



Spring 2014 Newsletter

In this, our 2014 Spring newsletter, are 2 articles.

The first article is '*Programme Review and Acceptance.*'

Our second article is titled, '*Acceleration*'

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PROGRAMME REVIEW and ACCEPTANCE

There is a clear need for a 'baseline' programme to be developed after the award of contract, reflecting the intentions of the contractor.

Contract administrators need front-line skills to review a contractor's baseline programme. Accordingly, contract administrators increasingly have to decide if, and to what extent, they are going to trust, approve or accept a contractor's programme submissions. In today's planning software paradise, CA's should be able to detect common techniques or mistakes when reviewing programmes that attempt to or increase the likelihood of extension of time awards. These techniques mean that a programme will not function as a proper predictive tool for measuring progress or quantifying the impact of delays and changes.

What to look for in a programme review

When the programme is submitted, the CA should ask the following questions,

- i) Does it comply with contractual obligations, milestones, or restraints on working hours or methods?
- ii) Is the entire scope of the work represented?
- iii) Are any activity durations questionably too long, or too short for the scope of work they represent?
- iv) Are there any obvious errors in the programme related to the sequence or timing of the works?
- v) Are there any onerous requirements of the employer's professional team, e.g. early completion programmes, unrealistic time allowances for approvals or supply of information, which are employer's risks?

Review of a CPM programme submittal

A very dangerous misunderstanding exists with a CPM programme submittal; many contract administrator's and other professionals are still of the mistaken opinion that a CPM submittal exists of several pages of activity listings and/or a barchart plot or two. A CPM submission for review should consist of a full copy of the computer files necessary to recreate the programme; everything else is just frills.



PROGRAMME REVIEW and ACCEPTANCE (cont'd)

A CPM submission, both for the baseline for review and subsequent updates, should consist of three discrete items, which are,

- i) The activity details, including description, original and remaining durations, and percent complete. In conjunction with this, you should see for each activity other computed information such as early and late start and finish times, and total float.
- ii) The logical relationships that connect the various activities together to form a network which makes the CPM work. Full details of any lags and leads, i.e. imposed time durations between activities, is a must in the submittal.
- iii) Lastly and certainly not least is 'constraints'. The true logic of a network can be overridden by the programme containing various time constraints on an activity(s). These will artificially reduce total float and could create an invisible delay, or even have the activity just expand to take all available time. This will never show up on a barchart plot and is only found in a 'constraint' listing and/or a copy of the computer files.

Having been satisfied that the information in the contractor's submittal is sufficient for a proper review, here are five basic checks or tests that should be carried out using the computer files provided by the contractor,

Test 1: Does the 'longest path' filter identify a reasonable critical path for the project?
Make sure the longest path is reasonable, and then check the reasonableness of near critical paths.

Test 2: Are there any open-ended activities in the programme?
In general, there should be only two open-ended activities in the entire network. One beginning activity with no predecessors, and one completion activity with no successors. Every other activity should be logically tied into the network. Furthermore, every activity should have its finish constrained with at least one FS (finish to start) or FF (finish to finish) successor relationship to another activity. Likewise every activity should have at least one SS (start to start) or FS (finish to start) predecessor relationship to another activity.

Test 3: Do any of the activities have too much float?
Activities with too much float may indicate missing logic links, or logic links that have been overridden in a subsequent progress update. Identify any such activities.

Test 4: Are there any unnecessarily long gaps in workflow when grouping activities by work area and sorting by early start dates?
In most cases once work begins in a particular area or phase of the project then the programme should allow work to continue uninterrupted in that area or phase. Long calendar gaps in a work area or phase may indicate less than ideal workflow and suggests an adjustment of preferential logic links to create a better plan.

Test 5: Are there activities with unnecessary contractor assigned constraints?
As constraints override the network logic in calculating activity start / finish dates and total float they should be used sparingly, if at all. A better approach is to use activity durations and network logic to model the project, and thereby eliminate constraints.



PROGRAMME REVIEW and ACCEPTANCE (cont'd)

Acceptance of the programme

If the contract administrator fails to comment it may be implied as acceptance that the contractor's programme is contract compliant / satisfactory. When 'accepting' a programme the contract administrator could be merely acknowledging receipt of contractor's intentions. In 'approving' the programme, the contract administrator is more often seen to have performed some level of due diligence on the programme, such as asking the questions above, and is therefore acknowledging that the submission complies with the terms of the contract. However, it is important that a realistic baseline is established for the management of the works and the assessment of potential and actual effects of changes, unforeseen events or other circumstances that could delay the works.

Programmes are key documents in extension of time and delay claims disputes; therefore their significance in potential dispute resolution forums cannot be under-estimated. At the same time, the perspective must be maintained that the programme is a management tool to assist in managing the work. A balance should be struck between keeping the contractor on an accurate progress path and the emphasis on the programme as a claims document. If approval is granted, this should not in any way relieve the contractor from complying with the contract, or in any way increase the employer's liability.

Contact Us

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ACCELERATION

"Acceleration" tends to be bandied about as if it was a term of art with a precise meaning, but this is not the case.

What Is Acceleration?

On a construction or engineering project, acceleration is the carrying out of work more quickly than previously planned. It usually occurs in one of two forms; firstly it occurs when a contractor, or subcontractor, is required to carry out increased, additional or delayed work within the same time period without the benefit of being given an extension of time.

Acceleration is closely related to disruption. It is only in recent years that standard forms of contract have made allowance for the employer to issue instructions to accelerate the works.

The reasons for acceleration usually fall into one of the following categories:

- 1) By agreement or instruction. By agreement between the parties or, if the contract so provides, on the instruction of the architect.
- 2) Unilateral acceleration. Unilaterally on the initiative of the contractor, often categorised as 'mitigation' by the contractor or as 'using best endeavours' by the employer.
- 3) Constructive acceleration. Constructive acceleration is where the contractor argues that he has no real alternative in the circumstances.

Acceleration occurs when a contractor is required to perform its work in less time than originally planned. The party liable for the cost of acceleration is the party responsible for the underlying delay and/or the party deciding to accelerate.

For example; the contractor is required to install 5,000 m of pipework in 30 days. If the employer later requires the contractor to install 5,000 m of pipework in 20 days, or install 7,000 m of pipework in 30 days, then the contractor was 'accelerated'. This is an example of '*instructed acceleration*'.

'*Constructive acceleration*', occurs when a contractor encounters an excusable delay during the carrying out of the contract work, such as design changes, late information or employer-caused delays. Under the contract, the contractor is entitled to an extension of time. If the contractor is not granted a time extension then he is constructively accelerated in its obligation to meet the contract completion date.

The Society of Construction Law's 'Delay and Disruption Protocol' defines Acceleration, under its Core Principle clauses, as follows,

Acceleration.

Where the contract provides for acceleration, payment for the acceleration should be based on the terms of the contract. Where the contract does not provide for acceleration but the Contractor and the Employer agree that acceleration measures should be undertaken, the basis of payment should be agreed before the acceleration is commenced. It is not recommended that a claim for so-called constructive acceleration be made. Instead, prior to any acceleration measures, steps should be taken by either party to have the dispute or difference about entitlement to EOT resolved in accordance with the dispute resolution procedures applicable to the contract.

Acceleration; By Agreement or Instruction

There should be no difficulty in obtaining payment where the contract administrator, in exercise of his powers under a contract, orders acceleration of the work or the employer and the contractor agree acceleration and a claim under the direct loss and expense clause is unnecessary.



ACCELERATION (Cont'd)

Once the contract administrator instructs acceleration, it is clear that the contractor must be paid for it by the employer. It follows that where directed acceleration has been instructed, the contractor is entitled to be paid:

1. The agreed rate for acceleration, if any rate has been agreed; or
2. In the absence of an agreed rate, a reasonable rate for the acceleration measures, ie, the contractors actual costs plus a reasonable level of profit and overheads.

Unilateral Acceleration

This is the situation where a contractor accelerates without any agreement with the employer or instruction from the architect. No pressure has been placed on him by the refusal of an extension of time; indeed in this situation it may be that the contractor is reasonably confident of getting an extension of time. The reason for doing so may be order to find work for operatives from another site which is drawing to a close. The result may be that some time is recovered and an extension of time is not required.

In most such cases, the contractor will find it difficult to contend that he was going other than 'using his best endeavours' to reduce delay. It is by no means clear, however, under what contract provision the contractor could be paid even if the architect.

Constructive Acceleration

This is an argument advanced by a contractor and is based on the architect's failure to give an extension of time to which the contractor believes he is entitled. A contractor will put more resources into a project than originally envisaged and then attempt to recover the value on the basis that he was obliged to do so in order to complete on time, because the architect failed to make an extension of time of the contract period. The problem faced by the contractor is that in the absence of an extension of time he may be faced with liquidated damages being levied against him. He has a stark choice; he can continue to work as planned and efficiently in the hope that he can later successfully demonstrate that he is entitled to an extension of time and that this will be granted. Alternatively, he can accept, temporarily at least, that he is in default and take steps to mitigate the consequences of this temporary default by putting more resources on the project, and / or reorganising the works, so as to finish by the date for completion.

An important question to be asked before this kind of argument can be entertained is the extent to which pressure is put on the contractor; the contractor's problem is one of causation. Where the architect fails to make an extension of time, either at all or of sufficient length, the contractor's route under the contract is adjudication or arbitration. If, as a matter of fact and law, the contractor is entitled to an extension of time, it may be said that he can confidently continue the work, without increasing resources, secure in the knowledge that he will be able to recover his prolongation loss and/or expense and any liquidated damages wrongfully deducted, at adjudication or arbitration. If he increases his resources, that is not a direct result of the architect's breach, but of the contractor's decision.

In practice, it must be acknowledged that a contractor in this position may not be entirely confident; the facts may be complex and the liquidated damages high. Faith in the wisdom of an adjudicator or arbitrator may not be total. It may be cheaper, even without recovering acceleration costs, for the contractor to accelerate rather than face liquidated damages with no guarantee that an extension of time will ultimately be made. As a matter of plain commercial realism, the contractor may have no other sensible choice than to accelerate and take a chance as to recovery. Unless the contractor can show that the architect has given him no real expectation that the contract period will ever be extended and in those circumstances the amount of liquidated damages would effectively bring about insolvency, this kind of claim has little chance of success.



ACCELERATION (Cont'd)

However, under the Housing Grants, Construction and Regeneration Act, a contractor now has the option to address the uncertainty at an early stage and not wait until after completion of the project. He can refer the architect's / contract administrator's refusal of his extension of time claim to an adjudicator during the course of the contract, rather than to arbitration or litigation after completion of the project.

Costs Recoverable Under Acceleration.

Accelerating a project costs money. In addition to the direct cost of the work, acceleration also may result in a loss of productivity. It is recognized in the construction and engineering industries that acceleration efforts, such as working overtime and shift work, performing out of sequence work, stacking trades, and overcrowding on the project site contribute to reduced labour productivity. In addition, when a contractor adds labour, there may be a loss of labour productivity as new workers may not be familiar with the work or may require training before achieving normal levels of productivity.

It is interesting to note that a contractor typically does not have to prove that the acceleration effort was successful. It is normally necessary to show that it reasonably attempted to accelerate the work and that the acceleration efforts resulted in additional costs.

A lack of understanding often exists between contractors, employers and their consultants as to what may, and what may not be included in acceleration claims.

There is no hard and fast formula for calculating acceleration costs. It is advisable that each situation should be individually assessed to determine what costs were sustained in the attempt to buy back time. Specific methods or a combination of methods which can be used to calculate acceleration costs exist, these are:

- The global or total cost approach;
- The modified total cost approach;
- The time impact methodology;
- The measured mile approach, and
- Formula approaches.

Acceleration claims in construction and engineering projects very often result from the lack of a good control system. If there is no control system that can effectively register every change that occurs during the project execution disputes are likely to emerge. A typical checklist for an acceleration claim is as follows:

- A summary of items and amounts to be claimed;
- Documents that support the claim;
- A detailed analysis of how the amounts were calculated, and
- Legal and contractual support. Each standard form of contract has its own detailed requirements regarding record keeping, document control, notices, etc. The prime source of information for any claim between the parties is the contract and the specific requirements contained therein. The process of keeping project records should start during the tender process. Tender documents are often used in disputes to help substantiate the costs that a contractor expects to incur on the project. Other project records such as project cost reports, daily logs and progress reports, daily payroll records, site instructions and related support documentation, minutes of meetings, project correspondence, documentation of design changes, photographs, etc will be vital in substantiating an acceleration claim

After a contractor has demonstrated that he was ordered to accelerate, he must then demonstrate that he reasonably attempted to accelerate. However, the contractor does not have to prove that he completed by the accelerated date in order for his acceleration claim to stand; he only needs to show that he incurred additional cost in a reasonable effort to accelerate.