

ARTICLE SERIES

**DELAY ANALYSIS IN CONSTRUCTION DISPUTES:
3 POINTS EVERY ARBITRAL TRIBUNAL CONSIDERS
BEFORE ENDORSING AN EXPERT'S METHOD**

MARCH 2022



INTRODUCTION

Parties refer delay claims to arbitration when the project owner's representative (engineer, architect, project manager or contract administrator) has refused to grant an extension of time or additional payment upon the contractor's notification of a delay event.

At the arbitral proceedings, the contractor invites an expert (engineer or quantity surveyor) to help support the contractor's delay claims. The expert will then deploy its preferred delay analysis method ("method") in establishing the delay. The aim is to convince the tribunal that the contractor is entitled to an extension of time and possibly additional payment.

In delay claims, it is common for experts to deploy either of the following methods recommended by the Society of Construction Law Delay Protocol 2017 – Impacted As-Planned Analysis; Time Impact Analysis; Time Slice Windows Analysis; As-Planned versus As-Built Windows Analysis; Retrospective Longest Path Analysis and collapsed As-Built Analysis.

THE 3 REQUIREMENTS EVERY DELAY ANALYSIS METHOD MUST MEET

While the arbitral tribunal ("the tribunal") will recognize any method, there are 3 key requirements every method must satisfy before the tribunal can accept it. What this means is that the arbitral tribunal will reject any method that cannot satisfy ALL the 3 requirements.


These 3 requirements are:

- The chosen method must be comprehensive;
- The chosen method must be drawn from the facts of the case;
- The facts referred to in the method must establish the cause and effect of the delay claimed.

I. The chosen method must be comprehensive.

Experts should ensure that their methodologies are easy to read and understand. The tribunal is likely to discard a convoluted method for one that it can understand. In *White Construction Pty Ltd v. PBS Holdings Pty Ltd*[1], both parties' expert civil engineers adopted different delay analysis methods.

[1] (2019) NSWSC 1166



While White's expert used the "collapsed as-built (or 'but-for') analysis", PBS' expert used the "as-planned versus as-built windows analysis".

Although the court had no issues with the parties' choice of delay analysis methods, the court found both methods to be 'complex and impenetrable to the unschooled'[2]. The court, therefore, sought help from a neutral expert engineer. The court relied on the neutral expert engineer's method as it was easy to comprehend.

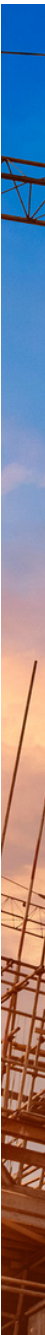
II. The chosen delay analysis method must be drawn from the facts of the case and not based on assumptions.

One question the tribunal will seek to answer is whether the chosen delay analysis method is based on facts or based on scientific opinions or conclusions. If the delay analysis is based on assumptions or opinions, the tribunal will not rely on it. However, if the expert supports its delay analysis method with facts, the tribunal will be persuaded to order an additional time or payment[3].

[3] White (n 1) at para 201

[4] Ibid (n 1) at para 197

[5] Ibid (n 1) at para 198



The experts can only get the facts from the contemporaneous records, which are mostly made up of the programme and site diary. Both documents show the progress of works and the timeline for the completion of construction activities. An updated programme and site diary are invaluable tools in confirming a delay, the activities affected by the delay and the extent of this delay.


III. The facts referred to must establish the cause and effect of the delay claimed.

While the delay analysis method must apply the facts, the tribunal will need to see that the facts referred to confirm that the acts of the employer delayed the project and the extent of this delay (cause and effect)[4]. If the facts referred to in the method cannot establish these two requirements, then the tribunal will not accept the method.

To pass this requirement, the expert's method will need to show 4 critical points[5]:

- The date when the entire project would have been completed.
- The event that delayed the works.



- 
- That the delay event prevented the completion of other works or the project and that the programme could not be reasonably varied to accommodate the consequences of the delaying event.
 - That other works could not have been done to fill downtimes to save time later.

One reason facts in a method may fail to establish the cause and effect of the delay is because of the mistakes parties make in failing to regularly update their records during the performance of works. And so there is no information on the delay activity or its consequences.

In White's case[6], the primary source of evidence was the diary. The diary listed the delay events on site such as "waiting for approved sewer design", "waiting for sewer and water subcontractor to start re-design work" and "waiting for sewer design to be approved". However, the diary did not identify the activities that were affected by the wait. The diary did not also reveal the consequences of the wait[7].

[6]Ibid

[7] White (n 1) at para 212



CONCLUSION

Whilst parties can use any method to analyze delays, it is important that the methods chosen satisfy all the 3 requirements discussed above. Experts preparing reports must be familiar with these requirements and comply accordingly.

Also, parties must endeavour to update records regularly as an insufficient record may not sustain a delay claim. An up to date record will make it easy for experts to successfully analyze delays and substantiate a delay claim.

AUTHOR



Osinachi Nwadem

AELEX is a full-service commercial and dispute resolution firm. It is one of the largest law firms in West Africa with offices in Lagos, Port Harcourt and Abuja in Nigeria and Accra, Ghana. A profile of our firm can be viewed [here](#). You can also visit our website at www.aelix.com to learn more about our firm and its services.'

COPYRIGHT: All rights reserved. No part of the publication may be reproduced, stored in a retrieval system or transmitted in any form or by any means without the prior permission in writing of AELEX or as expressly permitted by law.

DISCLAIMER: This publication is not intended to provide legal advice but to provide information on the matter covered in the publication. No reader should act on the matters covered in this publication without first seeking specific legal advice.

CONTACT DETAILS

LAGOS, NIGERIA

4th Floor,
Marble House
1, Kingsway Road, Falomo
P. O. Box 52901, Ikoyi
Lagos, Nigeria

Telephone: (+ 234 1) 2793367; 2793368
4736296, 4617321-3;
Facsimile: (+ 234 1) 2692072; 4617092
E-mail: lagos@aelex.com

ABUJA, NIGERIA

4th Floor,
Adamawa Plaza
1st Avenue, Off Shehu Shagari Way
Central Business Area
FCT Abuja, Nigeria

Telephone: (+234 9) 8704187, 6723568,
07098808416
Facsimile: (+234 9) 5230276
E-mail: abuja@aelex.com

PORT HARCOURT, NIGERIA

2nd Floor,
Right Wing UPDC Building
26, Aba Road
P.O. Box 12636, Port Harcourt
Rivers State, Nigeria

Telephone: (+234 84) 464514, 464515
574628, 574636
Facsimile: (+234 84) 464516, 574628
E-mail: portharcourt@aelex.com

ACCRA, GHANA

7th Floor, Suite B701
The Octagon
Accra Central, Accra
P.M.B 72, Cantonment Accra, Ghana

Telephone: (+233-302) 224828, 224845-6
Facsimile: (+233-302) 224824
E-mail: accra@aelex.com