

TIPS & TECHNIQUES

Scheduling Tips

Managing Delays and Accelerations

By Robert Posener

Planned delays are where you knowingly build a delay into your project schedule. This type of delay may or may not be on the schedule's critical path. Unplanned delays are where either you, the Client or the subcontractor, vendor or supplier introduced an unexpected delay into the schedule. These are generally associated with the project team waiting on a decision, approval, authorisation, answer or information about something (eg, a work product).

Unplanned delays can often become the subject of a claim and these claims sometimes find their way into a court of law. For a claim to be upheld in a court of law you can expect that the following will need to exist:

1. An original, resource-loaded baseline schedule
2. Approval documentation for the baseline schedule (ie, a signed acceptance letter from the Client)
3. A general notification of the consequences of a delay from the subcontractor, vendor or supplier to the Client (or vice versa) (eg, "If you delay the schedule, we will invoice you") so that the other party could reasonably arrange to avoid the delay. This should have been in the original proposal, contract or terms and conditions
4. An updated (with all task actuals (including work and % Complete as well as start dates and finish dates) as well as approved changes) schedule at the time when the delay commenced (ie, you must be keeping your schedule updated so that the evidence is contemporaneous and not backward-engineered after the event)
5. A notification to the Client from the subcontractor, vendor or supplier (or vice versa) that a delay had commenced including an estimate of its impacts (on time, cost and knock-on effects)
6. A notification to the Client from the subcontractor, vendor or supplier (or vice versa) that the delay had ended including a statement of claim for the exact amount of time and cost
7. A clear cause and a nexus between this cause and the prevention of performance leading to the effects
8. Because a delay can result in reducing project costs as well as increasing them (because of the effects of the time value of money) it is important to show exactly which costs have increased and which ones have decreased
9. Evidence of proactive measures to reduce delays, the impact of delays and attempts to regain lost time by rescheduling (ie, developing and

executing a "recovery schedule") and other work to develop and implement options that would mitigate the effects of the delay once it started (ie, each party must show good faith in terms of trying to do the right thing by the other party and the project). Examples include (not all may be possible/make sense):

- Change of schedule sequence
- Addition of extra resources
- Working overtime
- Defer scope
- Transfer scope to a follow-on party
- Reassigning staff to other revenue-generating projects

10. Evidence of any additional costs associated with project managing the delay

The courts will first review the contract wording for guidance as to how delays were envisaged to be handled.

The courts will then (and this may entail having an expert witness or two) evaluate your project schedule. Specifically, this will evaluate:

1. The logic of the schedule at the time of the delay
2. Was the original time allowed for the activity reasonable?
3. The impact of previous changes, variations and delays on this delay
4. The effect of the delay on the critical path
5. The amount of float in the schedule at the time of the delay (ie, could the delay be reasonably absorbed by the float?) as well as how much had been previously consumed
6. The type of delay:
 - Excusable:
 - Force majeure
 - Severe weather
 - Strike
 - Government action/inaction
 - Inexcusable:
 - Lack of resources
 - Not being ready
 - Lower resource productivity
 - Improper planning
 - Underestimation
 - Subcontractor delays
 - Failure to follow the schedule
 - Decision to delay incurring costs from one financial year to another
 - Finances not being available
7. Assessing the real impact of the delay on both the Client and the subcontractor, vendor or supplier including:
 - Knock-on effects
 - Acceleration costs

8. In summary, did the delaying of a specific activity really delay the project or was some or all of it taken up in float?

Scheduling the Delay

Some projects attract long periods of delay between tasks. Sometimes these delays occur cleanly between project life cycle phases. At other times these delays occur within a project life cycle phase. Examples of these types of delays include those between:

- Estimating a project and then being commissioned to start
- Designing a project and then building it
- Waiting on the Client to authorise the next project life cycle phase
- Being required to work on a higher priority project
- Funds being unavailable and/or cut off (either temporarily or permanently)

These types of delay manifest some or all of the following general characteristics:

- The duration of the delay is variable and generally unknown when the delay starts
- There may be a requirement to mothball the project ready for resurrection at a later date. There are always costs associated with mothballing a project
- There may be a requirement to resurrect the project after the period of delay. There are always costs associated with resurrecting a project
- The resources working on the resurrected project may be different to those who worked on it prior to mothballing
- The project may not be mothballed and resurrected but just keep going with the assigned resources not being gainfully employed

There are a number of ways of representing the delay in your project schedule and in your portfolio or programme schedule.

1. You can divide the project into multiple "mini-projects" and manage them separately. This works particularly well when you have no idea when the subsequent project activities will begin.
2. You can insert a task (with the name of "Delay – XXXXXXXXXXXX") where the delay occurs and make the duration of the delay task equal to the period of delay. This works well when you have a reasonable idea of the duration of the delay. To make it work when you have no idea how long the delay will be, make the duration of the delay task as large as possible (eg, 5 years). This saves you having to continually monitor the status of the delay and then updating it as it continues. Replace the "XXXXXXXXXX" in the task name with some meaningful explanation so that it is obvious why the delay exists and you don't have to continually answer questions about it. The delay

task should not have any resources or costs assigned to it unless resources remain assigned to the project and are accruing costs to the project – in which case – assign all of these remaining resources to this Delay task.

3. To monitor mothballing and resurrection costs, you should insert two tasks before and after the delay task. These tasks should have names of "Mothball Project" and "Resurrect Project". You can then record the costs of mothballing and then resurrecting the project against these.
4. Record "PLANNED DELAY" in the task's Text11 (Keyword) field for planned delays
5. Record "ACTUAL DELAY" in the task's Text11 (Keyword) field for unplanned delays

Accelerations

Accelerations are the opposite to delays. Accelerations are were you decide to explicitly speed up the schedule. There are usually two drivers for this:

- Your enterprise wants to finish early (there is a potential early completion bonus to be earnt, you "are jack of it" and just want to get it over with, etc)
- The Client enterprise wants to finish early (so that it can begin harvesting the project's benefits earlier, it wants to meet an artificially-set end date, etc)

Accelerations almost always cause a project to incur additional costs and this is why it is important to have clarity into why you are accelerating and who asked for it. Accelerations are always considered to be a change/variation. If the Client asked for it, then they should bear the costs that will be incurred.

Additional costs can come from:

- Working project team members overtime
- Assigning additional project team members
- All of the above

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