



# Project Delivery Systems

## Risks Associated with the Alternatives

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As an industry we are seeing alternatives to the traditional Design-Bid-Build (DBB) delivery methods grow in prominence. Two of these are Integrated Project Delivery (IPD) and Design Build (DB). IPD is relatively new, while DB has been around for a long time. In both cases, the Structural Engineer (SE) needs to be aware of different risks that can arise.

### Integrated Project Delivery

There are certain characteristics present in most IPD projects that introduce legal risks not normally present on DBB projects. IPD projects call for a team-based, heavily collaborative approach to performance and a means by which team members share in the project's success or lack thereof. This has the potential to blur lines of responsibility.

On a DBB project, the responsibilities of the SE are usually separate and distinct from those of other team members. The IPD project model attempts to change the dynamic from multi-team performance to a single-team focus. IPD projects are structured to require early and frequent collaboration among team members.

This could heighten the risk of assuming responsibility for mistakes made by other parties who receive such input. For example, if the SE offers advice to a contractor related to means and methods, is the SE thereby assuming responsibility for any associated mistakes? While this concern is significant in theory, as IPD appears to be currently playing out, the frequent collaboration that is a hallmark of IPD projects does not appear to be resulting in a blurring of the disciplines. In practice, each party's work is not so blended with another's that it becomes impossible to determine who did what.

Most legal disputes involving the SE relate to complaints brought by project team members. The risks associated with claims asserted by another team member are not viewed to be any greater in an IPD process. However, there is a real possibility of being dragged into a legal action brought by a party unrelated to

the design under the argument that a single entity is responsible for the suffered damages and that each team member is jointly and severally responsible for the resulting harm.

While IPD may be thought of as being on the cutting edge of today's design processes, professional liability insurance is very much rooted in tradition. By and large, insurance has not evolved as a result of alternative project delivery; rather, professional liability insurance remains rooted in making sure that the clear delineation of duties is preserved. Thus, insurance coverage may be difficult to discern for actions that were the result of collaboration among several team members.

It is not all doom and gloom when it comes to IPD and legal risks. In fact, there are a lot of things to like in a true IPD project. In order to encourage creativity and information sharing, and to reduce the likelihood of defensive engineering and construction, most IPD contracts will contain liability waivers that reduce or eliminate the ability of project team members (including the owner) to sue one another. Even in the absence of favorable contractual language, contractor-related claims alleging design defects will likely be severely curtailed given the opportunity of the contractor to participate in the design development portion of the project.

### Design-Build

DB is when one entity, the design-builder, contracts with the project owner to provide both design and construction services. On most projects, the general contractor is the design-builder and the SE is a subconsultant, either directly to the general contractor or to the architect. Most legal risks to the SE in such an arrangement will likely arise as a result of the general contractor's inability or unwillingness to recognize that the very same contract language that may be perfectly acceptable to a contractor will not be acceptable to an engineer. If the general contractor enters into a 'standard' construction contract with the owner, and then attempts to flow down the

same or similar provisions, the SE will likely face the prospect of assuming uninsurable risk. Potential problem areas include the standard of care, indemnification, and liquidated damages.

**Standard of Care:** Contractors often promise, via contract, that their work will be free of defects and mistakes. A primary reason why contractors agree to such language is that, should they fall short of this perfection threshold, their commercial general liability insurance will cover their shortcomings. However, if the SE were to promise perfection and fail to achieve it, professional liability insurance would only provide coverage to the extent of the SE's negligence.

**Indemnification:** Similarly, whereas the general contractor will most likely be covered by insurance for signing on to an indemnification clause not limited to the extent of their negligence, this is not the case for the SE.

**Liquidated Damages:** It is not unusual for a contractor to agree to pay a pre-determined dollar amount for each day a project's substantial completion is delayed beyond a certain date. This may be appropriate for contractors who control the job site and receive the lion's share of compensation associated with the project; again, this is not the case for the SE.

Another potential legal risk associated with a contractor-led DB project involves structural observation. Traditionally, the SE is charged with observing and reporting the contractor's defective work to the owner. This check and balance is designed to enlist the SE in watching out for the interests of the owner. However, in a DB project, the SE works for the contractor, creating a potential conflict of interest.

### Conclusion

Alternative project delivery presents different and, in some cases, heightened legal risks when compared to the traditional DBB model. This does not mean that these projects should always be avoided; it just means that additional up-front consideration should be given in the SE's go/no-go decision-making process. While some of the risks can be avoided by appropriate contractual terms, the most important mitigation tip is to choose projects and team members wisely. ■

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