

The Trinity on Delays & EOT

The Contract
The Evidence
The Analysis

by

Belden Premaraj

Messrs. Belden

Delays & EOT

Most Common Dispute

Most Complex Dispute

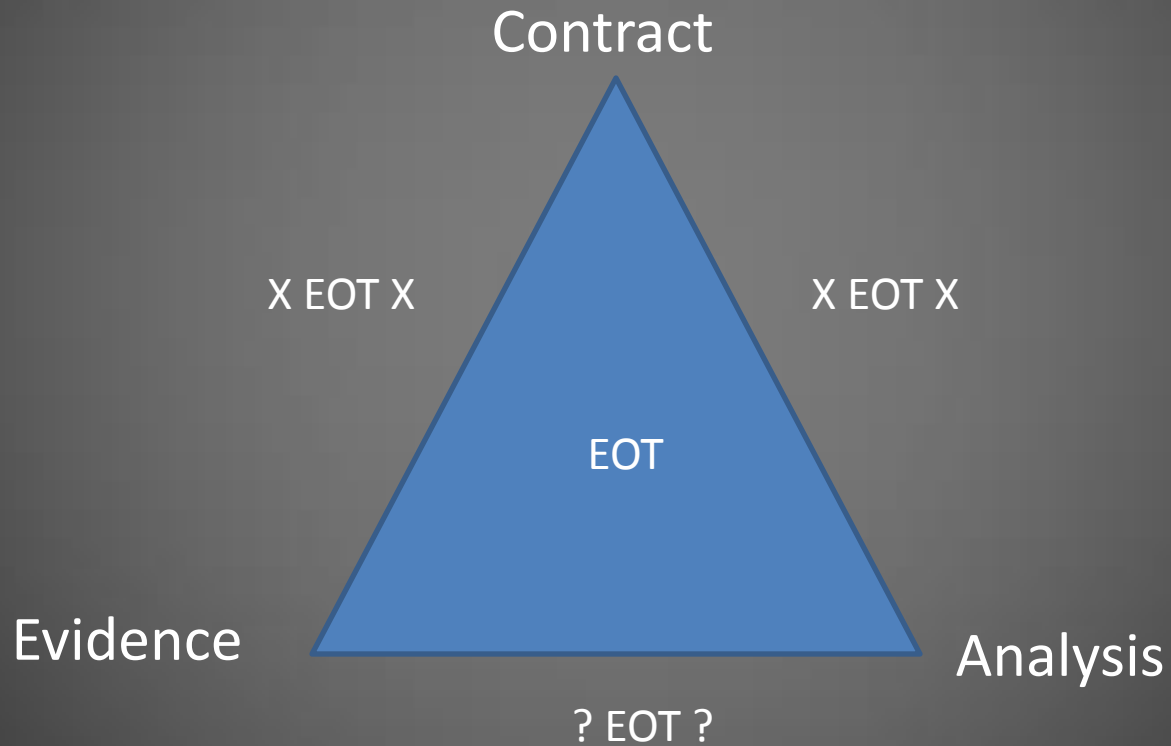
Most Uncertain Dispute

Construction & Time

“It has been said that the only major construction project to finish on time and to budget was a church where, presumably, divine intervention played a role”

Dr. Julian Critchlow

The Trinity



The Contract

- Excusable Delay
- Condition Precedent Notice
- Mitigation
- Prospective or Retrospective Analysis
- Evidentiary Requirements

Excusable Delays

- List of Delay Causes = EOT
- Limited List on Neutral Delay Events ✓
- Limited List on Employer/Agents Culpable Delay Events X

Why?

Time At Large

- Otherwise Unfair on Contractor
 - Dodd v Churton [1887] 1 QB 562
 - Sim Chio Huat v Wong Ted Fui [1983] 1 MLJ 151
 - Thamesia Designs SB v Kuching Hotels SB [1993] 3 MLJ 25
- No LAD & Reasonable Time to Complete
- What is the End Result?

Time at Large

- Reasonable Time = EOT Time
- EOT Time = Agreed by Parties
- EOT Time = Determined by Arbitrator/Court
- Further Delays = Compensable Actual Damages

Avoiding Such Time at Large

- Exhaustive List of Delay Causes???
- Catch-All Act of Prevention Clause
- PAM 98' & 2006'
- *any act of prevention or breach of contract by Employer*
- Interpretation in the hand of SO/ER
- Employer includes Agents/Consultants/3rd Parties within Employer's obligation

Notice Requirements

- Is it a Condition Precedent?
 - Must be clear
 - Standard Forms now use words “*shall be a condition precedent*”
 - Ambiguities = *Contra Proferentum*

- Is the Notice Period Clear?
 - Forthwith, Soon Thereafter, No. of Days
 - Time Runs From? = delay commence v knowledge
 - Objective Knowledge = reasonably apparent

Notice Requirements

- Notice Period Unworkable or Impossible
 - All delay events \neq delay the Completion Date
 - Time for Analysis of Criticality
 - Notice of Events Affecting Progress

Notice Requirements

- Required Accompaniments Effects Period
 - Particulars of Expected Effects
 - Estimate of EOT Required
 - For a reasonable estimate = Delay Event Cease
- Mitigation requirements impact notice period

Notice Requirements

- Should the Notice be Condition Precedent when:
 - Delay event known by the Parties/SO
 - Where Delay event caused by the Employer?
 - Where Act of Prevention
- Otherwise Unfair?
- Does lack of or delayed notice prejudice Employer?
 - Only if it prevent Employer from mitigation

Notice Requirements

- Delay Event within the knowledge of the SO
 - Condition Precedent to Contractor's application
 - Condition Precedent to SO's duty to give EOT?
 - London Borough of Merton v Stanley Hugh Leach Ltd [1985] 39 BLR 51
 - PAM 2006' retrospective duty post CPC

Notice Requirement

- Delay Caused by Employer/Act of Prevention
 - Gaymark Investments v Walter Construction Group [1999] NTSC 143
 - Keating on Building Contracts
 - Considered Wrong Legal View
 - The late Prof. Ian Duncan Wallace : Informed Drafting
 - Peninsula Balmain Pty Ltd v Abigroup Contractors Pty Ltd [2002] NSWCA 211

Rely on Failure of Condition Precedent Notice?

- Risk of Converting LAD to Penalty - Prevention
 - Can SO issue CNC?
 - Can SO honestly state works ought to be completed by the CNC date?
 - Can Employer benefit LAD when it caused the delay?
 - Will that not make the LAD a penalty?
 - Is this a genuine pre-estimate of loss when there is no loss? Cured by Informed Drafting?

Notice Requirement

X Gaymark

- lack of notice in an act of prevention causes time at large because SO prevented from granting EOT
- Contractor cannot benefit from own breach of no notice and get loss & expense

✓ Gaymark

implication that relying on lack of notice will lead to LAD being unenforceable

- Employer cannot benefit where it has committed wrong
- *Multiplex Constructions (UK) Ltd v Honeywell Control Systems* [2007] EWCH 447 (refers to prejudice to Employer)

Avoiding the Pitfall on Notice Requirements

- SO assess delay without prejudice to right to refuse due to lack of notice?
- Employer agrees EOT with no loss & expense?
- Employer Unilateral Right to grant EOT
- Australian Std Forms (PC-1, NPWC3, AS 4300)
- CNC based on contractual extensions and not SO's opinion?
- Employer waives LAD for the affected period?

Mitigation

- Reasonable steps = financially & resource feasible
- Actions which are in the normal course of business
- Causes an overall cost saving to Contractor rather than a mere expense
- Question of Fact, Not Law
- Burden discharged easily by assertions (evidence of ability generally lies with contractor)
- Evidential burden switches to other Party to Prove No Reasonable Mitigation

Mitigation

- Cost Incurred in Mitigation Recoverable
- Failure to Mitigate = Contractor's Culpable Delay?
 - RP Wallace Inc v The US
- Best Endeavors?
 - IBM v Rockware Glass Ltd [1980] FSR 335
 - Steps that are within the power and ability but limited to those that are in self-interest

Mitigation

- Standard Forms = Ineffective Mitigation Provisions
- Joint Effort Mitigation is Needed
 - NEC Contracts
 - Early Warning Procedure
 - Risk Reduction Meeting & Risk Register
 - Agreed Steps & Cost of Mitigation
 - Pending Determination of EOT, Cost Shared

Prospective v Retrospective Assessment

- Truly Prospective – Likely/Probable Delay
 - How to really consider Mitigation effects?
 - Unless Recovery/Catch-Up Program Issued
 - Without prejudice recovery/catch-up programs and constructive acceleration
 - PAM 98' : upon receipt of notice & on likely delay

Prospective v Retrospective Assessment

- Completion Date Prospective but Retrospective Delay Event
 - PWD 203 Rev 2007 : as soon as able to estimate the length of delay
 - PAM 2006 : upon receipt of final application within 28 days after cause of delay ended
 - SIA : after delaying factor ceases and possible to decide length of EOT

Prospective v Retrospective Assessment

- Truly Retrospective – just before or after CNC/CPC
 - PAM 2006 : within 12 weeks after CPC review and assess regardless of lack of notice
- Arbitrator & Analysis – to follow requirement of Contract?

The Evidentiary Burden

All the Crowd would shout back

“Yes, yes, we believe you.”

But as the trapdoor snapped open,
the Crowd would yell

*“But you ain’t got no proof...
and given that the burden of proof is on you,
you can hang”*

Cause to Effect

“Proxima Causa”

“Causes are spoken as if they were as distinct from one another as beads in a row or links in a chain, but – if this metaphysical topic has to be referred to- it is not wholly so. The chain of causation is a handy expression, but the figure is inadequate. Causation is not a chain but a net. At each point influence, force, events precedent and simultaneous, meet, and the radiation from each point extends infinitely.”

*Lord Shaw of Dunfermline,
Leyland Shipping v Norwich Union Fire Insurance Society*

Proxima Causa

“The test is what an informed person in the building industry (not the man in the street) would take to be the cause”

Judge Bowsher QC

**P&O Developments Ltd v The Guy’s and St.
Thomas’s NHS Trust**

The Work Program

- Impacted Work Program
- A Scientific & Reasonable Method of Proof!
- Best Evidence Rule
- The Standard of Proof = Burden of Proof
- What is the Legal View? - Commentaries

John Barker Construction Ltd v London Portman Hotel Ltd

“the SO must:-

- 1. Apply the rules of the contract;*
- 2. Recognise the effects of constructive change*
- 3. Make a logical analysis, in a methodical way, of the effect of the developer’s time risk events on the contractor’s programme;*
- 4. Calculate, rather than make an impressionist assessment of, the time taken up by events”*

Mr. Recorder Toulson QC

CPN Impact

- Critical Path Impact Assessment is the accepted basis of analysis and for assessing EOT entitlements
 - Henry Boot (Construction) UK Ltd v Malmaison Hotel (Manchester) Ltd
 - Aoki Corp v Lippoland (Singapore) Pte Ltd

An Adequate As-Planned Work Program

- Is it Adequate to later substantiate an EOT Claim?
- What does Adequate mean?
- What standard of work program is required by the Contract?

An Adequate Work Program

- Henry Gantt's bar Charts w/o CPM?
- Software Program with CPM?
- Software Program with CPM & Float?
- Software Program with CPM & Float & Resource Allocation?
- How Detailed Should the Program be?

How Detailed?

- General Activities?
- Sub-activities & trades?
- Location Sequencing details?
- Co-ordination & Interface details?
- Information lead time details?
- 3rd party or SO approval details?
- Supply lead time details?
- Free-Issue lead time details?
- Temporary Works detailing?

How Detailed?

- Resource Sequencing details?
- Multi-level or multi-trade CPM?
- Logic Links
 - Physical Links (Start-Finish of Activity)
 - Resource Links (Start-Finish due to Resource)
 - Contractual Links (Start-Finish due to Approvals)
 - Strategic Links (Start-Finish with Floats)

Logic Checks & Approval

Manipulated As-Planned Program!

- As-Planned CPN Logic – Ensure it is logical?
- Hidden Floats
 - Sequential Works that can be carried out in Parallel
 - Unidentified Floats
 - Exaggerated late completions of activities
- Exaggerated early completion of activities

Logic Checks & Approval

- Omitted Free Issue delivery dates
 - danger of un-realized lead time
 - leaving it to implications
 - Star trek scheduling
- Unrealistically early Free Issue delivery dates
- Omitted Contractual Logic dates
 - Information
 - Approvals
 - Reviews

Approval of As-Planned Program

- Contractual Document – more weight
- Non-Contractual Document – still evidentiary tool but with less weight
- Approval only on logic!
- Approval but with mitigation obligation (re-scheduling non CPN works)!
- Cuts both ways - Contractor also bound by logic.

Ascon Contracting Ltd v Alfred McAlpine (Isle of Man) Ltd

“I do not accept [the contractor’s] attempts to disown the logic links in its own program”

John Hicks QC

Float

- Does it affect the assessment of EOT?
- Date of Completion Critical Path Activities cannot have float unless:-
 - Contractor planned early completion
- Contractor Planned Early Completion
 - If delayed up to the Contracted Date of Completion = No EOT, no loss & expense, Productivity Loss?

Float

- Free Float (Finish – Start Activity to Activity Float)
- Total Float (Activity to Date of Completion Float)
- Is there a distinction between critical floats and non-critical floats?

Float

- Critical Float
 - minimum planning time required
 - minimum procurement, fabrication & delivery time required
- Non-critical float
 - time safety factor
- Critical float should be identified differently
- Temporary Works Detailing with a critical path to the Permanent Works

Float

- Non-Critical Float can be considered when assessing likely delays (i.e.. it can reduce truly prospective assessment)
- However, when assessing actual delays retrospectively, non-critical float that belongs to Contractor cannot be used to avoid or reduce the EOT
 - Aoki Corp v Lippoland (Singapore) Pte Ltd
 - The Royal Brompton Hospital NHS Trust v Frederick Alexander Hammond & Ors

Float & Ownership Belongs to Contractor

- EOT granted if float affected by delaying event?
- Only when the extent of the float used up results in the non-critical activity impacting the Completion Date because it caused a shift of the CP?
- But if it belongs to the Contractor, why show it in the as-planned work program?
- Silence on ownership but with float indicated in work program, should it not belong to Project by implication.

Float & Ownership Belongs to Project

- Either party may use the float period without liability for EOT
- First to use benefits
- Encourages the Contractor never to bother with early start
- Early start and delays occur : loss of productivity, efficiency & idling, not claimable?

Float & Ownership Belongs to Employer

- Contractor must progress by early start and early finish unless delayed by Employer culpable event
- Some Contracts gives right for Employer to instruct early start or otherwise, Contractor can use the float (Employer's option)
- If early start would have reduced effect of Employer culpable delay, it is to be taken into account

Properly Updated Baseline Work Program

- Work Programs & their contractual implications are not written in stone
- A work program is a living document on the progress and it must be updated to reflect the actual progress at any given time
- Actual Delays causing Actual Impacts is what the law is concerned with, not hypothetical based on the baseline work program (wishful as-planned at the commencement of the works)

Updating the As-Planned WP

- When Contractor wishes?
- When Delay Event is perceived by SO?
- When progress is found to be in variance?
- When Contractor claims or notifies of EOT?
- Any time wished and instructed by the SO?
- Periodical?
- Monitored Updating & Logic Re-checking?

Monitored & Re-checking?

- Avoid Manipulation!
- Misleading Updates due to automatic update
- Failure to reflect actual mitigation
- Failure to reflect accurately any variation impact (omission or addition)
- Allows accurate impact assessments at the appropriate time
- Pro-Contractor because claim is certain
- Pro- Employer because extent of liability is also certain

Actual Impact at the time when the Delay Occurs

- Failure to reliably update the baseline work program is not reflective of actual impact
- Purported updated as-planned work program that was misleading as to the actual situation at site cannot be relied on
- Actual progress can change the critical path
- Must reflect the actual progress and conditions existing immediately prior to the occurrence of the delay event

Actual Impact at the time when Delay occurs

- Must reflect whether contractor's actual progress is such that the supposed impacted as-planned works were at that time in fact ready to be carried out as-planned
 - Great Eastern Hotel Company Ltd v John Laing Construction Ltd
 - Royal Brompton hospital NHS Trust v Fredrick A Hammond
 - Henry Boot Construction (UK) Ltd v Malmaison Hotel (Manchester) Ltd

The Need for A Properly Updated WP

- Kemron Environmental Services Corp
- WG Yates & Sons Construction Co
- The Gasman Corp
- Motherwell Bridge v Micafil


L&C Europa Contracting

“In no instance, has [the contractor] attempted to identify and track the allegedly delayed work in the daily reports and account for the delay period. Only the (pre-construction planned program) is in evidence. There are no updated (program) in the record that might demonstrate the relationship of the alleged delays to other work at the site, or the timing and impact of alleged delays on overall completion of the contract. The record does not permit segregation of any delays caused by [the contractor] and/or delays extending over unexplained gaps in [the contractor’s] on site performance.With respect to the nature of the proof offered by [the contractor] generally, [the contractor] for the most part relies on general, unspecific and conclusive testimony that was not credible.”

Balfour Beatty Construction Ltd v The Mayor & Burgesses of Lambeth

“the foundation must be the original program (if capable of justification and substantiation to show its validity and reliability as a contractual starting point) and its success will similarly depend on the soundness of its revisions on the occurrences of every event, so as to be able to provide a satisfactory and convincing demonstration of cause and effect. A valid critical path (or paths) has to be established both initially and at every later material point since it (or they) will almost certainly change”

Progress Reports

- Daily & Monthly Reports?
- But are the Contents Adequate?
- Are the Veracity of the Reports intact?
- Probative Value? 
- Minutes of Site Meetings?
- Correspondence?

Contents of the Progress Report

Apart from the Normal Information:-

- Affect of the Weather on the Work Condition?
- Works Performed – Cross Referred to WP?
- The Measure of the Works Done?
- Time Spent by Resources & Down/Idle Time?
- Reason for Down/Idle Time?
- Resource Transfers & Reasons?
- Mitigation Steps?

Contents of the Progress Report

- Materials Received?
- Variation, Rectification, Inspection, Re-opening Works Identified?
- Works affected by RFI (Information & Inspection) Identified?
- Delays & Disruptions Identified & Reasons
- Resources affected by Delays & Disruptions Identified?
- Accidents & Site Visits?
- Corroboration = Progress Photographs or Videos

Veracity of the Reports

- Approved/Agreed? – COW/ PM/Consultants?
- Contemporaneity? – daily & prepared daily?
- Neutrality? – Favourable & Adverse
- Formal & Consistent – Format & Process?
- First Hand Recorder – Not hearsay? Weight?
- Security? Multiple Copies?
- Distributed & Unchallenged?
- Consistency with other Documents? External & Internal

Veracity of the Reports

- Legible Handwriting?
- Information within contradictory?
- Photographs not labeled?
- Photograph location not identified?
- Date & time of photograph not identified?
- Sub-contracted Works : no records?

Method of Impact Analysis

- Impacted As-planned Method
- As-Planned v As-Built Method
- Snapshot Time Impact Method
- Collapsed As-Built Method
- Windows/Slicing/Watershed Time Impact Method

Impacted As-Planned

- Treats the As-Planned Non-Updated Program as written in stone
- Critical Path never changes
- Can be based upon updated as-planned programs which can at times reveal hidden delays by Contractor
- Ignores the actual happenings in the site except for the delay events claimed

Impacted As-Planned

- Assumption that Contractor has been perfect with zero problems and exactly on schedule but for the claimed event
- Even so, why not updated? If not obliged?
Some factual evidence of contractor's delays will destroy the method
- Concurrent Delays Ignored

As Planned v As-Built

- Comparison of As-Planned & As-Built with some identification of what caused the delay
- Ignores critical path changes
- Superficial method
- Fails to consider knock-on effects
- Concurrent delays are ignored
- Ignores re-sequencing or accelerations

Collapsed As-Built

- Rebuilds Program using actual as-built commencement and completion dates
- Re-creates the critical path from the actual as-built
- Ignores mitigation or re-scheduling
- Ignores concurrent delays

Time Impact Method

- Danger if it ignores some actual facts
- Need to be aware of actual progress when relevant delaying event actual impact being considered
- Prior delays could have been recovered
- Prior delays could have actually had lesser impact than projected on program
- Total Retrospective: Modified Time Impact (Discounts on Mitigated Earlier As-Built Completions)

McAlpine Humberoak Ltd v McDermott International Inc

“the Judge dismiss the Defendant’s approach to the case as being a retrospective and dissectional reconstruction by expert evidence of events almost day by day, drawing by drawing, TQ by TQ and weld procedure by weld procedure, design to show that the spate of additional drawings which descended on McAlpine virtually from the start of the work really had little retarding or disruptive effect on its progress. In our view, the Defendant’s approach is just what the case required.”

Llyod L.J.

Skanska Construction UK Ltd (formerly
Kvaerner Construction Ltd) v Egger (Barony)
Ltd

“It is evident that the reliability of Mr Pickavance's sophisticated impact analysis is only as good as the data put in. The court cannot have confidence as to the completeness and quality of the input into this complex and rushed computer project.

Judge David Wilcox

•

Leighton Contractors (Asia) Ltd v Stelux Holdings Ltd

“In the actual circumstances of the case, looking prospectively from the time of Stelux’ initial failure to provide information, Stelux’s failure could not have be causative of delay. The late information could not cause actual delay, having regard to the state of the works at the time when the information ought to have been furnished originally”

Hon. Reyes J

Leighton Contractors (Asia) Ltd v Stelux Holdings Ltd

“The Arbitrator found against Leighton on actual delay. She further held that, given Leighton’s pleaded case and the facts as found by her, she did not have to concern herself with “likely delay” under cl.23. In those circumstances, it is not surprising that the Arbitrator found time slice methodology of little help. Stressing prospective delay regardless of actual delay, time slice methodology would have been of limited relevance.....”

Hon. Reyes J

Leighton Contractors (Asia) Ltd v Stelux Holdings Ltd

“The analysis pressed by Mr. Menyhart (Leighton’s expert) focused on the prospect of delay resulting from an event at a given time, regardless of whether in retrospect the event had actually caused delay. The Arbitrator rejected Mr. Menyhart’s analysis entirely. In contrast, the Arbitrator found the evidence of Mr. Foan (Stelux’s expert) more helpful. He also used “time slice” methodology. But his approach was different in focus. The Arbitrator observed that Mr. Foan “does not consider off-site delays until they affect “on-site” activities and then only to the extent that they do....”

Hon. Reyes J

Concurrent Delays

“Can’t separate the wheat from the chaff”

- True Concurrent Delay
 - Contractor culpable and Employer culpable events commence at the same time to the same critical item of work and has the same delaying effect
- Concurrent Delaying Effect
 - Distinct Delays to distinct items of works which can be sequential but both result in the same critical overall delayed period

Concurrent Delays

- Sequential Delays but resulting in some shared delay period
 - Prospective Time Slice Delay Assessment, chances of concurrent delays slim in terms of dominance
 - But at the time of the shared delay period, both equally material
 - If not concurrent then one party can benefit even when at culpable fault (LAD or Loss & Expense)

What are Global Claims

- No nexus between specific causes to specific effects to specific loss.
- Total costs claim
 - one lump sum claim for all causes to effects
 - actual costs minus planned costs
- Rolled up claims
 - many causes to one effect
 - many causes to many effects

Why Global Claims

- How the Courts were won at pleading stage
 - construction claims are highly complicated
 - many overlapping causes causing overlapping effects
 - impracticable or impossible to accurately apportion damage to particular causes/effects
 - impracticable or impossible to link causes to effects

Why Global Claims

- perhaps influenced by the belief that at the hearing
- experts will crystallize the nexus
- evidence of the facts will support the nexus

At Hearing Stage

- Courts insist on evidence of nexus
- Warned that if one cause fails or one effect fails – all fails (causes, effects & sums)
- Many causes to one effect, one cause proven is sufficient for the total costs claimed

Weakening of the Standards of Proof for Cause to Effect

- John Doyle Construction Ltd. v Laing Management (Lord MacFadyen)
- Accepts the need for proof of nexus
- Accepts the logic of the warnings
- However provides subjective rescue options
 - common sense approach providing any cause still standing is dominant; or
 - subjective assessment of apportionment providing cause still standing is material although not dominant.

Weakening of the Standards of Proof for Cause to Effect

- London Underground Ltd v Citylink Telecommunications Ltd [2007] EWHC 1749
(applied rescue options to rolled up causes to effect)

Criticism of John Doyle

- There ought not be rescue options
- Dominance is in any event the test to prove causation or nexus – if dominance existed no need for rescue
- Material is also a term used to establish the effective causation
- Judge seems confused as to dominance -v- material

Criticism of John Doyle

- Ignores adversarial system of parties proving the apportionment
- Ignores natural justice – no opportunity to the respondent to address the subjective apportionment exercise of the Courts
- Never considered the availability of technology and scientific tools of proving cause to effect

General Criticism of Global Claims

- Computer aided tools allow practicability and in fact, ability to prove nexus
- Forest technique of pleading
- Evidential burden switches to respondent to analyze claimant's causes to effects
- Proliferation of time and costs
- Allows bogus claims and 'hopeful' claims
- *'throwing enough mud in the hope that some will stick'*

SCL Protocol

- Excusable delay with catch-all prevention clause
- Avoid strict condition precedent notice requirements
- Application & Assessment close to time of delay event
- Prospective determination which are retrospective delay event
- Determination based on Time Impact Analysis

SCL Protocol

- Agree on Analysis Method
- Agree on Expert to perform analysis
- Immediate reference to dispute resolution when EOT not agreed
- Non-Critical Floats to belong to Project
- Contract to stipulate ownership of float
- Sequential delay events with a concurrent effect period should be treated as concurrent
delay = x dominant delay



The End

Thank You

Q & A