COMMENTS ON DELAY ANALYSIS METHODS IN RESOLVING CONSTRUCTION CLAIMS

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Abstract
Delay analysis methods, as used on construction projects, are now well established. The intent of this paper is to enhance the understanding of the implementation of these methods. Delay analysis on projects generally relies on programs (schedules) both in as-planned and as-built forms, and combinations of these two forms. The paper discusses some of the deficiencies in the current use of such programs in delay analysis. The paper draws attention to the representational nature of these programs and the implications of this. It is remarked that the as-planned and updated versions are no more than models of project workflow while the as-built version can, in the extreme case, be anything the contractor wants it to be. In this paper, it is argued for the first time that in any consensus between owner, contract administrator and contractor of as-planned and as-built status for delay analysis purposes, at any stage of a project, there is need not only for agreement on information at the project and activity levels as is common industry practice, but also for disclosure of lower level information, in order to get closer to a rational delay analysis.

Keywords
Delay analysis, programs, projects, claims, contract administration

INTRODUCTION

The correct assessment of delays is fundamental to contract extensions of time, liquidated damages, delay costs and the avoidance of disputes between the owner and contractor.

The deduction of liquidated damages appears to becoming more common on projects. Formerly, late completion may have been accepted with a degree of tolerance, and the imposition of damages may have been considered but not commonly invoked in the interest of preserving good owner-contractor relationships. In return, contractors did not submit hopeful or spurious claims and antagonise owners.

All this seems to be changing. Contractor claims appear to be rising. No longer is 'nil' written into the contract for liquidated damages. Liquidated damages are being imposed as a matter of course, rather than being a matter for discretion. And such damages can amount to considerable sums of money as a proportion of the total project cost and, in many cases, the damages exceed any profit that the contractor may have hoped to make.

Delay analysis methods as used on construction projects are now well established. Arditi and Pattanakitchamroon (2006) provide a very useful review of the various delay analysis methods used on projects, summarise their advantages and disadvantages, and discuss the most important issues in delay analysis that affect the results of the analysis. Existing delay analysis