

## Distinguishing Between Delay and Disruption

---

### INTRODUCTION

Due to the complexity of construction, combined with changes often inherent as a result of the very nature of construction, a contractor's actual performance can deviate significantly from its originally planned method, manner, sequence, and duration of work. **A deviation can impact both the schedule performance period and the overall cost of the project.** Determining the cause-and-effect relationship of the impact is primarily the responsibility of the contractor even though the owner and contractor may both be responsible for assigning the result of the impact to the responsible party.

### DELAY vs. DISRUPTION

One recognized entitlement theory that a contractor can utilize for recovering damages caused by an impact is "Delay and Disruption." Even though it is a common practice to generically refer to delay claims and disruptions as being synonymous, they are in fact very different, especially in terms of damages. For example, a contractor may experience a disruption to its planned method, manner, and sequence of work, but still complete the project on time without any total delay, through acceleration or other mitigative efforts.

While "delay and disruption" issues are usually easily identified, the effects of these types of issues are very complex and often difficult to quantify. When determining if a delay and/or disruption has occurred, it is necessary to distinguish the technical difference between a delay and a disruption. These are distinctions of considerable significance.

**Delays** are specific, singular events of conditions that result in the project completion and/or work actively starting or completing later than originally planned. **Disruptions** include the effects of individual or multiple delays, as well as interruptions to the planned method, manner, sequence, and duration of work activities directly and/or indirectly associated with the impacting event. Disruptions usually affect labor productivity and can cause significant cost overrun variances in labor budgets. Disruptions are often contributing causes to a project delay when the delay-related impacts ripple throughout the project to both the work activities directly changed and the unchanged work not directly affected.

### QUANTIFYING THE EFFECTS

Once events have caused a delay and/or disruption, the next and most complicated tasks are to quantify the effects that the resultant impacts have on the contracted performance period and determine the costs associated with the delay and/or disruptions. Quantifying the direct costs for delayed work can be a relatively simple task, but secondary disruption impacts caused by the "ripple" effect" require more sophisticated techniques. Costs can be segregated into two categories, delay costs and disruption costs.

Delay Costs include, but are not limited to:

- Extended project management support
- Extended engineering staff

- Extended administrative support
- Extended project and home office overhead, and general conditions costs
- Idle tools and equipment, and
- Direct costs of the change work directly affected by the delay

In addition to the aforementioned delay costs, Disruption Costs include, but are not limited to:

- Efficiency decreased due to re-sequencing work or additional work activities in progress at a given time
- Performance extended into a period of adverse weather
- Dilution of supervision due to additional work activities to be managed
- Overcrowding of trades, and
- Acceleration— premium time/increases in manpower

Quantifying the costs associated with “delay and disruption” requires a cause-and-effect analysis addressing both the work directly affected by the delay/disruption and other work indirectly affected by the delay/disruption. Once the impacting events have been identified, demonstrating the resultant effects of the impacts on work in progress and successive work activities is crucial to recovery of delay/disruption damages.

## MAXIMIZE YOUR RECOVERY

To maximize the recovery of the costs associated with delay and disruption, contractors must illustrate how the planned method, manner, sequence, and duration of work were affected/changed. **Methods for measuring impacts associated with delays are different than those for disruptions.** Delays can often be adequately illustrated using a Critical Path Method (CPM) schedule. Disruptions usually affect productivity rates and labor costs and proof of impacts are best measured by CPM schedule analyses, trending analyses, labor productivity data, and “clean period” (“measured mile”) analyses. In both cases, it is essential that the contractor have a CPM schedule developed prior to mobilizing to the project site or beginning work, and to status the schedule as the project progresses. If a delay does occur, it can be incorporated into the CPM schedule network using a “Time Impact Analysis” to illustrate the net effect of the delay on individual work activities and the contract performance period.

With the ever-present, day-to-day directed and constructive changes that occur on a construction project, and the burden of proof resting with the contractor, it is advisable for contractors to take a proactive approach to protecting their rights and their company from possible financial impact caused by delay/disruption. Contractors can maximize their recovery of delay and disruption damages by:

- Identifying impacts relative to delay and disruption as they occur
- Notifying the owner and reserving contractual rights to recovery
- Knowing and understanding the appropriate contract clauses which allow recovery
- Proving damages with credible and supportable cost and schedule data, and
- Explaining and demonstrating the causal link(s) in detail

If a contractor does not have sufficient factual data (e.g. contemporaneously prepared letters, supporting cost and schedule information, daily reports, etc.) to support the local and global effects of the delay and/or disruption on its work performance, costs, and schedule, then the chances of a fair and reasonable adjustment may be diminished.

## CONCLUSION

Excell can help a contractor to gain a better understanding of the intricacies of Delay and Disruption. When you partner with Excell Consulting, our consultants will conduct a specialized review of your particular situation and develop recommendations to guide you in making a business judgment.

In the end, you will be glad you made the call; by the way, it's a FREE CALL.

**Excell CONSULTING: "Here Today for Your Tomorrow."**

*Author's note: The information contained in this article is for general informational purposes only. This information does not constitute legal advice, is not intended to constitute legal advice, nor should it be relied upon as legal advice for your specific factual pattern or situation. - John G. Balch, CEO CPCM*