

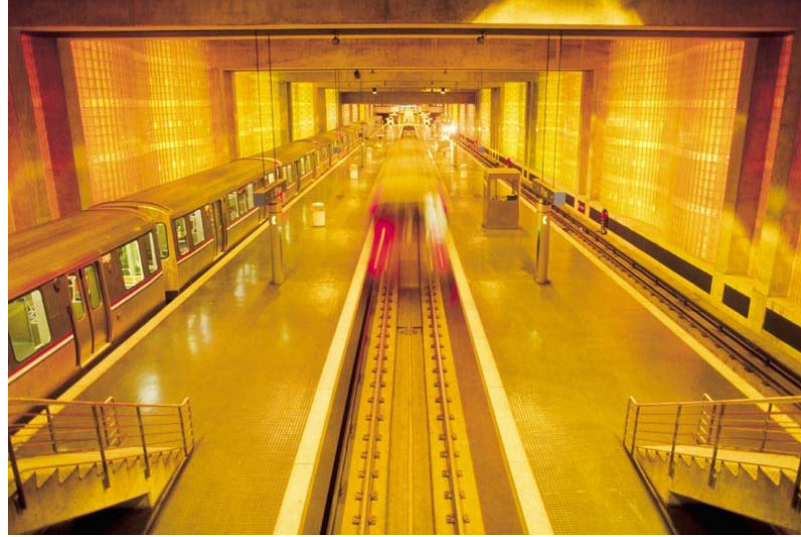
Analysis of Concurrency

There were clearly at least three competing causes of delay in this case which resulted in project delay:

- Contractor plant breakdowns;
- Delays to the on-site works through an alleged delay in the appointment of a Category III checker by the Engineer; and
- Off site delays in the design and manufacture of precast concrete structural components.

To determine the relevant delay impacts of each of the events, and in the absence of properly updated programmes by the contractor, we reconstructed a highly detailed as built programme including providing detail on each of the three paths on a day-by-day basis to determine the relevant sequence of the works, and the contemporary decision making against that backdrop.

The result was that we were able to chronologically demonstrate the impact of delay events in the order that they occurred, and their proper contribution to project delay could thus be calculated.



A CONCURRENCY EXAMPLE

UK Underground Railway Litigation

We undertook a detailed analysis of time related issues in connection with the construction of the structure of a major railway, underground and public transport station complex.

Our work involved detailed analysis of contemporary project records and contractor's claim documents to establish a reliable as-built programme as a basis for our time analysis, with detailed studies into the productivity actually achieved to assess the impact of disruption on the progress of the project.

Of particular importance was the timing of near concurrent delay events, for which we adopted a day-by-day dissection of the events that occurred on the project during the relevant period and sensitivity analyses where the records were incomplete.

We prepared a comprehensive expert's report on time related issues in connection with delays to the construction, in particular, in the relation between causative breaches and the effects in terms of activity prolongation and disruption and extension of time awards to the contractor.

Our analysis was carried out as part of a team of experts from other fields in connection with this complex piece of litigation, including giving oral evidence in the High Court (Technology & Construction Court).