

2009 News



Graham Benson CIOB RICS AICES

Graham Benson is a DGA Regional Manager with responsibility for the Northern region of the UK. He has in excess of 25 yrs within the Civil Engineering Industry encompassing a wide range of experience including: major roads and bridges, canals, tunnelling, marine works, and utility works. He has held senior commercial positions with major international companies in which his roles have involved the full spectrum including procurement, pre contract, operational and closure of projects. He has been directly involved in negotiating and securing large complex contracts and operational and closure functions including claim preparation and pursuit of entitlement of such via negotiation, mediation, adjudication and arbitration procedures.

Are you Over Valued?

Most will agree, that being proactive in the planning & programming element of a project is essential for the success of that project and that this process is continuous throughout the project duration. It is also essential that the QS fully understands the programme and how the progress is assessed as this will have an impact and how the true value is calculated at any one point in time. Such programmes tend to be large and complex in nature in their quest to capture all the relevant information resulting in them being difficult to grasp as a whole and as a result are usually presented at the appropriate commercial forums (end of month financial statements) in a summary form. It is this area that can potentially be a cause of concern.

The inevitability that the programme will change in some way is high in most projects and certain on civil engineering projects, reinforcing the requirement that continuous monitoring and action is essential. Most contractors perform this function well, mainly in the form of Critical Path Analysis (CPA), which focuses the mind on the issues at hand, i.e. to complete the project on time. However, with the inevitable attention applied to this overriding focus, other non critical activities are often left by the wayside, with potentially disastrous consequences.

An all too common scenario is:-

A contractor is undertaking a civil engineering project. He has a detailed programme and during the course of the project various changes have occurred that have changed the critical path. The contractor is focusing his attention on mitigating the effects of these changes both for the benefit of the client and himself. The QS on site will be measuring the works in order to establish a true commercial position usually on a monthly basis. (This may be performed in various ways, e.g. Earned Value Analysis (EVA), or a derivative of EVA. What is common in any cost/value analysis is that the programme will form an important reference to any figures reported). This establishment of a true commercial position usually takes the form of a detailed analysis of cost and value for the labour, plant, materials, subcontract, preliminaries & overheads elements, taking recognisance of the progress of the works to date, usually based on the CPA. During the course of the project the contractor is reporting that all is well, despite the changes and that he is on programme according to the critical path. As he approaches the anticipated completion date the contractor realises that numerous previously so called non critical activities have now become critical. The resultant effect being that instead of the activities reducing in number as he approaches the anticipated completion date it has in fact reversed and the number of activities required to complete the project have unexpectedly increase, such a situation then requires programming exercise to be undertaken. This exercise reveals that the time required to complete the works has increase and as such the anticipated completion date will now not be achieved. An apparent surprise for the contractor and client.

The consequences of the above, being that firstly the client is not at all impressed and damages may flow to name only one remedy the client may have. Costs to complete have increased with the prolonged duration of the works as the contractor attempts to mitigate these with little expectation of recovery from the client. The contractor finds himself in a position that he has over valued the works to date and as such has to declare losses in the period with further losses expected as he attempts to complete the works with all due haste. Definitely, not a desired position to be in. Why did it happen? There are always 101 reasons why such events happen, but the issue is how best to eliminate such situations occurring and thus reduce the potential for surprises.

One method being both simple and easy to use is a count of activities at any one point in time, (usually monthly, coinciding with the internal commercial report) that compares the activities actually being undertaken against those planned. It then further splits these down in to activities that were planned to commence in that month against those that actually did and similarly with those activities that were planned to complete against those that were completed. The above are reported per period and cumulative at the monthly commercial forums in conjunction with the other elements of the report, thus giving a complete overview of the total progress of the works. If the project is planned and reported in phases and/or sections then this can also be presented in a similar way. Trends can be monitored and reasons for the variance captured and explored at the time they occurred.

The simplicity of this activity count schedule means that it is quick to produce, easy to understand and can be used as a cross check against the commercial position as declared by the site team. At arguably one of the most critical stages of any project i.e. the approach of completion it is an effective management tool which the project manager can use to clearly identify what activities are not being closed out and the likely consequence of this. It will not give all the answers, but it will prompt discussion when comparing with the progress report and commercial position of the contract and a view can be taken as a whole whether the project is really on programme and the value declared reflects the true position.