CPR DISPUTE PREVENTION BRIEFING: CONSTRUCTION

Realistic Risk Allocation

Allocating Each Risk to the Party Best Able to Handle the Risk

BY JAMES GROTON AND ROBERT J. SMITH with
the CPR RISK ALLOCATION SUBCOMMITTEE OF
THE CPR CONSTRUCTION ADVISORY COMMITTEE

CPR
International Institute
for Conflict Prevention
& Resolution

ABOUT CPR

Our Mission

CPR Institute is a nonprofit organization based in New York City. Our mission is to spearhead innovation and promote excellence in public and private dispute resolution, and to serve as a primary multinational resource for avoidance, management and resolution of business-related and other disputes.

To fulfill our mission, CPR is engaged in an integrated agenda of research and development, education and advocacy. We are also the leading proponent of self-administered ADR and serve as an appointing authority for parties in need of neutrals.

Fulfilling the CPR Mission

CPR was founded in 1979 as the Center for Public Resources from a coalition of leading General Counsel dedicated to identifying and applying appropriate alternative solutions to disputes thereby mitigating the extraordinary costs of lengthy court trials. That determination is still at the heart of CPR's activities today.

We are pioneers and leaders in the area of dispute resolution. We were the first organization to bring together Corporate Counsel and their law firms to find ways of mitigating the extraordinary costs and delays of litigation, while achieving more satisfying and lasting results through appropriate alternatives, like negotiation, mediation, and arbitration.

We believe that the culture and practice of the way in which businesses settle disputes, nationally and internationally, needs vast revision in order to untie the bonds of lengthy and excruciatingly expensive litigation.

We believe that every effort to promote the appropriate use of mediation, arbitration, and other strategies must continue to be explored and used. And, we believe that CPR has an unparalleled role in exacting these changes.

We fulfill our mission by:

- Convening high-level meetings between General Counsel, Deputy General Counsel, Senior Partners, and Managing Partners at members-only meetings and programs, as well as through the efforts of our member committees and task forces.

- Providing up-to-the-minute research information and case law in our other printed publications, online materials, and CPR in-person or electronic counseling on ADR procedures and drafting.

- Resolving disputes via our Panels of Distinguished Neutrals, our non-administered procedures, and our unparalleled ability to get parties to the table.

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CPR Introduction

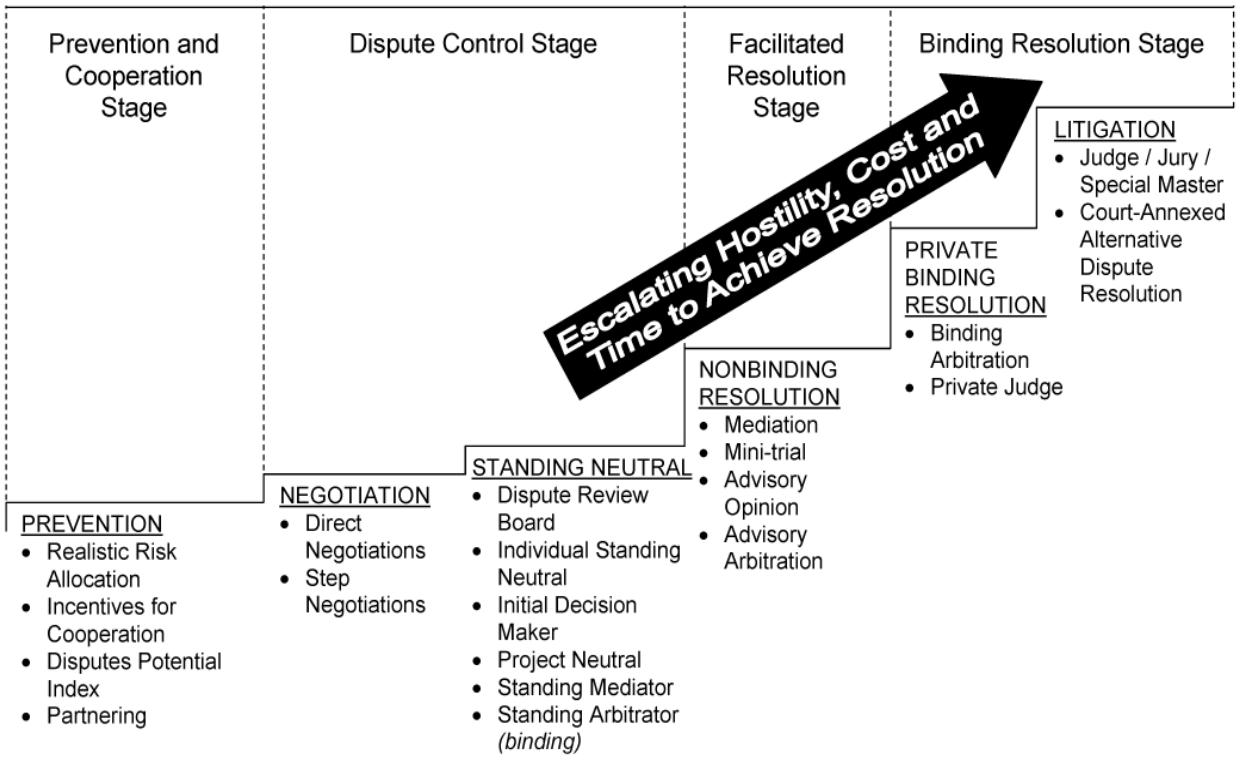
This Briefing presents Risk Allocation concepts to companies and their advisers who draft risk allocation provisions for construction contracts. Companies outside the construction arena, involved in long-term contractual arrangements prone to conflict, may also find this Briefing useful. They may be able to adapt these concepts to their own needs as they refine their conflict management processes.

CPR has continually fostered use of cost-effective resolution devices such as mediation. It has also maintained a focus on conflict management systems that push problem solving up to the earliest possible time in the life of a dispute or a potential dispute. Such systems include conflict prevention mechanisms and conflict control devices that promote collaboration between business partners so they can solve problems early and avoid more costly end-point conflict resolution processes.

The Risk Allocation concepts described in this Briefing have been shown to be effective conflict prevention approaches in construction matters. In other complex contractual arrangements, realistic assessment of risks and allocation of responsibility consistent with control over risks should be the first step and the foundation stone in an effective dispute prevention and resolution system.

The following complementary charts, showing dispute resolution steps and construction contract options, demonstrate how Realistic Risk Allocation fits into a system of superior conflict management that starts with prevention and ends with efficient conflict resolution devices. They provide a guide for the construction sector and should prove useful in other industries.

Dispute Resolution Stages and Steps [1]



[1] The original version of this Step Chart appeared in the 1991 CPR Publication "Preventing and Resolving Construction Disputes." It was later reformatted by the Dispute Avoidance and Resolution Task Force ("DART"), and more recently revised and updated by James P. Groton for presentations at international dispute prevention conferences in China, Finland and England.

Construction Contract Options

To effectively prevent and manage disputes, contracting parties should consider selecting and using at least one process from each of the following multi-step conflict management categories. When entering into contracts, parties can agree to use initial collaboration and preventive practices, to be followed by one or more efficient on-site conflict management techniques such as Step Negotiations, DRBs or Standing Neutrals, before resorting to costlier external non-binding or binding processes.

Contract for Dispute Prevention

- Equitable Risk Allocation Provisions *(See CPR's Realistic Risk Allocation Briefing)*
- Incentive Agreements for Cooperation
- Disputes Potential Index *(Created by the Construction Industry Institute)*
- Partnering *(See CPR's Partnering Briefing)*

Contract for Early Non-Binding In-Project Processes to Control Disputes

Additional contract terms allow early in-project nonbinding intervention appropriate to the particular project and can enhance ability to solve problems efficiently:

- Negotiation
- Multistep Negotiation
- Single Standing Neutral or Dispute Review Board *(See CPR's Dispute Review Board and Standing Neutral Briefing)*
- Initial Decision-Maker *(See AIA Forms, 2007)* or Project Neutral *(See Consensus.DOCS Forms, 2007)*
- Dispute Review Board
- *Alternatively, in special situations the Standing Neutral could be a Standing Arbitrator or Standing Mediator*
- *Arbitrator or Standing Mediato**r**; or the parties could name a dispute specialist to recommend processes when disputes arise*

Contract for External Non-Binding Resolution Processes

Contract provisions can incorporate external non-binding processes if in-project intervention fails, such as:

- Mediation
- Early Neutral Evaluation
- Expert Nonbinding Evaluation
- Mini-Trial
- Advisory Arbitration *(Non-binding)*

Each of these can loop back to negotiation

Contract for External Binding Resolution Processes

Binding processes are available if in-project intervention or external nonbinding processes fail:

- Private Judge
- Arbitration or
- Litigation

Before final decision, each of these can loop back to negotiation

Construction Fact Sheet

A. Facts about Construction, from a 2009 National Research Council Study [2]

Yearly U.S. construction	$1.16 Trillion
Yearly worldwide construction	$4.6 Trillion
Value of U.S. construction as % of GDP	10%
Percentage of U.S. workforce employed	8%
Estimated yearly transactional costs of disputes	$4 Billion to $11 Billion

B. Mean Transaction Costs of Negotiation, Mediation & Arbitration [3]

In his 2006 Ph.D thesis researcher Richard J. Gebken reported on a study of the direct and indirect transactional costs required to resolve disputes on 44 projects involving 57 contracting organizations. The dispute resolution methods used to resolve those disputes were Negotiation, Mediation, and Arbitration. He found that the relative mean transaction costs of resolving disputes through these three methods were:

Negotiation Cost Mean in 18 projects:	$330,199
Mediation Cost Mean in 15 projects:	$1,212,433
Arbitration Costs Mean in 11 projects:	$1,167,182

While Gebken found that the stand-alone processes of Arbitration and Mediation differed only slightly in costs, Negotiation costs were 75% less costs of Mediation. He attributed the relatively higher costs of Mediation in large part to the fact that the mediations of the disputes that were resolved by that method occurred late in the dispute resolution process, and involved prolonged discovery and depositions.

C. Percentage of Various Transaction Costs for Resolving Disputes via Negotiation, Mediation & Arbitration[4]

During the course of analyzing the sources of transactional costs incurred in the three methods of dispute resolution that he studied, Mr. Gebken found that as the hostility of dispute resolution increased from Negotiation to Arbitration (*see* page 1, above), outside counsel fees increased. He also found that expenditures for Negotiation involved substantial in-house costs.

Transactional Costs in Construction Disputes	Aggregate Costs of Arbitration, Mediation & Negotiation [5]	Only Arbitration Costs [6]	Only Mediation Costs [7]	Only Negotiation Costs [8]
Outside Counsel	61%	75%	58%	40%
Management & Staff	16%	8%	8%	41%
Consultants/Expert Witnesses	11%	6%	6%	10%
In-House Counsel	5%	3%	3%	6%
Forum Fees	3%	8%	8%	1%
Other Costs	4%	8%	0%	2%

[2] *Advancing the Competitiveness and Efficiency of the U.S. Construction Industry*, National Research Council, National Academies Press, 2009, at pages 11 and 18.

[3] Richard J. Gebken, *Quantification of Transactional Dispute Resolution Costs for the U.S. Construction Industry*, at pages 115, 127 and 156 (May 2006, Ph.D Dissertation at The University of Texas at Austin). (Mr. Gebken's study did not evaluate the costs of preventing or resolving disputes through Partnering or Dispute Review Boards.)

[4] Ibid., p. 111

[5] Ibid., p. 109; Aggregate costs represent the total percentage of costs for all dispute resolution methods studied compared to percentages for specific ones. (Partnering, Dispute Review Board, and Standing Neutral costs were not studied.)

[6] Ibid., p 110.

[7] Ibid.

[8] Ibid.

Realistic Allocation of Risk: The First Step in Dispute Prevention

What Is Realistic Allocation of Risk?

Realistic allocation of risks is a management best practice when negotiating construction contracts and is the foundation for prevention of problems and disputes. It complements, but should precede, other dispute prevention devices such as partnering and standing neutrals.

Risks are inherent in any commercial activity, so businesses need to identify, understand, anticipate, assess, analyze, and learn to manage risks. An important part of the risk management and planning process in any business transaction or project is the allocation of risks among the parties. Wise decisions about allocation of risks improve efficiency, reduce costs, reduce the potential for disputes, and promote project goals.

Starting with the 1979 landmark industry conference on "Construction Risks and Liability Sharing," (American Society of Civil Engineers, *Construction Risks and Liability Sharing*, volume II at 2 (1980))**,** the construction industry has recognized the basic principles of risk allocation, which are:

- Risks belong with those parties who are best able to evaluate, control, bear the cost, and benefit from, the assumption of risks.

- Every risk has an associated and unavoidable cost which must be assumed somewhere in the process.

- Many risks and liabilities are best shared.

Further studies into risk allocation conducted by the Construction Industry Institute have concluded that:

- The ideal, or most cost effective, contract is the one that assigns each risk to the party best equipped to manage and minimize that risk, recognizing the unique circumstances of the project.

- Each project should be assessed individually to determine, for each risk, the allocation considerations that will ultimately reduce the project's total cost of risk.

  (*Impact of Various Construction Contract Types and Clauses on Project Performance* 6, Construction Industry Institute (1986)).

These principles are well-documented and are widely accepted in the industry.

Many different adjectives have been used to define the nature and quality of the kind of risk allocation that achieves maximum economic efficiency. Some of the adjectives that have been used are "ideal," optimum," "wise," "smart," "balanced," "appropriate," "reasonable," "sensible," "equitable," and "fair." However, these terms have been criticized as being either too vague, too subjective, too judgmental, or too weak in a competitive business world.

We have come to the conclusion that the most accurate adjective to use is the word "realistic," because the true test of the quality of risk allocation provisions is the relationship they bear to the realities of the particular construction project and their impact on maintaining a productive working relationship among the relevant parties.

Why Should Risks Be Allocated Realistically?

Cost, Efficiency, and Dispute Control Benefits of Realistic Risk Allocation

Numerous construction industry studies have shown that realistic allocation of risks between parties involved in a construction project will improve efficiency, promote a much more positive working relationship between the parties, and reduce the overall cost of the project. The result in nearly all cases will be fewer disputes and a greater chance for project success.

Construction projects and their participants will benefit significantly from routinely taking a systematic, structured approach to risk allocation. It is axiomatic that realistic risk allocation should result in fewer misunderstandings and unfulfilled expectations, less acrimony, and therefore less time and money spent dealing with attempts to mitigate the adverse consequences of unanticipated risks. The end result is that many disputes will be avoided and others will be susceptible to resolution at the site. On the other hand, no form of alternative dispute resolution can overcome a fundamentally flawed allocation of risk.

It has been estimated that better contracting practices, of which risk identification and allocation are major components, can result in a 5% savings in the project's total cost. *Construction Risk Allocation and Cost-Effectiveness*, Construction Industry Institute Publication 5-1 (1986). More recent survey data from the Construction Industry Institute suggests that inappropriate allocation of risk results in at least a 3% contingency or risk premium in bids. *Equitable Risk Allocation*, Research Summary 210-1, Construction Industry Institute Research Team on Contracting to Appropriately Allocate Risk (2006). These increased costs can be saved by observing the principles of realistic risk allocation.

Dynamics and Impacts of Unrealistic Risk Allocation

Fixing the cost of the project at the outset and avoiding "surprises" has become an overriding objective of many owners and their lenders. Pursuit of these objectives has caused many owners to use their superior bargaining power to attempt to shift risks unrealistically to others (notably contractors and design professionals), without considering the potential consequences.

Owners' lawyers have sometimes unwittingly supported these objectives, without advising their clients of the potential adverse consequences that arise from misallocation of risks.

For better or worse, many contractors who are eager for new business, when dealing with owners whose contract terms are presented on a "take it or leave it" basis, are tempted to enter into contracts containing provisions which they and most fair-minded and objective persons would consider unrealistic and inequitable. However, contract documents with inappropriate allocations of risks send bidders the message that the owner does not honor accepted realistic risk allocation principles. This has been shown to cause bidders to include substantial risk contingency premiums in their bids, thus escalating all bids. Clauses which misallocate risks create an adversarial relationship on the project from the very start. Moreover, the owner who believes that it has successfully laid off to others risks which the owner should assume has less incentive to effectively manage the project. The resulting vacuum of project management has an adverse effect on the project.

As the parties build fences rather than bridges, the likelihood of legal conflict is greatly increased. In order to level the playing field contractors have sought increased legal assistance to pursue creative legal measures to recover what they thought were legitimate costs. They not only expand or develop new and imaginatively conceived tort theories, but also use more traditional contract theories of recovery. They also are tempted to disregard the risk-shifting provisions and to litigate with the owner or to sue other parties in the construction process for costs flowing from breach of duties under a tort or third party beneficiary theory.

When a risk materializes, the party that had shifted the risk hardens its position in an effort to retain what it perceives to be its contractually bargained-for right to have the other party bear the risk. The party to whom the risk was shifted, on the other hand, seeks ways to avoid bearing the consequences of misallocated risk.

Ironically, when those carefully drafted contract provisions are tested in arbitration or litigation they may not actually achieve the result envisioned by the contract drafter. For example, onerous site conditions clauses requiring contractors to assume risk for unforeseeable conditions and "no-damage-for-delay" clauses may not be enforced when the arbitrator or court considers that conditions are beyond the contemplation of the parties. Similarly, clauses that seek to require the contractor to assume liability for the owner's negligence are likely to be strictly construed and may be held void as against public policy. Moreover, juries are prone to release a contractor or subcontractor from a bargain that the jury considers grossly inequitable, particularly if inequality in bargaining power is perceived. Even arbitrators and judges are influenced by the same considerations.

The likely result of such unrealistic risk shifting is project trouble, if not failure.

Studies conducted by organizations interested in major construction, such as The Business Roundtable and the Construction Industry Institute (CII) (*Contract Risk Allocation and Cost Effectiveness*, Construction Industry Institute Publication 5-3 (1988)) have confirmed that the imposition of onerous contract conditions is not cost-effective because:

- it reduces contractor competition,
- it increases bid prices due to increased contractor contingencies,
- it causes a high-quality contractor to be replaced by a lesser-quality contractor who is more likely to unknowingly accept grossly inequitable risk allocation,
- it creates an adversarial owner-contractor relationship,
- it is more likely to increase requests for change orders and claims for extra compensation, and
- it increases the likelihood of disputes.

Disputes reduce efficiency, divert management resources, and incur the substantial transaction costs of hiring consultants and lawyers. The combination of these factors has an adverse impact on the project in terms of final product cost, quality, reputation, public relations, and ultimate project outcome.

In short, misallocation of risks is not cost effective. It is contrary to the interests of the party with superior bargaining power who dictates the misallocation of risk and to the success of the project or business enterprise. The conclusion is inescapable: imposing risks on contractors when they cannot manage or control them is a primary cause of construction disputes.

Examples of Major Risks that Are Sometimes Misallocated

A recent study by a CII Research Team (*Contracting to Appropriately Allocate Risk*, Construction Industry Institute Research Report 210-11 (2007)), identified a number of "hot-button" contract provisions that are most frequently allocated in an unrealistic and inappropriate manner. Following are some of the most troublesome examples:

Differing Site Conditions

Information such as subsurface data is commonly furnished to bidders. The contractor normally expects to assert a claim for extra compensation if actual conditions differ and cause additional expense. However, some owners seek to require the contractor to assume the risk of all differing site conditions in the contract.

If the existing site conditions are materially different from those that are indicated in the contract documents or from those expected by the contracting parties, the costs of performing the work, as well as costs of delays and mitigation efforts, can increase materially, and at an alarming rate. If the risk of differing site conditions is not adequately covered in the contract, the contractor may dramatically increase its contingency to account for the risk. The realistic way to allocate this risk is to have a differing site conditions clause which clearly and appropriately allocates the risk of encountering such conditions.

Force Majeure

Often contracting parties will rely on insurance companies to provide protection from force majeure ("Acts of God) events. However, the potential for insurance company insolvency in the case of a force majeure event – such as the catastrophic damage to the U.S. Gulf Coast in August-September 2005 from Hurricanes Katrina and Rita -- makes it even more important that the contract documents clearly address the risk factors surrounding force majeure events. Force majeure events should be clearly and unambiguously defined, along with the allowable compensation, in order to eliminate the risk for potential disputes.

No Damages for Delay

Contractors typically base their bids on the assumption that they will have full access to the site and that the owner will not interfere with the contractor's work schedule. Delay in completion of the contractor's work can cause substantial additional cost to the contractor. When delay is caused by the owner or other contractors hired by the owner, the contractor normally expects reimbursement of such additional costs. Some owners attempt to include contract clauses that severely limit or exclude recovery of damages for owner-caused delays, called "no damages for delay" clauses. Exacerbating the problem, the primary contractor also may attempt to shift the risk of contractor-caused delay damages onto lower-tier sub-contracted parties with similar clauses. As a result, lower-tier parties may be forced to assume the majority of the financial responsibility for all delays on a project. Few subcontractors can survive the likely consequences if a project were severely delayed. The U.S. judicial system has frowned upon the inclusion of "no damages for delay" clauses since such clauses attempt to shift the responsibility for wrong- doings from the higher-tier to lower-tier parties.

Consequential Damages

Many construction projects have the potential to produce high indirect or special damages, commonly referred to as consequential damages, which are frequently associated with delay. Consequential damages for an owner include loss of business reputation, loss of revenue, and loss of beneficial occupancy that can arise from delay. Consequential damages for a contractor include loss of business reputation, loss of potential business, and loss of advantageous weather conditions in which to perform construction work. Many owners feel that contractors have a low incentive to perform in a timely manner if the contract waives the owner's right to its consequential damages. In contrast, many contractors feel that it is inequitable for owners to attempt to hold the contractor responsible for consequential damages that could reach excessive amounts and drive the contractor out of business.

Indemnification of the Owner

Since the contractor is in control of the project site and responsible for job site safety, it is reasonable to expect the contractor to indemnify the owner against claims of personal injury at the job site by employees of the contractor and its subcontractors, without regard to fault on the part of the owner. However, many indemnification clauses now require the contractor to hold the owner harmless against all third party claims, including injuries and property damage to third parties caused in whole or in part by the owner's negligence over which the contractor has no control. In these cases, even if the owner is 100 percent responsible for the damaging event, the contractor could be forced to indemnify the owner.

In some states, indemnification clauses are not legally enforceable due to "anti-indemnification" statutes. Elsewhere, contractors try to avoid indemnification clauses that provide full indemnification for the owner without qualification. Some owners feel that indemnification clauses that provide mutual, comparative indemnification for both contractors and owners are unfair to owners since there is a higher likelihood that a contractor employee will be injured than an owner employee. Owners know that if a contractor employee is injured, the contractor's responsibility is usually limited by worker's compensation statutes. So, even if the owner is responsible for only part of the injuring event, it may end up paying for the majority of the loss.

Due to the potential for personal injury lawsuits to reach millions of dollars, it is imperative that indemnity clauses are equitably and cooperatively drafted.

Ambiguous Criteria for Acceptance of Work

If a contract contains ambiguous acceptance criteria (especially troubling in design-build and process-oriented contracts), costs can increase quickly. Frequently, acceptance criteria may include phrases that specify that the work be completed so that it is "fit for the purpose" or "to the owner's satisfaction." This can lead to a situation where the contractor may feel that it has achieved the acceptance criteria, but the owner views the contractor's performance as falling well short of acceptance. Some contractors feel that ambiguously defined acceptance criteria can lead to the owner using the punch list as a "catch-all" to modify or fine-tune the design to make it "acceptable." All parties will benefit when the acceptance criteria avoid qualitative statements and contain measurable, quantitative criteria.

New or Unfamiliar Technology

With new or unfamiliar technology, it is important that the risk of its performance is appropriately allocated in the event of failure. Contractors do not want to take on responsibility for owner-specified technology that the contractor has never before encountered. However, when the contractor chooses to employ new technology in its means and methods, the contractor should retain the associated risks. Although it may seem clear which party should take the responsibility for new or unfamiliar technology, contracts often do not clearly specify how this risk should be allocated. As technology in the construction industry advances, it will become increasingly important that the functionality risk of new technology is properly allocated.

Schedule Acceleration

Accelerating the schedule can quickly increase costs. Contractors feel that clauses that allow the owner to mandate acceleration at any time without providing relief from resulting indirect costs due to lost productivity are inappropriate. Owners feel that there should be a limitation on the indirect costs that contractors are allowed in case of acceleration. Ultimately, many projects have fixed end dates. It is important that compensation for mandated, constructive, and recovery acceleration costs are appropriately specified up front in the contract documents since there is a high likelihood that acceleration efforts will be required on many projects.

Suggested Methodology for Systematically Addressing Risk Allocation

During the course of negotiating and drafting a construction contract, good practice would be to address risks in the following logical categories:

- Risks of availability of resources and project pre-requisites that are fundamental to the viability of the project.
- Risks arising out of the performance of participants in the project.
- Risks that arise from influences and sources outside the project participants.

The following three tables identify and allocate some of the more commonly-experienced risks in these categories.

Table A: Allocating Resource and Project Pre-requisite Risks

Risk	To whom allocated & why	How allocated/mitigated
Adequacy of Project Funding	Owner—it's the owner's project	Include contract language giving the contractor the right to confirm availability of funds
Adequacy of Labor Force	Contractor—can best assess at time of bidding	Owner should consider known labor shortage in a particular trade (e.g., ironworkers) in making decisions on alternate materials; owner should consider projected surplus/ shortage in determining project performance time
Permits and Licenses	Shared—both parties have some ability to control	Owner should identify all requirements to extent possible; contractor has some lead role in compliance
Site Access	Owner—it's the owner's site	Owner should identify requirements early and then delineate site availability/ constraints in bidding documents

Table B: Allocating Performance Related Risks

Risk	To whom allocated &why	How allocated/mitigated
Inadequate Plans	Owner—funds design	Retain a qualified design professional; fund adequate design effort
Underestimation of Costs	Contractor—controllable	Use a competent estimating staff
Owner-furnished Material and Equipment	Owner—elects to use this method	Preplan for purchases, expediting; include contractual remedies for quality or delay problems
Contractor-furnished Material and Equipment	Contractor—typical scenario	Preplan for purchases, expediting; use remedies from vendors

Means and Methods of Construction	Contractor—area of expertise	Use/follow "standard" language
Delay in Presenting Problems	Claiming party—controls ability to give notice	Use/follow/enforce notice provisions
Delay in Addressing and Solving Problems	Party receiving claim—has obligation to respond	Delegate decision-making authority; empowerment
Subsurface Conditions	Owner—owns site	Use a differing site conditions clause; eliminate disclaimers on geotechnical data
Worker and Site Safety	Contractor—controls means/methods	Use clear contract language assigning responsibility

Table C: Allocating Outside Influence-Type Risks

Risk	*To whom allocated & why*	*How allocated/mitigated*
Governmental Acts	Shared—not foreseeable or controllable	Include a suspension of work clause
Adverse Weather	Shared—not foreseeable or controllable	Include a time extension clause
Acts of God	Shared—not foreseeable or controllable	Include a time extension clause
Cost Escalation	Shared—not foreseeable or controllable	Provide a contractual formula to pay escalation on long term contracts

Principal Barriers to the Implementation of Realistic Risk Allocation

Despite wide industry experience with the principles of realistic risk allocation, construction owners have been slow to adopt and apply recognized risk allocation principles, even as implementation methodologies have progressed.

The principal barrier to broad implementation of beneficial risk allocation practices is the challenge of educating owners and their lawyers to the realities of construction risks and the advantages of realistic risk allocation practices. Many owners are the least experienced members of the construction team in the realities of construction. These include "one time" or "occasional" owners. Even experienced owners, however, resist implementing appropriate risk allocation, sometimes for fear of political criticism or fallout, sometimes by virtue of institutional inertia. For example, it took Congress to have differing site conditions and suspension of work clauses included in federally-assisted highway projects. Owners whose businesses involve selling products may feel that construction is simply another "commodity" to be purchased at the lowest price possible. Many owners' lawyers, considering themselves advocates rather than counselors, and having been taught to represent their clients "zealously," may seek to "get the best deal for the client" when drafting or negotiating the contract, not realizing that "winning the battle of the contract negotiation" can often result in "losing the war" in terms of overall success of the project.

Special Considerations

(The first two topics in this section have been adapted, with permission, from Andrew Blumenfeld, *"Equitable Risk Allocation," Proceedings of Forum* on *Reducing Construction Costs: Uses of "Best Dispute Resolution Practices" by Project Owners*, National Academies Press 2007.)

The Role of Leverage

Unrealistic allocations of risk typically occur from the exercise of leverage by an owner or general contractor. However, owners and general contractors may not fully appreciate the reality that leverage in a construction project, particularly a big construction project, shifts over time, often bringing about unanticipated consequences.

In the solicitation and award phase of a project, the owner has all the leverage. The owner can dictate the contract type, the specifications, the project delivery method, who can bid (based on past performance, bonding or other factors), the award criteria (low bid, best value), and allocations of risk through specific contract clauses.

When the owner awards the contract to the general contractor, leverage then shifts to the general contractor, who then selects the subcontractors and suppliers. The general contractor can choose whether or not to honor the subcontractors' pre-award bids, he may "shop" the bids, or adjust significant terms and conditions. In many cases, the subcontractors are relatively powerless at this point and are faced with a "take-it-or-leave-it" contract.

However, misuse of leverage by the owner or general contractor can have unintended consequences. Once the general contractor completes "buying out the job" and awards the subcontractor and supply contracts, the leverage then shifts from the general contractor to the subcontractors, who are responsible, during the mobilization and construction phases of the project, for delivering a significant portion of the job. If the general contractor has used subcontractors badly during the period when the general contractor had the leverage, the subcontractors may feel the need to recover losses through change orders and claims.

Therefore owners and general contractors need to consider the effect of overreaching use of leverage, particularly when one considers the relative time periods when the different parties have maximum leverage:

- The period between solicitation and award, when the owner has the leverage, is generally a very brief three months.
- The period from contract award to completion of buy-out, when the general contractor has the leverage, is generally even shorter – perhaps one to two months.
- But the period from buy-out to completion of construction -- the remainder of the project time, which may be a year or more -- is the period when the subcontractors have the leverage.

Consequently an owner or general contractor should not be surprised if subcontractors who have been treated unfairly "return the favor," demonstrating that "what goes around, comes around."

Best Practices for Project Owners and Contractors

The parties to construction contracts should, as a part of the wise allocation of their respective roles on the project, observe the following additional wise risk allocation practices:

Owners should:

- Develop concise specifications and drawings based on national codes.

- Use commercial standards to the extent possible; unique requirements discourage good contractors from bidding. For example, contract clauses that require contractors to "match existing" or to use a brand name "or equal" product have proven to be one of the leading causes of claims and disputes. If you are the owner and you have no intention of accepting other than the cited product, just say so.
- Pay invoices in a timely manner to avoid friction at the job site; cash flow is a contractor's life blood.
- Provide adequate authority at the job site so that decisions can be made quickly when something unexpected happens.(See CPR Briefing: Dispute Review Boards)
- Speak with one voice.
- Safeguard the critical path by:
    - providing clear and timely direction to the general contractor,
    - providing timely responses to requests for information, and
    - clearly acknowledging changes in the contract scope in writing.
- "Fix the problem" before trying to "fix the blame." When resolving issues that affect the critical path, hold two separate meetings with the contractor: the first meeting should be dedicated solely to finding a solution, with no discussion of fault or payment, so that the problem can be fixed; then, a second meeting can be held to discuss "who pays."

Contractors should:

- Manage and coordinate subcontractors proactively.
  .
- Maintain project continuity by:
    - involving the project manager in bid preparation, and
    - avoiding staff reassignments before substantial completion.

- Avoid frivolous changes; carefully screen subcontractors' proposed changes and their costs; establish a minimum change value; control indirect costs (general conditions, home office overhead, cumulative markups.) Offer solutions, not just descriptions, when unexpected problems arise on the critical path. When dealing with subcontractors on changes that affect the critical path, just as in the case of owner-contractor dealings, hold separate meetings: first, focus on fixing the problem; later the parties can address the subject of fixing the blame.

Applicability of Realistic Risk Allocation to Other Business Contexts

In the two-party transactions which are customary in the general business world, it may not make a difference to anyone other than the two parties involved if the party with superior bargaining power shifts risks to the other party who can't control them. However, even in two-party transactions, misallocated risks can become breeding grounds for problems that can disrupt any business transaction and create disagreements that end up in conflict. To avoid these disputes, particularly in any business relationship which is of long duration or involves repeated transactions, or where the success of the relationship has an impact on third parties, there are distinct advantages to having a balanced relationship where both parties profit. In multiple-party enterprises, realistic assignments of risk are essential to the maintenance of healthy relationships.

Summary

This monograph has described the conclusions of industry studies, addressed some specific construction contract risk allocation problems, and recommended approaches which allocate risks in a rational and realistic manner. Important "takeaways" are:

- Responsibility for each potential risk should be assigned to the participant in the construction project who can best manage or control the risk.

- Those risks which are beyond the control of both of the contracting parties (such as unusually severe weather) should best be shared.

- Improper allocations of risk hamper efficiency, increase the likelihood of disputes, and can result in increased total project costs.

- Structured risk management procedures during the pre-contract and contract phase of a project will reduce overall project costs.

- Adoption and use of structured risk identification, evaluation, allocation, and management processes is a "best practice.".