



### ***P6 Schedule - Total Float Erosion: Whose float is it anyway?***

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A very prevalent friction point between multiple Contractors in a sizeable construction project, is the allocation of proportionate responsibility for delays and for the resulting diminishing Total Float of P6 activities as the project moves closer to completion.

The customary assumption, if craft segregation between Contractors is present, is that the party responsible for the activities preceding another party's work, will likely "own the float". For example, Piping Schedule slippage and the resulting Total Float erosion is usually attributed to Civil or Steel delays while for Electrical work, delays and the corresponding diminishing Total Float will be impetuously and promptly ascribed to the Piping Contractor. Even though that may very well be the case in many occasions, assumptions should be avoided and a closer look by the Project's Schedulers at Activity Logic, Activity Durations and Activity Granularity is always warranted.

Assigning and maintaining proper Activity Logic between multiple Contractors is an important and challenging task. Apart from making certain that Project Schedulers don't mutilate logic ties with other Contractors' activities, (by unilaterally deleting or drastically modifying Relationships after Baseline establishment), care should also be exercised so that logic ties are continuously reevaluated to accurately reflect the volatile symbiosis between crafts in the field. For example, carelessly assigned Finish-to-Finish relationships between Contractors' activities or unnecessary and excessive Lag that may no longer even be applicable, can significantly reduce a Project's Total Float.

A realistic evaluation of Activity Durations is also an important step while addressing diminishing Total Float. When tracing the Lowest Float Path, (by opening all Contractors' schedules and following the Successors with the lowest Float number), it is not uncommon to come across succeeding activities that have unreasonable duration. This may be a result of inadvertent excessive duration assignment during the initial scheduling process, or it could be a deliberate attempt by a Contractor's Scheduler to add "cushioning" between or within his or her company's tasks. Regardless of the underlying reasons, an open and honest discussion between Schedulers should take place in order to assign appropriate Activity Durations based primarily on estimated hours, level of difficulty and field conditions.

Finally, evaluating the level of Activity Granularity when tracing Total Float Erosion can reveal potential opportunities to further mitigate the issue. Breaking up unnecessarily large activities to more defined and easy-to-progress tasks of smaller duration, can increase Total Float back to healthy levels. A simplified example would be, instead of having a single 30-day Equipment Insulation activity, tied with a Finish-to-Finish relationship to the last Equipment Installation activity, the Insulating Contractor's Scheduler could create separate, smaller duration activities, for each specific piece of Equipment to be insulated and tie them to the corresponding installation activities.

Total Float Erosion in a multi-Contractor project environment, should not be a friction point or part of a blame allocation endeavor. A Project's Total Float should be owned by everyone as it belongs to the entire Project. In a cooperative and honest manner, the Contractors' Schedulers should examine Activity Logic, Activity Durations and Activity Granularity to evaluate if changes are merited or if, more importantly, the Diminishing Total Float is the result of the genuine emergence of a secondary Critical Path that they have a duty to communicate clearly and promptly to the Project's Management team.

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