Over the past few years, you’ve heard a lot about Integrated Project Delivery (IPD), and perhaps you’ve even attended a continuing education program on the topic. You’re probably also aware that there is more talk than action in the IPD world today, and that the likelihood that you will be involved in an IPD project in the near future is very low. In fact, IPD observers and reporters estimate that about six IPD projects are now completed and perhaps eight more are in construction around the country.

So, you may ask, “Why all the fuss over a delivery method that is affecting so few people?”

This article will attempt to answer that question by providing some background on when and why IPD began, and explain why some owners are sold on it. It will also identify IPD’s unique features, share the highlights of the existing IPD contracts, and explain how IPD challenges traditional risk management concepts. Finally, this article will point out what you should look for in an IPD contract so that you can evaluate the potential risk and rewards of IPD for yourself.

Necessity is the Mother of Invention

You may have heard that IPD is Kumbaya around the campfire, but that’s not how it started. IPD is a project delivery method that was created by no-nonsense property owners who did not see themselves as camp counselors. Instead, they were strongly motivated to find a new way to deliver projects that would save time and money without sacrificing quality. These owners, British Petroleum, the Commonwealth of Australia, and Sutter Health Care, were prepared to take drastic measures, knowing that small steps would not achieve the necessary results.

British Petroleum (BP) started the IPD ball rolling in the early 1990’s. Faced with the need to pull oil out of the North Sea at a cost lower than its historical data suggested was possible, BP introduced several innovations. First, it cast off the low bid process and selected seven contractors on the basis of their qualifications. Then, it developed contracts that would create a culture of teamwork by aligning each contractor’s profit motive to overall project outcomes. In a very bold move, BP gave up the right to a guaranteed maximum price, and charged the contracting team with the task of developing a target price. Contractors were paid for their costs through open book accounting, but their profits and losses were tied to the success of the project, and all uninsurable risks were shared.
BP had estimated that the project would cost £450 million using traditional methods. Under its radical new method, the project was completed for under £290 million in six fewer months than projected. Given results like that, the new contracting model, called Alliance Contracting, attracted attention and followers.

The Commonwealth of Australia began using the Alliance model in the late 1990’s and by 2007 had completed over 100 infrastructure projects throughout the country. Australia also used Alliance Contracting to design and construct the Australia National Museum. This high profile project had to deliver a landmark building, satisfy public procurement ethical standards, incorporate a design competition, and meet a tight deadline. The Commonwealth considered design-bid-build, but found it too time consuming. The Alliance model was selected because it offered quality incentives and its transparent, "open book" nature offered greater accountability, which addressed ethical concerns. The project opened on time in 2001, fewer than three years after the Alliance model was selected.

In 2004 Sutter Health Care, the northern California health care provider, faced requirements to retrofit its hospitals to a new earthquake code, and also embark on expansion of hospital facilities. Working with the Lean Construction Institute (LCI), Sutter developed its own contract, called the Integrated Form of Agreement (iFOA) in 2005. The iFOA borrows from Alliance Contracting and incorporates Lean Construction principles. Sutter first used this contract to develop the Fairfield Medical Office Building in Fairfield, California, and has since modified the contract for use on several subsequent projects now in design or construction. Sutter representatives state that the projects using the iFOA are coming in on time, under budget and free of litigation.

Building owners have been told for years that construction is a three legged stool whose legs are quality, time and money. Owners are also told that only two of the three legs can be achieved without sacrificing the third. Owners are interested in IPD because they are seeing from the examples above that, for the first time in history, a delivery method offers the opportunity to attain all three legs of the stool.

What is IPD?

The American Institute of Architects (AIA) recently published a paper (Integrated Project Delivery: Case Studies) that identified six completed IPD projects. For purposes of identifying an IPD project “as pure as possible,” the AIA applied six characteristics:

1. Early involvement of key players
2. Shared risk and reward
3. Multiparty contract
4. Collaborative decision making and control
5. Liability waivers among key participants
6. Jointly developed and validated project goals

While very few IPD projects possess all six characteristics, these six attributes serve as a useful measurement for determining whether a project is being delivered using IPD, or by using a traditional model that incorporates some IPD traits. Some industry commentators call the latter type IPD-ish, or IPD-Lite.

Both IPD and IPD-ish projects likely involve designers and contractors, including some subcontractors, working together from the start of the project and freely sharing information as the design is developed. Subcontractors and even...
fabricators may be assigned the role to design certain parts of the project. None of these entities are retained by bidding. Instead, the initial team is usually selected by a quality-based selection process that values past performance, as well as a commitment to the IPD process itself. Often, the team is compensated on a time and material basis employing “open book” accounting, but profits are often deferred.

Working on a team, the design professionals, contractor, and owner review and validate the owner’s program and objectives, and set cost and schedule goals. IPD contracts require that the team make decisions either unanimously or by consensus, and they limit the owner’s ability to control decisions. The team designs and constructs the project working collaboratively to solve problems. When the construction is complete, profits not already paid may be distributed, or not, depending upon whether the actual construction costs exceed the target cost. Bonus payments may also be paid for achieving certain goals. In the case of cost overruns, the design and construction team may be required to fund some or all of those costs to the owner.

Shared Risk and Reward
As a project becomes more purely IPD, it will require that all parties share risks and rewards. For that reason, an IPD project requires a more entrepreneurial team than traditionally seen. Contractors are accustomed to assuming the cost risk for a project, and so are project owners. Design-Build contractors are even accustomed to taking on the risk of design. By contrast, architects and engineers traditionally assume only the costs of their own errors and omissions, and only after they have been shown to be negligent in preparing plans and specifications. In an IPD contract, the design professional may not only assume the costs of its own errors and omissions, whether it is negligent or not, but may also take on the risk of the contractor’s mistakes in bidding the scopes of work to trade subcontractors and errors in means and methods of construction.

For the contractor, shared risk and reward may mean forfeiting the benefit of the Spearin Doctrine, the legal theory that permits the contractor to recover from the owner the costs of errors and omissions in the design professional’s plans and specifications. In an IPD contract, the contractor and designer may share in paying to the owner the costs of any errors and omissions.

For the owner, sharing risk can mean giving up the right to obtain a fixed construction price from the contractor. While some IPD projects incorporate a Guaranteed Maximum Price, most are based on a target price that is not guaranteed. The owner may also fund a contingency to cover a certain amount of errors and omissions.

Some IPD contracts require that the owner, design professionals and contractors waive claims against each other, but often make an exception for claims that are covered by insurance. Those claims may be allowed, to the extent that coverage is available. The trouble is this: with respect to professional liability insurance, it is not clear that coverage will be available.
Professional Liability Insurance Issues in IPD

Professional liability (PL) insurance covers design professionals for claims arising from their negligent performance of professional services. The policy reimburses the cost of damage or injury caused by the insured party’s negligent performance. 

Design professionals are found negligent when they breach the legal standard of care applicable to similarly situated professionals performing similar services under similar circumstance. Expert witness testimony is generally required to establish a breach of the standard of care. 

PL insurance does not apply to promises made by contract that go beyond what a professional would be required to do under the common law. Guarantees of perfection, “time is of the essence” provisions, and assumption of liability for another’s mistakes all fall into that category, called “contractual liability.” Any agreement must be culled through by yourself, your insurance advisor, or your attorney to locate and negotiate away any such examples of contractual liability before you sign it.

IPD contracts raise questions of whether PL coverage will be available for several reasons:

• IPD agreements that include promises to share risks and rewards present concerns of contractual liability. A PL policy will only cover damages caused by the insured party’s negligence. It will not cover the cost of damages caused by another member of the team and shared with the insured party. For that reason, PL coverage will not be applicable to losses arising from shared risk pools, when the losses cannot be attributed to the insured party’s negligence.

• PL insurance coverage is triggered when a claim is made against the insured. When an IPD contract requires that the parties repay the owner for the costs of errors and omissions, without the owner’s having filed a claim, professional liability insurance will not be triggered.

• PL insurance excludes damages arising from the means and methods of construction. When lines between design and construction are blurred, such as when parties collaborate on an IPD design and construction team without clear lines of responsibility, it is possible that a design professional may be found to have taken on means and methods liability. Contractual disclaimers of such liability may not hold up in the presence of clear evidence to the contrary.

• PL insurance does not apply to payment disputes. Consequently, if the design professional agrees that its compensation may be withheld to cover errors, omissions, and cost overruns caused by others, and payment is withheld, a disagreement by the design professional over the withholding would be a payment dispute for which PL coverage is not available.

• The law does not require perfect performance from design professionals. For that reason, the design professional is not legally liable for each and every error or omission. When the design professional agrees to correct errors and omissions without a showing of negligence, it is essentially agreeing that the owner is entitled to receive perfect services, including a perfect set of plans and specifications, which would amount to an uninsurable guarantee of perfection. 

PL policies require a finding of negligence on the part of the insured party. It is pretty clear that the laudable goal of IPD, to get parties working together to solve problems and correct mistakes without pointing fingers of blame, runs contrary to the foundation upon which PL policies are founded.
The authors of IPD contracts to date have expressed the intent that professional liability policies be available to cover not only third-party claims by injured parties, but also first-party claims, particularly by the owner, for economic losses caused by professional errors and omissions. As shown above, many contractual provisions of IPD agreements, particularly those regarding shared risk and reward, cannot be covered by PL policies.

Perhaps the ideal insurance product for IPD would be one akin to “no fault” auto insurance. If the designer or builder made a mistake that increased the Target Cost, insurance would step in to cover the cost, without a finding of fault or negligence. Any such policy would naturally raise concerns in the insurance industry that the team members would not exercise due care—why should they if insurance would cover their mistakes, and no one would know who was at fault? Deductibles and self-insured retentions could be used to incentivize good behavior, but without a statistical claims history for IPD projects, those self-insured retentions would likely be very high. In any event, such a policy is not available.

The IPD projects constructed to date have relied upon traditional practice policies, which were required by the contracts used. The actual contracts executed by the parties are confidential, but it is highly likely that some provisions in the forms released to the public, and outlined below, may have been negotiated to eliminate contractual liability before being executed. Because the projects did not result in litigation, the applicability of PL insurance has not been put to the test.

Right now, IPD is an idea that is ahead of its time, swimming upstream against the current of traditional design and construction risk management principles. Insurance companies are trying to address IPD, but the policies publicly issued to date cover only third-party claims, and they include significant self-insured retentions.

IPD Agreements

At present, two industry organizations, the AIA and the ConsensusDOCS (funded by the Associated General Contractors), have published several standard form IPD agreements. Additionally, Sutter Health has released for educational purposes a version of its IFOA, and the California law firm HansonBridgett has posted to its Web site its own IPD agreement form. All of these contracts are IPD agreements and they share some common characteristics, but they differ in significant ways. Discussed below are highlights of the Sutter Health, ConsensusDOCS and AIA IPD agreements.
Sutter Health Integrated Form of Agreement

Sutter Health has been generous in sharing its IFOA, with the result that versions of it are being used not only by Sutter but also by other health care providers, including SSM Healthcare, headquartered in St. Louis, MO, and ThedaCare, operating in Wisconsin. If you are working in health care, you may encounter a version of this agreement over the next few years. The IFOA requires that design professionals and contractors implement Lean principles, focused on reducing lost time and wasted material. The team must learn and implement a new vocabulary of terms such as “set-based design,” “Target Value Design,” and “pull-based design production.”

A Core Group, comprising senior representatives of the owner, architect and contractor, manage the project by consensus decisions, with the owner deciding only an impasse. Early in the project the design and construction team, called the IPD Team, develops a Target Cost for the Core Team’s approval. The IPD Team then proceeds to design the project under the cardinal rule that “the Project’s Target Cost shall never be exceeded without express approval of the Owner.” Design of major systems is performed by cross-functional teams of designers and builders. Drawings are not taken to pre-set stages of development and then priced; rather, contractors provide continuous ongoing cost analysis and estimating within the cross-functional teams.

When the design is complete, the IPD Team prepares an Estimated Maximum Price. The owner protects itself from cost overruns in two ways: the IPD Team Contingency and the At-Risk Pools. The IPD Team Contingency is an amount included in the Estimated Maximum Price that may be used for design errors and omissions and contractor mistakes. If those errors cause the IPD Team Contingency to be exceeded, the IPD Team is required to pay the extra costs, including construction costs, to the owner.

The At-Risk Pool provides assurance to the owner that funds will be available to cover cost overruns. It consists of profits that would have been paid to the contractor and design professionals. Instead of paying the earned profit, the owner deposits an agreed-upon portion of it into an escrow account. At the completion of construction, the At-Risk Pool amounts may be paid to the owner to cover cost overruns, or distributed to the IPD Team. If the project completes for less than the Target Cost, some additional incentive payments may be paid to the IPD Team. The IPD Team’s total liability to the owner for all causes except fraud, misconduct and amounts covered by insurance, is capped at the total amount of the At-Risk Pool.

Change orders may raise the Estimated Maximum Price due to errors and omissions in the design, but only if the contractor could not have caught the error during the design phase.

Parties to the same contract are permitted by law to make claims against each other for economic loss, and the IFOA does not require that the parties waive their claims against each other. Moreover, the limitation of liability provision contemplates that claims covered by insurance may be made. Such claims could arise based on errors and omissions that increase the actual costs, create cost overruns, and diminish shared savings and profits. The owner and contractor could make such claims against the architect. With respect to the owner’s claims, any amount recovered would be capped by the limitation of liability, but that limitation would not apply to contractor claims. Similarly, the architect could claim against the contractor, if the contractor’s errors decreased the architect’s potential profits.
This standard form Tri-party Agreement for Collaborative Project Delivery (CD300) is modeled after the Sutter Health IFOA. The most notable difference between the two is this agreement’s flexibility. Like many other ConsensusDOCS agreements, the CD300 poses choices to the parties that must be made by checking a box. For that reason, this agreement may vary from a standard GMP agreement with a few IPD/Lean requirements (IPD-ish) to a pure IPD agreement with full risk sharing and rewards. Because of the extreme variations that this agreement may take, it is not advisable to begin work under this agreement until all boxes are checked and the agreement is executed.

Like the IFOA, two tiers of teams exist: the Management Group is the decision-making body, making decisions by consensus with the owner deciding impasse; and the Collaborative Project Delivery Team (CPD Team) takes on the day-to-day design and construction of the project. However, the CPD Team does not have the consistent responsibility allocated to the IPD Team under the IFOA and, in some instances, only the designer, or only the constructor, is assigned a function.

Although the designer is required to use “Pull-Based Design,” the constructor is to provide ongoing “Target Value Pricing,” and the CPD Team is to employ “Pull Planning,” the CD300 substantially pares down the Lean requirements of the IFOA. As a result, the CD300 places far fewer requirements on the design and construction team regarding how to design, schedule, and construct the project.

At the beginning of the Project, the constructor, in collaboration with the Management Group, not the CPD Team or the designer, is to prepare a Construction Budget to cover the cost of the work, including design and construction contingencies, and the constructor’s profit. Thereafter the CPD Team is to “use diligent efforts” to design the project within that budget. The Construction Budget “cannot be revised without Owner approval, which approval may not be given.” When the Management Group determines that the design is sufficiently complete, the owner, designer, and constructor provide a Project Target Cost Estimate (PTCE). The PTCE includes traditional design and construction contingencies, but not a contingency for errors and omissions.

Unlike in the IFOA, where cost responsibility for design errors and omissions is collectively assigned to the IPD Team, the CD300 clearly emphasizes in several locations that the constructor is not responsible for design, except as related to means and methods and for discrete elements that may be performed as design-build. Although the constructor is required to assist the designer during the design phase, the CD300 explicitly allocates all design responsibility to the designer, even to the extent of making cost and schedule part of the designer’s responsibility, as seen in these quotations from the agreement:

The Designer shall furnish or provide all the design and engineering services necessary to design the Project in accordance with the Owner’s objectives.

Cost and schedule are design criteria and the Designer, in collaboration with the CPD Team, shall ensure that design fully considers cost and schedule implications.

Constructor shall assist the Designer in the development of the Project design, but shall not provide professional services which constitute the practice of architecture or engineering services.

Designer is responsible for the completeness and accuracy of the design.

Risk and reward sharing can vary substantially in this agreement depending upon choices made by checking boxes. The parties are required to choose between “Traditional Risk Allocation,” where each party retains full liability for its own negligence and contract breaches, and “Safe Harbor Decisions,” where the parties agree to release each other from liability for decisions made by the Management Group, except for willful default. Note that not all decisions made collaboratively are covered by the Safe Harbor provision, but only those made by the Management Group. With either choice, the parties waive claims against each other for consequential damages.
Whether the parties will share the risk of cost overruns, called losses, is also controlled by check boxes. Losses may be borne by the owner, or shared by the “Parties” (not the CPD Team) based on agreed-upon percentages. If the Parties elect to share losses, then they must next decide if their profits will be at risk, and if the amount of profit will represent a limitation of the designer’s or constructor’s liability. Depending upon the checkbox selections, it is possible for the PCTE to become a Guaranteed Maximum Price, with both the designer and constructor responsible for cost overruns, without any limitation of their liability.

The designer and constructor are paid their costs and normal profit, without mention of profits being pooled in an escrow account; although compensation paid is subject to the incentive and risk sharing provisions that the parties develop.

A financial incentive program funded by contingency preservation and reduction in the project costs may reward the CPD Team for achieving superior performance. Ultimately, any savings between the PTCE and the actual cost is to be shared in a method to be agreed upon.

As in the IFOA, claims between parties are not waived, and could be made based on cost overruns and profits not achieved. Traditional insurance products are required. Because the constructor and designer sign the same agreement, claims from the constructor against the designer, and the designer against the constructor, are permitted.

AIA IPD Agreements

The AIA has published three versions of IPD agreements. One type, the A295-2008 family, is based on a GMP agreement and is not a multi-party agreement. The AIA calls this a transitional agreement (IPD-ish) issued to introduce IPD to those who see the value in requiring the design and construction teams to collaborate from the start, but are not ready to waive claims against contracting parties and share risks and rewards. The other two AIA agreements, discussed below, incorporate all six characteristics of pure IPD. These two agreements are substantially similar in their terms and conditions; however, one of them, C195-2008, requires that the parties establish a single purpose entity (a limited liability company, or LLC) for the purpose of designing and constructing the project. As such, it represents the highest level of integration—where all parties are joined in one company. The other agreement, C191-2009, is a multi-party agreement and, in that respect, more comparable to the IFOA and CD300.

AIA’s C191 and C195 agreements establish two teams, a senior level team for making executive decisions, and a Project Management Team, for day-to-day operations. Both teams include the owner, and are required to make decisions unanimously. Early in the design phase, and prior to preparing a Target Cost, the Project Management team must develop the project criteria (based on criteria from the owner), project goals, project definition, project schedule, and early procurement schedule. They must also complete a risk assessment matrix, which determines responsibility for managing each risk identified, and a scope of services matrix, which assigns primary responsibility for each task required to design and construct the project. The contract is amended to incorporate the Target Cost, but if the parties are unable to agree on the Target Cost, the agreement is terminated. The Target Cost may be adjusted for reasons enumerated in the agreement, including Force Majeure events.
Parties are paid their costs, but not profit, up to the amount of the Target Cost. To share the risk of cost overruns, the non-owner parties of the LLC continue to work without compensation if the Target Cost is exceeded. In the multi-party agreement the parties elect by a check box whether the owner will continue to pay direct labor costs. In either contract, the owner funds all construction costs.

Profit may be earned in two ways: (1) for the achievement of project goals (Goal Achievement Compensation), which may be earned and paid commencing in the design phase; and (2) by sharing savings achieved between the actual cost and the Target Cost. The AIA agreements are the only IPD agreements that pay profit for achieving goals, even if the Target Cost is exceeded, on the rationale that the owner has received a benefit. Also, Goal Achievement Compensation that is paid may be kept, even if the actual costs ultimately exceed the Target Cost.

Both agreements discourage litigation. The LLC parties handle this not by directly waiving claims, but by agreeing to resolve any claims and disputes through the dispute resolution provisions of the agreement, which do not permit litigation. Liability among the parties is limited to the amount of available insurance. Complex indemnities, which may not be enforceable in all states, are used to protect the parties from third-party claims. The multi-party agreement provides a direct waiver of most claims, but it allows claims that are covered by the insurance required under the agreement. In both agreements, recovery on claims is limited to the amount of available insurance.

The IFOA and CD300 require that the parties obtain traditional insurance products. The AIA agreements require traditional products prior to establishing the Target Cost. Uniquely, the AIA agreements require that the parties retain an insurance consultant to provide advice regarding obtaining an insurance program to cover all parties, and to incorporate this program into the contract with the amendment accepting the Target Cost.

The claims provisions in these AIA agreements are complex, and you may not understand them without talking to your lawyer. It seems clear that the AIA went to great lengths to avoid litigation in court, but claims covered by insurance are still permitted through the contract’s dispute provisions, and these claims may be filed by any party against any other party.
What to Look for in an IPD Agreement

If a client asks you to provide services under an IPD contract, you will have a lot to think about. First of all, consider the other team members with whom you may be asked to share risks and rewards. Do you feel comfortable predating your success on their success? A contractor that is accustomed to a low bid environment, where profits necessarily given up in bidding are recouped in change orders, may not be the best partner. Similarly, a contractor would want to weigh the architect's reputation for meeting schedules and budgets. Although not an exhaustive list, consider these questions:

- Will all of your costs be paid, or will that depend upon whether there are cost overruns?
- Under what conditions will profit be paid?
- If there are cost overruns, will you be required to share them with the other team members?
- Can the Target Cost become a GMP? If so, will you be a guarantor?
- Does the contract provide an opt-out if the parties cannot agree on the Target Cost or GMP?
- Will your costs be paid if you refuse to sign a cost amendment to the contract, or the contract is terminated for some reason?
- Will your earned profit be spent to cover the cost of errors and omissions?
- Is your liability limited?
- Are claims within the team waived or limited?

A yes or no answer to the above questions does not necessarily mean a yes or no to the IPD contract; rather, the answers will arm you with the information you need to evaluate whether you are prepared to make that go/no go decision, or must spend more time in negotiations.

Are You Ready for IPD?

Most IPD agreements include a statement of purpose or intent that provides aspirational language about collaboration and respect, such as the following, excerpted from the IFOA:

The purpose of the IPD Team is to facilitate collaborative design, construction and commissioning of the Project. . .to gain the benefit of an open and creative learning environment. . .share ideas freely in an atmosphere of mutual respect and tolerance. . .work together and individually to achieve transparent and cooperative exchange of information in all matters relating to the Project. . .share ideas for improving Project delivery. . .actively promote harmony, collaboration and cooperation among all entities performing on the Project.

This kind of contractual language, called by some “IPD happy talk,” may not be legally enforceable; in fact, one attorney has called words of this nature “useless, naïve, and illusory.” These words conjure up images of songs around the campfire and tend to overshadow the hard reality that IPD is an owner-driven process created not for the purpose of achieving harmony, but to drive down the cost and time of construction.

None of us would question the desire to reduce the time and cost of construction, and certainly we would all support innovation targeted to increasing efficiency and reducing litigation in construction projects. Where some of us, including the insurance industry, are having trouble is this: to increase efficiency and reduce the time and cost of construction, must design professionals and contractors share the risk of each other's mistakes?
For design professionals, who are traditionally, and by law, required only to accept the cost of their own negligence, IPD presents the most significant challenges.

IPD is not without its detractors. For example, the chairman of a major architectural firm that has not yet been involved in an IPD project has been an outspoken critic of IPD and has been quoted as saying that he believes IPD is not in the best interest of the architect, and will not, at least in the current economic climate, bring the best price to the owner. On the other hand, a prominent architect whose firm provided services on a high-profile IPD project, is among those with a positive opinion concerning IPD. And he is not alone. The six AIA case studies found that the owners, designers, and contractors who have tried IPD all praised the process and would use IPD again.

If those with IPD experience are IPD supporters, then perhaps the skeptics should follow the advice of the old television commercial for kids’ cereal, “Try it Mikey, you’ll like it.” Certainly, many of us would like to participate in a movement that holds the hope of changing our industry for the better, but until the insurance carriers find a realistic way to insure the risks of the parties involved, we may find ourselves sitting on the sidelines.

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