liquidated damages clause** of the contract.
Effects of Employer’s Acts of Prevention

• The result remains the same, notwithstanding that the Employer’s act of prevention may account for only a small part of the overall delay
The operation of these principles was clearly demonstrated in the classic case of *Dodd v Churton* [1897] (UK, Court of Appeal).

• In that case, a building contract permitted extra work to be ordered during the course of the contract. There were the usual provisions for the imposition of liquidated damages in the event of delay in completion but there was **no express provision for extensions of time**.

• Additional work was ordered which had the effect of delaying completion. The Employer attempted to impose liquidated damages on the period of delay after an allowance of a fortnight had been made for what he considered was the appropriate portion of the delay caused by the additional work.
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- The court (*UK, Court of Appeal*) ruled that the Employer was not entitled to claim any liquidated damages. The delay was attributed in part to his act of ordering additional work and there was no provision under the contract, that is, an operative time extension provision, which would enable the liquidated damages clause to be kept alive in such a situation. *Lord Esher, Master of Rolls (MR) for the UK Court of Appeal*, stated the position under common law in the following terms.
The operation of these principles was clearly demonstrated in the classic case of *Dodd v Churton* [1897] (UK, Court of Appeal).

“...that, when one party to a contract is prevented from performing it by the act of the other, he is not liable in law for that default; and accordingly a well established rule has been established in cases of this kind ... to the effect that if the building Owner has ordered extra work beyond that specified by the original contract which has necessarily increased the time requisite for finishing the work, he is thereby disentitled to claim the penalties for non-completion provided for by the contract. The reason for that rule is that otherwise a most unreasonable burden would be imposed on the Contractor.”
Extension of Time (EOT) principles

Delay in Architect’s or Engineer’s or Superintending Officer’s Approvals and Instruction

• A delay on the part of the Employer’s Engineer or Architect in approving drawings or in making critical decisions which affect the progress of the works can constitute an *act of prevention* by the Employer.

• There is little difficulty in reading into the time extension provisions of the major standard forms a power to fix a new completion date on account of these contingencies.
Extension of Time (EOT) principles

Effect of “concurrent delays”

• “Concurrent delays” is an expression which describes a situation where there are two or more causes of delay operating at a particular point of time and at least one of these causes is outside the Contractor’s control.

• The situation is complicated because it is difficult, on the usual principles, to determine FIRSTLY the precise chain of causation exerted by these events on the overall contract programme and SECONDLY the settlement of questions relating to liquidated damages and extensions of time.

• While there is no direct English authority on this point, the approach taken by the courts in the United States is to apportion the loss according to the degree of culpability of each of the parties for the delay.
Extension of Time (EOT) principles

Acceleration of Works when Extensions of Time (EOT) Claims have not been settled

• The question which then arises is whether the Contractor can allege that the Architect or Engineer or Superintending Officer (SO) had failed to discharge his duty to administer the contract fairly by virtue of the fact that he had failed to certify the extension of time (EOT) claims within a reasonable time from the date of the Contractor’s application for extension.

• This in turn determines whether the Contractor is entitled to proceed against the Employer on an acceleration claim.

• This position is well established in the United States of America (USA).
Acceleration of Works when Extensions of Time (EOT) Claims have not been settled

In *Norair Engineering Corporation v United States [1981] (USA)*, the Employer was a United States government agency.

- The works had not been proceeding well and the Employer wrote to the Contractor alluding to the liquidated damages provisions in the contract and pointing out that the completion date was only six months away. In the letter, the Employer conceded that some of the delays were excusable but did not specify which. It further stated that the Employer was not prepared to accept the Contractor’s contentions on the delays.
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In *Norair Engineering Corporation v United States [1981] (USA)*, the Employer was a United States government agency.

• In one instance, the Employer wrote: “I request that you take positive action to expedite the work by supplying the job with all materials necessary to accelerate progress.”

• In the end, however, the Employer granted the full extension of 524 days claimed for by the Contractor.
Extension of Time (EOT) principles

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In *Norair Engineering Corporation v United States [1981] (USA)*, the Employer was a United States government agency.

- The **court ruled** that an order to accelerate the progress of the works might be formulated in the form of a request and need not be couched in the form of mandatory instruction. It held that, on the evidence, the Contractor was led to accelerate the works beyond the level which the Contractor considered was the proper rate of progress in order to avoid any potential liability for liquidated damages, and that, accordingly, the Contractor in this case was entitled to recover his acceleration costs.
Another example is afforded in a more recent case in the United States of America (USA).

**Appeal of Continental Heller Corp [1984] (USA, General Service Board of Contract Appeal [GSBCA]).**

- In that case, a Contractor had entered into a contract for the construction of a building for a United States government agency
Extension of Time (EOT) principles

Acceleration of Works when Extensions of Time (EOT) Claims have not been settled

Appeal of Continental Heller Corp [1984] (USA, General Service Board of Contract Appeal [GSBCA]).

• Due to heavy rains at the start of the project, the excavation subcontractor could not proceed with the work. The Government insisted that the Contractor stay on schedule and refused to grant an extension of time (EOT) until the Contractor documented the site conditions and the activity’s status on the critical path.

• The Government finally granted an extension of time (EOT) of 16 months after completion of the excavation, but the subcontractor had already switched to a more expensive method of excavation in order to comply with the original schedule.
Acceleration of Works when Extensions of Time (EOT) Claims have not been settled

*Appeal of Continental Heller Corp [1984] (USA, General Service Board of Contract Appeal [GSBCA]).*

- The General Service Board of Contract Appeal held for the Contractor finding the following facts as elements which together constituted a constructive acceleration, namely that:
  1. the Contractor had encountered an excusable delay;
  2. the Contractor had requested for an extension of time (EOT);
  3. the Government refused to grant the extension of time (EOT);
  4. the Government required the Contractor to complete the work within the original performance period;
  5. the Contractor whereupon gave notice of acceleration; AND
  6. the Contractor actually did incur additional costs by accelerating performance.
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There may be more substance to an acceleration claim arising from a superintending Officer’s or an Engineer’s or an Architect’s refusal to grant an extension of time (EOT) where the refusal is triggered directly by some breach or overt act on the part of the Employer.
Extension of Time (EOT) principles

Acceleration of Works when Extensions of Time (EOT) Claims have not been settled

In the leading Canadian case of *Morrison-Knudsen Co Inc v British Columbia Hydro and Electric Power Authority (No 2) [1978]* (Canada, British Columbia Court of Appeal), the Employers interfered with the Engineer’s exercise of his powers to certify extensions of time (EOT) while directing the Contractor to make up for the time lost. In the result, it was held that the Contractor was entitled to extensions of time (EOT) in respect of the relevant events and to recover his acceleration costs.