

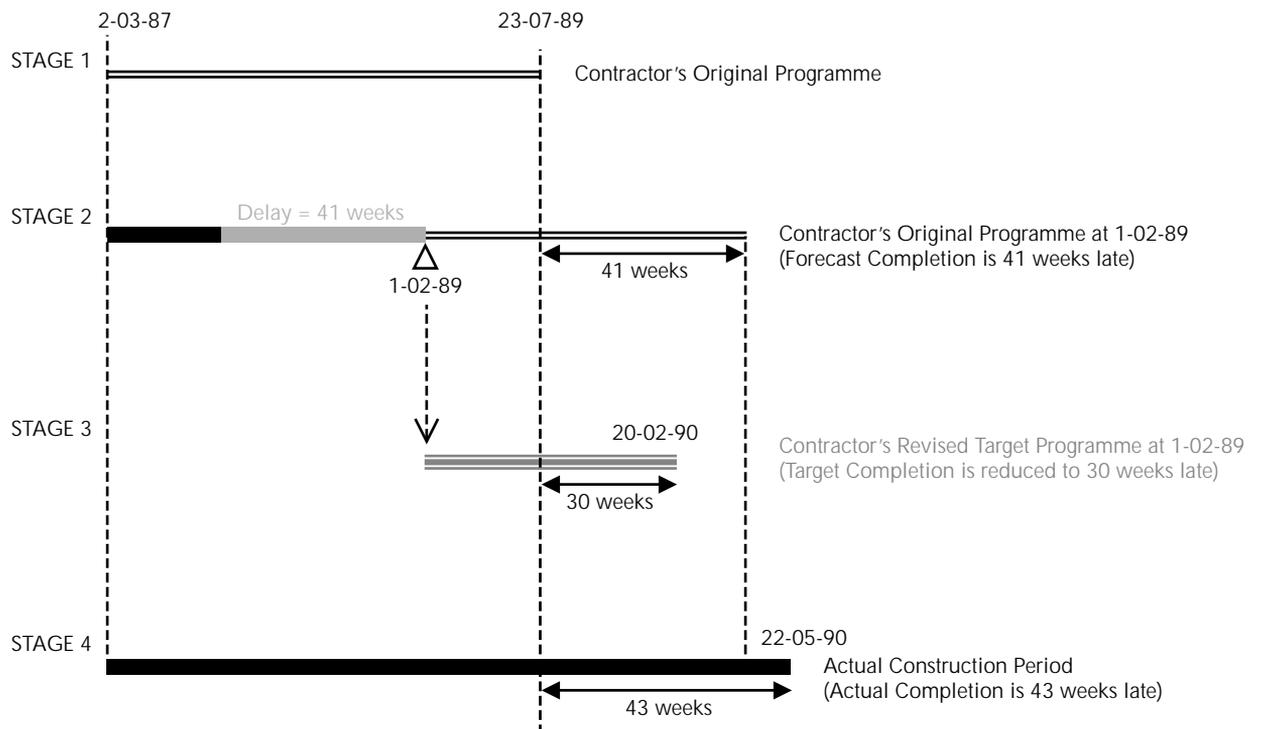
Micro-level delay analysis

Focus on Legal by **Nicholas Huf**

When recently trying to find a case relevant to the concept of mitigation, I came across **Royal Brompton Hospital v. Hammond and Co.** Whilst this case was principally concerned with whether the Architect had acted negligently by over-awarding extension of time to the Main Contractor (equivalent to the actual project over-run), it also provides insight into judicial understanding of such things as delay recovery programmes and mitigation. The ideas expressed by the judge in this case offer some interesting instructions to Planners (and for that matter everyone trying to decipher what the Planner has done) left with the task of quantifying extensions of time.

So what happened in this case? The diagram

below is included to help explain the scenario. The project involved construction of a six-storey hospital in London under the standard JCT (1980) form of contract. Construction commenced in early 1987 with the date for completion set as 23 July 1989 (refer to stage 1). However, by 1 February 1989 the project was reported to be 41 weeks behind schedule primarily due to Contractor Delays (refer to stage 2). At this time the Contractor prepared a revised Target Programme showing that it could complete the works only 30 weeks late, i.e. a potential saving of 11 weeks (refer to stage 3). However the project continued to suffer as a result of various Employer Delays and the project was eventually complete 43 weeks late (refer to stage 4).



The Architect eventually awarded 43 weeks extension of time for Employer Delays, of which 35 weeks occurred after the Target Programme was produced, and after the Contractor was already reporting progress to be 41 weeks behind the original schedule. The Claimant, attempting to show that the Architect had acted negligently in awarding EOT, argued that: (i) up to 1 February 1989 the project was already 41 weeks late predominantly due to Contractor Delays, and alternatively (ii) when compared to the Target Programme, the project finished only 13 weeks late.

The judge however, rejected such assertions and stated that "*The validity of the point depends, in my judgment, upon the assumption that it was either not open to [the contractor] to seek to improve upon the Target Programme, or that, as a practical matter, it was impossible for [the contractor] to do so. For the reasons which I have given above I do not consider that assumption to be a proper one to make*". Further, the Judge later clarified this point in relation to one of the specific delay events by stating "*...an extension of time could be justified if a contractor was prevented from recovering lost time by the occurrence of a Relevant Event*".

It would appear then, that if a Contractor is in delay up to a certain point, revises its programme to accelerate remaining works and the Employer causes delay to these remaining works, then the Employer is responsible for the critical delay it causes calculated against the revised delay recovery programme, even if the Contractor would have finished late according to its original programme anyway. The principle being that an extension of time could be justified if the Contractor was "prevented from recovering lost time" by the occurrence of a Relevant event. Furthermore, this concept of lost opportunity extends well beyond the confines of the Contractor's own best-case scenario, i.e. its delay recovery programme.

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The outcome of this case was that the Judge found the Architect negligent in awarding five weeks only, out of the 43 weeks extension of time granted. Employers and Contract Administrators might well throw their hands up in disbelief, but there are several points to note about this. Firstly, it is arguable that the Contractor was properly entitled to the remaining 38 weeks extension of time, but ultimately this was a decision on negligence and not correctness. A subtle difference maybe, though nonetheless important. Furthermore, the Judge alluded to other elements that proved detrimental to the pleaded case such as the structure of the pleadings themselves, and the fact that he was forced to disregard evidence from the Claimant's Expert Witnesses. However, this may well only affect the magnitude of the Contractor's entitlement rather than the basis for it.

Those involved in assessment of delays and extension of time, thus should be aware of the need to analyse delays on a micro-level relative to the progress (or status) of the works at the time a delay event occurs, e.g. via the snapshot analysis as advocated in the EOT Protocol. In effect this is exactly what the Judge did in the Royal Brompton Hospital case. By reviewing the detailed progress of critical activities before, during and after delay events, and relative to the Target Programme, he was able to determine their true impact on the completion date and in doing so take into account mitigation undertaken by the Contractor. In contrast, alternative techniques where as-built data is simply compared to the original plan cannot be relied upon to provide the extent of 'likely' critical delay to critical path activities and ultimately the date for completion. 