



IBA International Construction Projects Working Weekend Session 4: Forensic Schedule Analyses: Science, Art or Myth?

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I. Introduction

- Formerly Partner in White & Case, Arbitration and Construction.
- 2014 – returned to the English Bar at 4 New Square Chambers.
- Specialist in major construction disputes, particular focus on energy (especially nuclear power and hydro-electric), oil & gas, and large infrastructure.
- Particular emphasis on delay and disruption cases, including notable failures of EPC projects around the world.
- Succeeded in establishing new EOT case law in English Court of Appeal (2017) (*Carillion v EMCOR*).
- Obtained detailed arbitral award rejecting € multi-billion disruption claim based on “dynamic simulation” (2017).

II. Prospective vs. Retrospective Delay Analysis

Overview

- What are they? What is the difference?
- Factual illustration.
- When use them, and why?
 - Contractual requirements
 - Legal requirements/ preferences
 - Practical constraints

III. Prospective vs. Retrospective: What are they? What is the Difference?

- Prospective:
 - (a) Looking at the impact that delay events are expected to have, by reference to a planned schedule at the time.
 - (b) Assessment of EOTs by Contract Administrator as delay events occur during the project are necessarily prospective (by reference to the project schedule as updated to that point in time).
 - (c) Can be done after project is complete.
 - (d) Reflects what the parties were actually aware of and what was actually driving the project at the time the delay events occurred.

III. Prospective vs. Retrospective: What are they? What is the Difference?

- Retrospective:
 - (a) Necessarily performed after the fact (i.e. after the end of the project).
 - (b) Applies hindsight as to what was the ultimate effect (or not) on project completion of the delay events that occurred during the project.
 - (c) Should be based on all available evidence as to what actually happened on the project, not forecasts.
 - (d) May not reflect the actual drivers of progress during the course of the project.

IV. Prospective vs. Retrospective: Illustration

- Example:
 - (a) Power plant with small owner-responsible delays occurring to activities regarded as critical during the project.
 - (b) In testing 1 month before planned completion, turbine is found to be defective (contractor responsibility). 12 months to fabricate a new one.
 - (c) As a result, now clear in retrospect that project would always have been 11 months late.
 - (d) What, if any, EOT is due to the contractor?

V. Prospective vs. Retrospective: Which approach to use, and why?

- Contractual requirements:
 - (a) Contract may prescribe the approach to be used during the project and / or after the project is complete.
 - (b) During the project, the CA has to assess prospectively (e.g. using the updated “Accepted Programme” in NEC3).

“A delay to the Completion Date is assessed as the length of time that, due to the compensation event, planned Completion is later than planned Completion as shown on the Accepted Programme.”
 - (c) May be argued that this mandates how EOT is to be assessed before or after the project is completed.

V. Prospective vs. Retrospective: Which approach to use, and why?

- In Northern Ireland Housing Executive v Healthy Buildings (Ireland) Limited [2017] NIQB 43:

“...I prefer the construction which is consistent with business common sense i.e. that the information as to the actual time and cost expended by the consultant should be made available to allow this court as Tribunal to fairly assess the compensation event. I consider it a strained and unnatural interpretation of the contract to rely on the use of the word “forecast” in Clause 63 to prevent access to the best evidence in a situation such as this, where the “forecast” is in reality a claim for work that has been done by the time of the quotation on behalf of the consultant.”

“Faced with seeking to award compensation to the consultant here for any cost to it as a result of the instruction of 10 January 2013 why should I shut my eyes and grope in the dark when the material is available to show what work they actually did and how much it cost them?”

- Common perspective (especially among lawyers):

“Why look in the crystal ball when you can read the book?”

[Quoted by David Barry, SCL Paper, Jan 2009]

V. Prospective vs. Retrospective: Which approach to use, and why?

- Other judicial perspectives – depends on the purpose?

(a) Walter Lilly & Co Limited v Mackay [2012] EWHC 1773 (Akenhead J.):

“In the context of this contractual based approach to extension, one cannot therefore do a purely retrospective exercise. What one cannot do is to identify the last of a number of events which delayed completion and then say it was that last event at the end which caused the overall delay to the Works. One needs to consider what critically delayed the Works as they went along ... Put another way, it did not delay the Works (if at all) until it emerged as a problem which needed to be addressed.”

Resulted in primarily prospective approach for EOT, but able to be “sanity checked” against as-built record.

V. **Prospective vs. Retrospective: Which approach to use, and why?**

- Other judicial perspectives – depends on the purpose?

(b) Fluor v Shanghai Zhenhua Heavy Industry Co. Ltd. [2018] EWHC 1 [Edwards-Stuart J.]:

“There has been an extensive debate about the correct approach to delay analysis. Mr Morgan said, and I would accept, that a prospective analysis - in other words considering the critical path at any particular point in time as viewed by those on the ground at that time - does not necessarily produce the same answer as an analysis carried out retrospectively. The former is the correct approach when considering matters such as the award of an extension of time, but that is not the exercise with which the court is concerned in this case. I agree that some form of retrospective analysis is required.”

English law – difference in approach between assessing EOT (and relief from liquidated damages) vs. cost claim (where “but for” test approaches will apply).

V. Prospective vs. Retrospective: Which approach to use, and why?

- Other practical influences?
 - (a) SCL Protocol (2nd edition) expresses preference for prospective approach, but...

“Where an EOT application is assessed after completion of the works, or significantly after the effect of an Employer Risk Event, then the prospective analysis of delay...may no longer be appropriate” [Guidance Part B, Section 11]
 - (b) What is possible from the records on the project? Availability of reliable contemporaneous progress data, schedule updates etc. will strongly influence what type of analysis is possible, regardless of preferences.

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