1 International Construction Projects

1.1 The unique nature of the construction industry

The construction industry does not have clearly defined borders and its characteristics range from simple to complex. Construction supplies basic materials (such as aggregate, cement, steel reinforcement, and pre-packaged mixtures) right up to cutting-edge technology developed and used by experts. The industry has contributed to, and is a vital element of, almost everything we see around us. For example, the diversion of water courses, land reclamation, houses, shopping centers, offices, factories, health care facilities, and large infrastructure-related civil engineering works such as bridges, tunnels, highways, airports, and harbors. Others installations include water treatment plants, dams, nuclear power plants, wind power plants, and projects in the field of electricity generation. The contribution made by the construction of factories, warehouses, and production lines that serve other industries, (including mining and research centres) cannot be ignored. The particular activities relate not only to new construction works, but also repairs, extensions, reconstructions, and demolitions.

The diverse nature of the construction industry reflects the complexity of contemporary society as a whole, leading then to necessary specialization of particular activities in construction. A construction project is further composed of complex processes, services, and supplies reaching beyond the scope of this industry alone. For example, insurance, financing, bonds and guarantees, purchase of plant and equipment, security guards, operations, and maintenance of work processes.

1.2 Individuality of construction projects

A construction project is a specific process or, rather, a sum of many processes. Mostly, it is an individual process. There are variables relating to the positions of its participants, their assignments and relationships, external conditions (concerning the economy, the nature of the site, climatic conditions, project risk, and
hazard levels in general), project management and delivery methods, procurement methods, and public support.

Construction projects face hazards of various kinds, caused either by humans or natural elements. Therefore, people, time and environmental elements play a major part here. The construction project itself tends to be a unique setup of processes with unpredictable impacts caused by individual hazards. For large construction projects, their duration will often exceed two years. These projects are realized over extensive areas and are often difficult to safeguard perfectly. Therefore, a construction project is not a production line you can just program to smoothly create a product, within a well-defined time, quality, and financial outlay.

Design errors, extremely adverse climatic conditions, unforeseeable on-site conditions in physical or social terms, site access-related issues, building permit problems, delays due to the requirements of environmentalists, and variations are just some examples of potential complications.

Effective risk management must be the aim of everyone involved in a construction project. In other words, to identify patterns and potential problems, variations, hazards, and risks in order to manage them effectively. This can only be achieved through the perfect preparation of each particular project. This is the theory.

However, in practice, the lowest bid price tends to be the most important criterion in public tender evaluations nowadays. This is also a reason why contracts (for works or for design) that determine particular project relations must anticipate and involve transparent, efficient, and reasonable solutions to potential problems and complications.

1.3 Roles and relationships

In the course of time, five main groups of construction project participants have emerged as major players in the construction industry. These groups are directly involved in construction projects or have an influence or a particular function within the industry. They are the contractors, designers, regulators, employers and users (Murdoch and Hughes, 2008). Lenders (banks), insurance, and reinsurance companies must also be mentioned as further (indirect) construction project participants because of their significant influence on construction projects. We will now discuss these important roles in the construction project.

1.3.1 Contractors

Most frequently, contractors can be encountered as either global or local construction companies. Construction companies differ in specialization and size—from small contractors for specialized activities up to supranational organizations that enjoy major industrial and political influence.

In the field of large construction projects, contractors often collaborate within joint ventures, setting up delivery chains at numerous levels. A general contractor enters into relationships with the subcontractors who further delegate parts of their obligations down to other specialized trade contractors, and so on down
1. International Construction Projects

the chain. A particular delivery method will influence the positions of the individual contractors.

1.3.2 Designers

The role of a designer is to provide the employer with solutions, drawings, and specifications. Working on a construction project, the designer will often provide project management, contract administration and supervision services to the employer. When hearing the word “designer,” one usually imagines an individual, but less often a company providing the services in support of construction project realization. Today, the latter prevails, as design works becomes ever more demanding and too large to be dealt with by an individual on their own.

1.3.3 Regulators

In the construction industry, regulators apply their professional expertise, for example, in the following areas:

- land planning and related processes;
- building permit applications;
- health and safety;
- environmental issues;
- quality assurance;
- to ensure fair business competition; and
- to ensure proper management of public resources.

1.3.4 Employers

Project realization by the contractor is a service to the employer. Someone about to build a house for their family may be an employer. A developer, who is funding a shopping center construction to sell to potential operators, may be an employer. The employer themselves may be a future owner or an operator.

A taxpayer, who is financing public projects via a public authority in the fields of transportation, infrastructure, construction of prisons, health care facilities, and so on, can also be considered an employer. An employer’s characteristics depend, therefore, on whether the related funds are public or private. Significant differences between the private and public employers can be encountered. For example, in France, the contractor cannot suspend the works if the employer does not pay for the works performed in a public project. The so-called “l’exception d’inexécution” known in private projects in France cannot be used. According to Article 48-3 CCAG Travaux 1976, the contractor can suspend the works only after three unpaid monthly invoices (Wyckoff, 2010).

In contracts, the employer is often referred to as “the owner,” “the buyer” or “the client,” and so on. For the purposes of this book, we will mainly use the term “the employer.”
1.3.5 Users

All of us are users of products that are the result of construction efforts—whether we like it or not. Our views on construction projects are often subjective and vary for many different reasons. Other vital aspects are how the public perceive the inconvenience and nuisance that can occur during the course of construction or if the public really think that there is a need for a particular building. Specific traditions and cultural influences of the relevant society are a significant factor as well.

As a field of activity, the construction industry is traditionally burdened by uncertainties that may cause distrust between the employer and the user.

1.4 Contract administration

Construction contracts are different from other commercial agreements because of the high degree of uncertainty. While the contract documents will provide a definition of the scope of works to be performed, a high degree of project complexity still leaves a lot of room for uncertainty along the way to the final result. This makes the task of administering the contract an important part of the larger process of “managing uncertainty.”

Furthermore, the question of “moral hazard” is sometimes mentioned (Winch, 2010), that is, the difficulties the employer can face in ensuring that the contractor will perform the contract in good faith and bring it to its desired outcome. As a rule, the contractor possesses better technical and managerial skills than the employer. The absence of a proper contract that will provide clear terms and procedures regarding all relevant aspects and an efficient risk allocation may leave the less-informed employer exposed to the risks associated with moral hazard and suffering from a potentially severe compromise regarding the desired outcome.

On the other hand, large public procurement construction projects are often accompanied by political irresponsibility on the employer’s side, mainly when problems are encountered. Nobody wants to be responsible for cost overruns and delays. To avoid responsibility, employers sometimes shift the risk of negative consequences of badly prepared projects onto contractors (e.g., delayed expropriation risk or bad ground conditions risk in underground works). Such “one-sided contracts” actually negatively affect the smooth implementation of projects and consequently are considered disadvantageous to the borrowers due, among other things, to the late completion of the project (JICA, 2011). If this is done systematically, it is also dangerous for society. From a socioeconomic point of view, it leads to frustration and a waste of resources in the short term and more expensive construction works and damage to the local economy over the long term.

Corruption is another “moral hazard,” which is much more serious and can cause damages to the construction industry as a whole.

There are certain well-known rules of risk allocation. The ultimate rule is that risk allocation must be efficient and if there is a non-insurable risk that is hard to quantify, the risk should be borne by the one who bears the majority benefit. It is self-evident who bears the majority benefit if it is a public construction project. In this case, it is the employer and the users. Furthermore, the state as an employer is
often the stronger party (applying a take it or leave it approach to contracts). Thus it seems to be appropriate to apply the principles of protection of the weaker party (the contractor) in such public construction projects.

Another principle that must be stressed is the principle of good faith protection. The governing law usually does not protect the one who is not fair, misuses their position and, as in the case of public employers, invites contractors to deliver projects where risks are speculatively shifted onto contractors and the terms of reference of the particular contract happens to be a sophisticated trap.

Another problem seems to be the fact that international contract forms are often “imported” to developing countries. Naturally they are less familiar to the local employers in both legal terms and working procedures (Banica, 2013). Employers in both the private and public sectors do not pay enough attention to the uneven knowledge asymmetry when facing and entering an agreement with a contractor, as well as to the need to manage this risk through contractual means and by employing a consultant as contract administrator or project manager. Employers tend to show an exaggerated optimism and focus extensively on establishing an initial contract price, without a clear understanding of the importance of setting clear rules regarding the management of change, regardless of the source of the change such as claims, variations, disputes, additional work, and so on (Banica, 2013).

Add to this the fact that the construction industry in developing countries (still in the first stages of modernization) has not yet formed a body of knowledge or produced a significant number of contract managers/consultants familiar with international contracting and procurement practice and the local specificities and working culture (Banica, 2013).

The position of the “contract administrator” is of key importance. A contract administrator hired by the employer on a professional service agreement basis deals with coordination, monitoring, supervision of compliance with standards, certifies the works done, testing, taking over, participates in variation, price and time management, claim evaluation, contract interpretation, and dispute avoidance. They should help to complete a successful project in a fair way and in accordance with the contract, achieving the demanded standard in the agreed time and for the agreed price.

The contract by itself is not enough to solve the problem of moral hazard and the asymmetry of knowledge between the employer and the contractor. The second key element required is the presence of a third contractual party—namely, the contract administrator (Banica, 2013).

In terms of contract administration, there are three usual arrangements in force:

- The “engineer” as an employer’s agent, whose job is to monitor and supervise the work, whose duty is to make fair determinations on certain matters (e.g., on claims for extension of time and additional payments; see an example of such determination in Appendix B). The engineer issues certificates on payments, taking over, and performance.
- The employer’s representative where the contract is administered directly by the employer or its representative. This is often the case in small projects or under EPC or PPP project with large shift of risk to the contractor.
• The construction manager as an employer’s agent hired to coordinate all processes on a professional service agreement basis without direct responsibility for design and works (see Chapter 3).

1.4.1 The Engineer

The engineer’s rights and duties consist simultaneously of two parts. The first is acting on the employer’s behalf, where the contractor can take the engineer’s conduct as the employer’s conduct and misconduct (such as the engineer’s instructions regarding variations). Acting in their second role, the engineer is an impartial third party who is professionally skilled to maintain an equitable balance between the contractor and the employer (such as in settling disputes). The independence of the engineer (an entity/person appointed and funded by the employer), often becomes the topic of numerous debates. It is in the interests of all construction project participants to ascertain and clarify the engineer’s competencies to limit disputes about who will, in fact, act as the engineer on a particular project. The question, “What are the attributes of the engineer and when can a party be said to have tacitly accepted someone as the engineer?” (ICC, 2009) was answered, for example, in the ICC case no. 10892 (the tribunal found that the engineer was the employer itself in this case).

A competent engineer (allowed to do their work by the employer) is in many cases a mandatory prerequisite for a successful construction project. A company or a group of consulting engineers and designers are mostly acting in the role of “engineer.” Their specific representatives have to be appointed for particular activities. An engineer can also be an employee of the employer, but this may be a problematic approach in practice. In respect of this, Jaeger and Hök (2010, p. 222) refer to a decision of the Arbitration Court of the International Chamber of Commerce. In this case, the arbitrators dealt with the replacement of the engineer with an employee of the employer (where the employer was a statutory body). According to the arbitrators, this replacement resulted in contract frustration. The authors support the view that it is unacceptable for the employer and the engineer to come from the same organization. However, in this case, the International Federation of Consulting Engineers (FIDIC) conditions included an express impartiality clause.

As a rule, the engineer’s individual rights and duties are assigned by a particular agreement with the employer. The engineer is typically entitled to give the contractor instructions related to work executed (and to remedy any defects) and the contractor is obliged to follow their instructions. The engineer must usually, for example, clarify any ambiguities and discrepancies should they appear in the contract. But it is not within the engineer’s powers to change the contract—they are not, therefore, empowered to relieve either of the parties of their duties, commitments, or responsibilities arising from the contract. Their assignment does not exempt the contractor from any liability they have under the contract.

The engineer should be a professional with all necessary skills and experience, and have a good knowledge of the contract and contractual procedures (e.g., methods of re-measurement, extension of time procedures, and so on). The engineer should be able to foresee all legal, commercial, and technical consequences of their instructions, particularly those that lead to variations. They should be able to fairly evaluate
the adequacy of new rates or prices where it is necessary to create them. The engineer should also be able to fairly determine—in terms of claims—additional payment or extensions of time for completion (Jaeger and Hök, 2010).

According to the FIDIC CONS MDB/Red Book (2005 MDB Edition), the engineer has the following roles (JICA, 2011):

1. **Employer’s agent**: the engineer provides the following services to conduct the contract management:
   - production of detailed design drawings under Sub-Clause 1.9;
   - issuance of instructions for variation of the works under Sub-Clause 13.1;
   - review of plans and drawings submitted by the contractor under Sub-Clause 4.1;
   - carrying out project management services including time and cost management, quality control, testing and inspection, safety and environmental management under various Sub-Clauses especially 8.3, 13, 7, 9, and 4.9.

2. **Certifier**: the engineer issues various certificates certifying the quality of the contractor’s performance and payment is therefore at the engineer’s discretion. The engineer’s certificates have a strong binding effect on both the employer and the contractor. Examples of certificates follow:
   - taking over certificate under Sub-Clause 10.1;
   - certification of work completion date under Sub-Clause 11.9;
   - interim payment certificate under Sub-Clause 14.6;
   - defect liability certificate under Sub-Clause 4.9;
   - final payment certificate under Sub-Clause 14.13.

3. **Determiner in claim settlement**: The contractor and the employer have a right to claim settlement from the engineer. The engineer should consult with both parties on the matter in question based on Sub-Clause 3.5 in order to come to an agreement. If the consultation reaches an impasse, a fair determination should be made based on the contract.

### 1.4.2 The Engineer’s certifications and fair determinations

Within the scope of their activities, the engineer can issue various types of certificates. The FIDIC forms, for example, presume numerous certificates. These include mentioned interim payment certificates, final payment certificates, taking over certificates, and performance certificates. Pursuant to the FIDIC forms, any approval, check, certificate, consent, examination, inspection, instruction, notice, proposal, request, test, or similar act by the engineer (including absence of disapproval) shall not relieve the contractor of any responsibility they have under the contract. This includes responsibility for errors, omissions, discrepancies and non-compliances. Pursuant to FIDIC forms, for example, it further applies that the engineer may, in either of the payment certificates, make any correction or modification that should have properly been made to any previous payment certificate. A payment certificate alone shall not be deemed to indicate the engineer’s acceptance, approval, consent, or satisfaction.

Under FIDIC, whenever the employer or the contractor submits a claim, the engineer is required, in the first instance, to mediate between the parties to facilitate
agreement. If the parties cannot agree, the engineer must make “a fair determination in accordance with the contract, taking due regard of all relevant circumstances.” Accordingly, any determination must express the rights and obligations of the parties in accordance with the contract and applicable law, irrespective of any preference expressed, or pressure exerted by either party.

In terms of engineer certifications, it is very interesting to compare the opinions of lawyers from different countries (available at: http://globalarbitrationreview.com) who responded to the following questions:

1. When must a certifier under a construction contract act impartially, fairly, and honestly?
2. To what extent are the parties bound by certificates (where the contract does not expressly empower a court or arbitral tribunal to open up, review, and revise certificates)?
3. Can the contractor bring proceedings directly against the certifier?

- **England and Wales**: Where a person is employed by the employer under a construction contract to issue certificates or make decisions as part of the administration of the contract, he is required to act in accordance with the contract, fairly and impartially, and holds the balance between the employer and the contractor. Whether or not a certificate is binding and conclusive will depend upon the interpretation of the contract as a whole. If the contract, properly interpreted, provides that a certificate is to be binding and conclusive, the grounds for attacking such a certificate are much narrower. Inclusion of an express power for arbitrators to open up, review, and revise certificates is necessary if arbitrators are to have that power. By contrast, no express wording is required in order for the courts to have the power to open up, review and revise certificates, and so on. Nevertheless, the absence of the open-up review and revised wording does not necessarily mean that the certificate cannot be challenged in arbitration. Unless the contract provides that a certificate is to be binding and conclusive, it can be attacked on various grounds, including where the certifier acted outside his jurisdiction, dishonestly or partially in issuing the certificate or where the certificate is otherwise defective as a matter of form, substance or intent.

Where the certificate can be opened up, reviewed, revised, or otherwise challenged, the contractor will, unlikely, have a cause of action directly against the certifier. Absent the ability to challenge certificates, it is possible that the contractor may be able to proceed directly against the certifier but the contractor would have to show that the certifier owed it a duty of care in issuing the certificate and that the certifier was in breach of that duty. This will depend upon the facts (Choat and Long at globalarbitrationreview.com).

- **France**: Architects or engineers who verify payment certificates as part of their supervision of the works must act with due care within the scope defined in their contract with the employer. The extent to which parties are bound by certificates will generally depend on contractual terms. Where there is an over-certification of payments, the certifier may be held jointly liable with the contractor. Administrative case law also shows that a contractor can bring proceedings against the certifier (Gillion and Rosher at globalarbitrationreview.com).
• **Germany:** A certifier under the construction contract is obligated to act impartially, fairly and honestly. Such obligation derives from its mandate/contract with the parties and—depending on the nature of the certifier—from its administrative duties deriving from his or her official role as (state-certified) certifier. The parties are generally not bound by certificates, but may have them reviewed under the construction contract’s dispute resolution regime. Claims may be brought against the certifier him or herself outside of the contract by both the contractor and the employer as obligations and duties of care are created through the mandate to certify certain facts in connection with the construction contract (Kremer at http://globalarbitrationreview.com).

• **Ireland:** There is an implied contractual obligation for the certifier to act independently, fairly and impartially as between the contractor and the employer. It is not unusual in Ireland for the employer to appoint an employee within its organization as an employer’s representative and certifier under the construction contract. The commonly held position in Ireland prior to 2007 was that a contractor was entitled to enforce an interim payment certificate by way of summary judgment as a debt due. Following the decision of the Irish High Court in *Moohan & Bradley Construction Limited v. S&R Motors Limited* (2007), contractors operating under the standard RIAI contract terms can no longer rely on being awarded summary judgment in court on interim certificates where a valid defence is raised. In such cases, even where judgment is granted, the execution of that judgment may be stayed pending the outcome of an arbitration hearing on all the issues between the parties (Killoran, O’Higgins, and Cooney at http://globalarbitrationreview.com).

• **Korea:** (1) A certifier or an engineer is administered under the *Construction Technology Management Act* (“the Act”), which categorizes the work scope of a certifier into three different areas: design, inspection and survey, and construction. The Act requires any certifier to act honestly, with dignity and in the interest of quality improvement. (2) The parties are bound by certificates to the extent required by the contract, but these are not mandatory requirements for the completion of the works under the contract. (3) The contractor may bring proceedings directly against a certifier based on wrongful conduct and is able to claim damages for tort liabilities, which is also stipulated in the Act (Oh and Park at http://globalarbitrationreview.com).

### 1.4.3 The Engineer’s responsibilities and liabilities

Under the conditions of the contract with their employer, the engineer is responsible for the duties they undertake (designer, agent, supervisor, certifier, adjudicator). The engineer under FIDIC forms owes a duty of care also to the contractor in exercising their discretion in a neutral manner within the terms of the contract, and having regard to all circumstances. This duty of care exists alongside the other duties which may be imposed in tort under the governing law in order to avoid causing physical loss or damage or, in some cases, economic loss, with or without physical damage. The engineer may be responsible (and liable) for negligent design and supervision, negligent under-certification, negligent statements and instructions,
lack of cooperation, lack of prevention of damage, and so on. The engineer is also responsible against third parties. The potential liability and the form and extent of liability depend on the governing law (Bunni, 2005).

Engineer’s power to re-rate due to substantial increase in BoQ quantities by Albert Yeu (Hong Kong)

It has long been a debate in remeasurement contracts about the use of bills of quantities rates in valuation of variations, omitted BoQ items, and sometimes change of contract scope. In a standard government form for civil engineering works, a term provides that “should the actual quantity of work executed in the contract be substantially greater or less than that stated in the bills of quantities and if in the opinion of the engineer such increase or decrease shall render the rate unreasonable or inapplicable, the engineer shall determine as appropriate increase or decrease of the rate of the item using the bills of quantities rate as the basis.”

What amounts to a substantial increase or decrease is not defined and sometimes elusive. In an appellate case The Secretary for Justice v. Sun Fook Kong (Civil) Limited (HCCT 94/1997), the court supported the arbitrator’s narrow interpretation of substantial increase or decrease in relation to the method of working or the economics of a working method. The arbitrator said that, in order to justify a re-rate, the engineer would have to be satisfied that, as a result of the change in quantities, there was a change in the method of working of which change itself led to a saving in costs. The court supported that if there had been no change in the method of working, it is difficult to see how there could be any change in the economics of a working method. The only legitimate basis for decreasing a BQ rate was that the increase in the quantity decreased the actual costs of the contractor. So the profit margin of the unit item shall not be altered.

The other contention was about one cubic meter BQ items against actually quantities at least 20 times higher. The arbitrator equally concluded the quantities were not substantially higher and no reason found to re-rate. The court disagreed with this finding but did not grant leave of the appeal unless the question of law concerned could substantially affect the rights of one or more of the parties. The court presupposed the same arbitral judgment if the arbitral award were to be remitted to the arbitrator to decide on the merits of change of method of working.

In another appellate case Maeda Corp v. Government of HKSAR (CACV 230/2011), the situation reversed. Here, the arbitrator ordered discovery of a rate buildup and concluded that the increase in quantity rendered the application of the original rate both unreasonable and inapplicable. He took the view that if there is an obvious increase in quantity, an obvious disproportion between the rate and the nature of the work covered by the rate, a composite nature of the item and an uncertainty as to what costs the rate included, then to apply such rate to a significantly increase or decrease in quantity of work will be unreasonable since the contractor will be over-reimbursed in the case of an increase in quantity or under-reimbursed in the case of a decrease in quantity. The court found for the arbitrator’s inquiry as to the buildup of the rate was reasonable. It did not reconcile with the method of working or economics of working method as contributing factors toward the re-rate power.

To bridge the gap, it is the pro-arbitration nature of Hong Kong courts that reinforces Hong Kong’s position as an attractive seat for commercial dispute resolution. The courts uphold the independence and finality of arbitration and the minimum court intervention objective of the
arbitration law. When a tribunal takes an inquisitorial role to open up a composite rate to find the pricing intention, it is not easy for the court to find a serious doubt in this exercise or it is obviously wrong to do so, where the Arbitration Ordinance (Cap. 341) confers the court this power to interfere the arbitral proceedings on the ground of errors of law. The result was favored by the limiting courts interference rather than an analysis of a point of law and might have been different if the arbitrator did not order a discovery of the tender breakdown. However, it will jeopardize uncertainty of the law if the decision is reversed just because the tender breakdown is available in one case but not another. A persisting battle on varying a tender rate will continue between one of these cases with the tribunal’s power to order discovery of documents conferred by the Arbitration Ordinance.

Albert Yeu
Chartered Civil Engineer, HKIAC Arbitrator
KLRCA Adjudicator, HKMAAC Mediator
Expert Witness

1.5 Further important aspects of construction projects

A construction project is a temporary configuration of processes—a temporary multi-organization. Every construction project will bring together large numbers of people in their joint efforts who are aware of the temporary nature of the project. Large numbers of professionals and specialists cooperate within every construction project.

Employers, designers, and contractors are the most frequent, direct participants in construction projects. Large construction projects also have large numbers of employed people representing these direct participants. Each of them is an employee of an organization and, frequently, a member of a professional association with different interests, roles and priorities. It is therefore important to set up an efficient method of management and organization within a particular project to help create a common synergy for construction project success. It is equally important to establish a certain positive social atmosphere to help overcome problems that accompany every construction project.

A typical yet important issue that often arises is a change in the function of the engineer, contractor, or employer’s representatives over the course of the project. The removal or replacement of a vital project management position can cause confusion and lead to technical complications, contract price increases, and delays.

Representatives of construction project participants have various levels of knowledge, different specializations, and varying interests. As a result, the competency and authority of these parties may be unclear. When things go wrong, it is not unusual for some people to avoid responsibility completely and for others to unfairly get the blame. It is extremely difficult to harmonize the interests of all participants.

It must be remembered that the duty to deliver value for money, quality, and timeliness prevails over individual interests.
1.5.1 Overlap of construction project phases

Three phases of a construction project can be distinguished: preparation, design, and realization. The operating phase, if any, can be seen as a part of the realization of the project. Often intentionally or inevitably, these phases overlap with each other. The overlap of the design and realization phases may appear in cases of Design-Build Projects (see Chapter 3). This may speed up construction or make it more effective where a variation in, or clarification of, the design becomes necessary during realization. Variation management (or change management) is a key aspect of project management in construction and a contract must be the main instrument used to define respective procedures.

1.5.2 Admissibility of variations and the need for variation management

The emergence of unforeseen events in construction projects is inevitable. It can almost be guaranteed that a large construction project will deviate from the employer’s, designer’s, or contractor’s original vision. The ability to foresee such modifications in the contract and provide respective solutions from the outset is critical to avoiding disputes. Good contracts envisage this and therefore contain variation clauses and procedures (see Chapter 8).

Obviously, variations administered on the basis of a variation clause cannot imply breach of contract, as it is the contract which enables variation. When used in a contract, the variation procedures include, for example, the way to propose the variation, a form of instruction to vary, periods, pricing method, and sample variation orders.

1.6 Typical contractual relationships

Typical contractual relationships among direct construction project participants are mainly expressed in contracts for works, contracts for purchases, and professional service agreements.

The fundamental risk allocation and delivery method must be stipulated in a contract between the employer and main contractor. This is the “main contract.” Other contracts arise within the delivery chains. A joint venture agreement is also common and important in practice.

Further contractual relationships arise in connection with insurance (see Chapter 14) and securities (see Chapter 16).

Shipping and marine construction contracts in Asia by Knut Kirkhus (Oman)

Shipping and marine contracts are represented by various standard forms of contracts used in the offshore oil and gas industry, drilling and exploration and shipbuilding and marine constructions. There are several initiatives to standardize such contracts using assorted model form
of agreement consisting of marine constructions, constructions, well services, design, mobile drilling rigs, supply of major items of plant of equipment, purchase order terms and conditions (short form), small/medium enterprises (SME) services and subcontract small/medium enterprises (SME) services.

In terms of standard forms of contract used, shipping and marine construction contracts appear in various forms, such as LOGIC former CRINE (cost reduction in new era; initiative with the objective of reducing costs by 30% and helping to simplify the industry's procedures; LOGIC currently supports a suite of 10 standard contracts that are available for use throughout the oil and gas industry) standard for the North Sea offshore oil and gas industry, IADC (International Association for Drilling Contractors) standard drilling contracts for contractors where the length of such contract usually is determined by the number of wells the operator wants to drill. It must be decided whether a term contract or a contract for a specific number of wells is best for the specific program. The use of a long-term contract is usually driven by market conditions, with a tight rig market usually resulting in term contracts. This is especially true if a new rig build is involved; the drilling contractor’s financial institutions may require a reasonable payback on the loan before the contractor can sign a contract and build the unit. Others use FIDIC standards or tailor made EPC contracts, they all are negotiated to different degrees depending on the contract complexity, value of the contract, the level of risk involved, specifically the risk of overcapacity (as a site condition), with reference to for instance the shipbuilding yards in Korea and China, which has been flooded with many new construction orders, and the existence of country specific forms that may also dictate terms.

In South Korea, for example, the Standard contracts are published by the Ministry of Land, Infrastructure and Transport (MOLIT) and the Korean Fair Trade Commission (KFTC). For government projects, the General Terms and Conditions of Construction Contracts (GTCCC) are published by the Ministry of Strategy and Finance (MSF) and serve as the general terms and conditions, whereas special terms may be added based on the relevant project.

For private projects, there are no standardized forms of contract, and as the GTCCC are not mandatory they have however been widely used.

For large-scale shipping and marine construction projects, the parties separately negotiate and agree the terms of the contract. Usually, the terms agreed are tailor made close to FIDIC standard forms rather than the GTCCC. The terms usually discussed is about the concept of corresponding IFC (issued for construction) MTOs (material take off) dates from company, the accuracy of IFC MTO, re-measurement of quantity between FEED (front-end engineering design) MTO and the final MTO and the specific definition and agreement for the final MTO in the contract as the parties may have different view in their interpretations.

However, shipbuilding contracts, which have basis in Japanese standard shipbuilding contracts made by the SAJ (Shipbuilders’ Association of Japan) standard from 1970 to 1980 are still being used. At that time there existed over 5,000 shipbuilding yards. It was published by SAJ in January 1974 and the framework of this form is still commonly used in South Korea, China, Singapore, and Taiwan. These contracts initially was drafted to protect more the ship owners and relayed most risk to the shipbuilder.

In the past, claims for upward adjustments of the contract price due to extensions of time were not common in practice because the contractors rarely raised them, in many cases it was culturally negative to discuss or admit to any form of delay caused by the client and this is why the issue was usually hidden and incorporated into other contractual issues for negotiation.
But as the courts in South Korea are given more supportive judgments the contractors are raising more claims, which consequently have resulted in a significant increase of extension of time claims.

Due to the volatile and high oil prices in the recent years the shipping and marine market became friendlier, which gave cause to higher rates and favorable terms. However, as the oil prices dramatically decreased, most oil companies had to consequently cut their budget for oil expenditures, and subsequently reduce cost on existing shipping and marine contracts and press to achieve better terms (such as lower ship rates) on their new contracts.

Oil companies will continue to be affected by the current volatile oil and gas market and with reduced prices on various levels. It will affect how they are tied in to long term shipping and marine construction contracts, and they will experience maybe further revenue funds, and be forced to cancel or renegotiate terms of these contracts. Inescapably, this will lead to an increase in contract disputes.

According to the Asia-Pacific Arbitration Review 2018 (Duncan Speller, Jane Rahman and Jonathan Lim): “Given the importance of the oil and gas sector to the Asia-Pacific economics, it is perhaps unsurprising that oil and gas arbitrations have increased in both prominence and frequency. … out of 72 LNG disputes observed globally since 2010, there has been no reports of arbitrations brought by Japanese, Chinese or Korean LNG Asian market participants. Not much information is publicly available and there are suggestions that Asian market participants prefer to negotiate rather than arbitrate price adjustment issues.”

As for new shipping and marine construction contracts the oil companies, beyond their obvious desire to gain lower ship rates, still want increase flexibility in the contract terms, rebalance the risk/reward profile, and reduce the fixed cost elements of the contract.

Awareness and understanding of critical terms including international construction contract standards that may be integral part to a shipping and marine agreement is of paramount importance during the negotiation process to minimize the incidence of misunderstandings and conflict during and after execution.

A recent typical case I was engaged with was a ground conditions risk dispute between Songa Offshore, an offshore drilling contractor, and South Korea’s shipbuilder Daewoo Shipbuilding and Marine Engineering Co. Ltd. (DSME) regarding a construction contract for the Songa Equinox drilling CAT D rigs (a series of four rigs) built by DSME. Songa received claim submissions from DSME in which DSME asserts a claim of $329 million, along with a request for repayment of liquidated damages in a total amount of $43.8 million, totaling $372.8 million. DSME alleges that the cost overrun is caused by inherent errors and omissions in the design documents (often referred to as the FEED package). According to Songa DSME was responsible for the delays and any attempt to recover cost overruns was of no merit due to the “turn-key” nature of the construction contract.

CAT D—are new tailor made mobile offshore drilling rigs—designed by the industry on behalf of Statoil (Norwegian international energy company and the world’s largest offshore operator) for mature fields on the Norwegian continental shelf (NCS). These new drilling rigs can easily be converted for work in deep water, high-pressure high-temperature (HPHT) operations and the artic regions.

As a fair viewpoint from this case would be to continue to endeavor to be prepared for the complexity and the nature of future shipping and marine construction contracts, especially on risk allocation, awareness and understanding of the contractual terms. To continue striving
to avoid poorly drafted or incomplete and unsubstantiated claims and to cleverly manage the utilization of highly skilled contracts and claims resources proportionate to the complexity of awarded contracts.

Knut H. Kirkhus
Contract Manager
Sultanate of Oman

1.7 Motivation for international business

The construction industry and construction projects were, traditionally, local by nature. Construction contractors and their employers were typically limited to businesses/projects in their geographical area. These days, by contrast, the construction industry is witnessing globalization. Integrated processes, newly emerging supranational formations, government programs supporting investment, the expansion and development of means of communication, social networks, increased mobility of goods, capital, and labor, have all had a major impact on the construction industry.

The fall of socialism and the consequent liberalization in the 1980s in Eastern Europe and Russia led to a relaxation of the formerly protective policies in many countries. The end of central planning created new opportunities for construction companies from First World countries in the West where the infrastructure was already well developed.

Preconditions for international construction business expansion can include any of the following: implementation of clear and open international rules of commerce, foreign investment incentives, availability of credit, trade agreements, contract law modification, development of alternative dispute resolution, international treaties on investment protection, enforceability of arbitration awards, and protection of new technologies under intellectual property laws—particularly in terms of EPC contractors in oil, gas, and energy projects.

Global companies are using their know-how, synergy, and financial strength to expand their business. In numerous developing and Third World countries, foreign companies have acquired state-owned companies or entered into joint ventures with local private companies.

Contrasting examples of international projects in a globalized world can include a small warehouse for an international vendor, a complex strategic energy project with the involvement of several countries as employers or an international joint venture as a contractor under different applicable laws and rules of dispute resolution. The element of internationality can mainly be found in the place where the project is implemented, in the parties to the contract, in the procurement and contracting procedure, and in the technical and legal standards.

Cross-border projects foster competition, but also put pressure on employers to properly manage international tenders in terms of how to engineer, procure, construct, and supervise work. In the case of public tenders, an employer must, first of all, be able to ensure proper preparation of the project. In particular, to provide
funding, obtain building permits and provide access to the site including archaeological surveys and settlements with utility owners and land owners. Local laws must be ready for international construction projects, mainly in terms of public procurement, construction law, environmental protection, technical and quality-related standards, commercial contractual relationships, dispute resolution, and competition law. The employer must provide appropriate design documentation and technical specifications. Most importantly, the employer must provide the people well qualified enough to act as their competent representatives/agents in the other country. Last but not least, the employer must select an appropriate delivery method (see Chapter 3). The risks that result from shortcomings in the mentioned domains complicate financing, tender procedures, and sometimes can even jeopardize the implementation of a particular construction project.

The above-mentioned risks will obviously prolong the realization and increase the cost of construction projects. Therefore, the international construction business is very demanding for construction companies that want to conduct their ventures abroad. By the same token, local companies are challenged by international competition. Ventures abroad increase demands on the employees of both local and international contractors. Recruiting and educating these employees form one of the most demanding missions of an international construction contractor.

The primary motivation of a contractor for an international venture is either “offensive” or “defensive.” Here, the “attack” is to be perceived as a proactive, strategic decision ensuring another business opportunity to sustain growth and the “defense” is to be perceived as a response to a lack of work and opportunity in the country of origin.

An interesting case study of a unique international project was presented at the 2012 International Engineering and Infrastructure Congress (Scott, 2018). Fredric S. Berger, the chairman of the Louis Berger Group, Inc. shared with the attendees his firm’s experience in carrying out a US$250 million project in 2003 to reconstruct 384 km of roadways and bridges in Afghanistan from Kabul to Kandahar. The firm was given an eight-month deadline and the work had to be carried out while military operations were proceeding. “We had a war going on,” he explains in summarizing his remarks at the conference:

We were working on a road that served 30% of the population but we could not enter because it was in the most heavily land-mined country in the world and had been destroyed by war for over thirty years. So there was no construction machinery, no construction industry, no construction workers, and no construction materials. We not only had to resolve the question of how to get equipment, workers, and materials into the country fast enough [to complete the project on time] but we all had to do that in the context of a threat-prone environment.

Berger says that, after the landmines had been removed from the roads and rock quarries, all of the contractors brought equipment in from outside the country. In some cases it was flown in, and in others it was brought in by road from Pakistan. Berger had to get a special waiver from President Bush for the contractors in Turkey to bring their equipment through Iran. “We had to modify the standard FIDIC contract,” says Berger.
We were in a war environment, and we could not allow the contractors to exercise the *force majeure* clauses and shut down their projects. So we pre-negotiated stand-down daily rates so that if there was an incident in their area we could tell them to go inside the camp and lock the gate. So we paid them a fixed rate per day; it was pre-negotiated rather than let the project be shut down.

**The Italian construction industry: Between past and future**

by SDG & Partners (Italy)

**Introduction**

The Italian construction industry approached foreign markets for the first time during the late first decade of the last century, as a direct consequence of the Italian colonial expansion in Africa.

On the contrary, it is necessary to wait until the second post-war period to note the first significant presence of foreign companies in the Italian market, especially those involved in noteworthy and strategic public tenders.

However, the Italian construction industry remained fundamentally isolated for a long time, since the Italian companies concentrated on operating in their local market and protecting their interests from the curiosity of foreign competitors.

Only with the recent recession (2009–2016) have things began to change.

In order to correctly understand the phenomenon, it is necessary to enlarge the view to the entire Italian industrial model as it evolved during the last half-century; while in Europe, it took root in a number of big corporations that were strongly competitive in both domestic and foreign markets, in Italy, they opted for an industrial-districts based economy.

According to the scholars, the industrial district is essentially defined “as a socio-territorial entity characterized by the active co-presence, in a limited area, of a community of people and a population of industrial firms.” And also: “[…] the district is the concrete form, defined on two dimensions - the industry and the territory - of the principle of increasing returns to the widening of demand in a competitive environment” (Giacomo Becattini, “Riflessioni sul distretto industriale marshalliano come concetto socio-economico”, Stato e Mercato, pp. 111–128 (1989)).

In this context, also the construction field has been for a long time (and partially is still so) typified by a highly pulverized industry structure, with a great number of small companies acting in their own specific territory.

According to ANCE (the Italian national builders’ association), in 2012, there were 142,182 enterprises in the construction industry, employing 1.5 million people. Many of these firms are midgets: 60% of them are one-man businesses, whereas 37% have less than 10 employees. Only 0.2% of Italian builders employ more than 50 people, and that’s considered large (ANCE, “Osservatorio congiunturale sull’industria delle costruzioni” 2013).

In spite of their dimensions, Italian companies have historically been very efficient in defending their market from the competition of foreign companies. In fact, not only has the Italian legislation always supported and favored the cooperation between single entities, but the same nature of the industrial district model forces the enterprises to join the efforts and operate all together as a single organism.

The situation does not substantially change until the recent crisis of (not only) the construction market: in Italy, in the period 2008 to 2014, the construction industry has lost the 31.7%
of the investments (about 58.800 million Euros) and the current level of the investments is comparable to the level registered in 1967 (ANCE, “Osservatorio congiunturale sull’industria delle costruzioni” 2014).

In this scenario, the Italian construction companies have increased their overseas activities in order to balance the contraction of the domestic market. New international markets have been targeted with "dynamism and determination" (Italian Ministry of Foreign Affairs, Press room (10/05/2015): "2015 ANCE Report - Gentiloni, Farnesina and government help enterprise with foreign investment opportunities") the numbers of ANCE Report (ANCE, “Rapporto 2015 sulla presenza delle imprese di costruzione italiane nel mondo”) confirm the tenth year of growth for construction firms abroad, with an increase of 10.2% in turnover: over 237% in ten years (from 3 to 10 billion euro).

Although only a small number of Italian companies has the dimension and the capacity to singularly compete on the global markets, as already observed with reference to the protection of the domestic market from the intrusion of foreign competitors, the key brick of such success has been always the same: the cooperation.

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The Italian cooperation model

Construction projects are generally executed by general contractors who retain the services of special trade subcontractors. This form of organization is preferable to vertically integrating these trades because of the transaction cost implications of construction technology. The general contractor and special trade subcontractors can form a stable organizational unit when conditions permit. This organizational form, is called by the scholars (Robert Eccles, “The quasifirm in the construction industry” in Journal of Economic Behavior & Organization, December 1981, pp. 355-357) the “quasifirm” (The “quasifirm” model is analogous to the ‘inside contracting system’ discussed by Williamson (1975)).

Under the Italian law, the “quasifirm” can be incorporated in a plurality of legal forms.

In detail, the “quasifirm” is frequently incorporated in the form of the Consortium (Consorzio), in the form of the Temporary Association of Enterprises (Associazione Temporanea di Imprese – ATI) or simply in the form of the Company.

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The new legislative decree No. 50/2016 in the name of the transparent cooperation

One recent trend in the public procurement sector, the aim of which is greater procedural transparency, is an increase in the range of activities the awarding body must carry out in public sessions (e.g., opening of envelopes that contain the administrative documentation, the technical offer, and the economic offer).

No statistics are available on the cases that ended up in court, nor is there any record of the number of cases involving an application for an ineffectiveness order.

To increase transparency in the public procurement sector, according to article 29 of the Legislative Decree 50/2016, any act of the public procurement procedure must be published on the website of the specific public authority.
We would like to underline how the recently introduced Legislative Decree No. 50/2016 strongly encourages the stable cooperation between single entities, (i) enlarging the number of the legal forms entitled to participate to public tenders and (ii) imposing them to formally undertake the commitment of a long-lasting partnership.

In this respect, please note that the previous art. 34 of Legislative Decree 163/2006 (replaced by the abovementioned provision) permitted to participate to public tender only to few specific entities, without any further requirement about the nature, the purpose, and the duration of such entities.

The new current regulation, therefore, is firstly aimed to strengthen the competitiveness of the Italian—not only—construction industry, permitting an easier access to public tenders to cooperating small entities and, meanwhile, to guarantee the respect of the rules in a long-term perspective.

Once again, Italian legislator bets on the cooperation model that, during the decades, represented the Italian way to the economic success.

* In any case, the new regulations does not change the nature of the legal forms provided for the “quasifirm” by the Italian Civil Code

As previously mentioned, in order to participate to public tender such particular entities are still frequently incorporated under the form of the Stable Consortium, of the Temporary Association of Enterprises (ATI) and of the Company.

The reason of the preference for these legal forms is mainly connected with their better regulation from a civil and fiscal point of view and the consequent lesser operative uncertainty in respect of newer legal forms.

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Conclusions

The above gives an excellent view of the legal framework within which the construction industry can undertake and perform construction works in Italy.

However, one must not forget that in order to attain the final goal of any construction work under any of the above described contractual solutions, a swift and well-functioning conflict resolution system must exist.

Civil works in particular are historically most likely to give rise to conflicts between the main contractor and the subcontractors.

Unfortunately, the Italian civil judicial system is still (notwithstanding recent changes that go in the right direction) slow compared to international standards.

Therefore, arbitration clauses are a must in any construction contract; in particular the emergency arbitrator clause is very important to quickly decide any issue that could halt or delay the works.

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SDG & Partners, Milan, Italy
Patrizia Sangalli, FCI Arb, Partner
Dario Rizzi, Senior Associate
Alberto Croze, Of Counsel
1.8 Managerial analysis

In the international construction business, careful risk analysis is of the utmost importance. In general, there are two basic levels of risk analysis: (1) the analysis of a particular target market; and (2) the analysis of a particular construction project. Many various management techniques and formulas are used in conducting market analyses. To evaluate the external environment in terms of political, economic, social, technological, environmental, and legal factors and their influences, the PESTEL analysis is often used.

- Tax policy, labor legislation, environmental legislation, restrictions on trade, customs, and political stability reflect how and to what extent the government intervenes in the economy are among the political factors.
- Economic growth, interest rates, exchange rates, inflation rates, and GDP are ranked among the economic factors.
- Social factors comprise cultural aspects such as health care awareness, age structures, the demographics of an ageing population, the value of human life, and emphasis on safety.
- Technological factors include technological aspects such as research and development, automation, levels of innovation, technological stimuli, and the rate at which the technological changes occur.
- Environmental factors are the ecological and environmental aspects (weather, climate, climate change) that may have a major impact on industries such as tourism, agriculture, insurance, and, of course, the construction industry.
- Legal factors concern consumer rights, competition law, labor legislation, health and safety, and commercial law.

Strategic capacities are often explored by means of the SWOT analysis. They are, in particular, resources (i.e., what we have) the competencies (i.e., what we are good at). SWOT stands for Strengths, Weaknesses, Opportunities and Threats. The questions, therefore, are:

- What are our strengths?
- How can they be exploited?
- How can the impacts of our weaknesses be minimized?
- What are our opportunities?
- How they can be used?
- What are the threats preventing us from making use of these opportunities?
- How can these threats be overcome?

For these reasons, careful analysis and investigation of the internal and external environment are required.

Another popular analysis is the Porter’s Five Forces Analysis. This can assist in setting up a business analysis framework. The Porter’s Five Forces Model defines the forces that determine the level of competition in an industry and, therefore, its attractiveness.

Porter defined two vertical forces—the power of suppliers and employers, along with three horizontal forces—the threat of new competitors in the market, the threat
of substitutes, and the threat of established competitors. Having analyzed the external and internal environments, one has to assess the influences on product or business plans and draw up a strategy.

1.9 Hazards and risks

Large construction projects are regularly exposed to numerous hazards. Construction project participants (mainly the employer and the bidding contractor) should identify potential hazards and carry out a systematic risk analysis to assess the respective risks of a particular project properly. Lenders (such as banks) and insurance and re-insurance companies often require a risk analysis before providing loans or insurance. Every contract must contain instruments to cope with foreseeable hazards and risks. A risk can be defined as the probable value of damage caused by the realization of a hazard.

Concerning risk, it is not the contractor’s objective to avoid it completely, but to identify and be able to mitigate it in order to achieve a competitive advantage. Three main phases can be distinguished in respect of handling risk:

- hazard identification
- risk analysis
- anti-risk measures.

1.10 Hazard identification

Risk, in principle, is not a bad thing. Naturally, people tend to seek certainty by avoiding change and risk. One can even benefit from risk if one is not afraid of it. In construction, the aim must be to avoid risk and adverse consequences by systematically identifying, analyzing, and taking action.

Individual hazards and associated risks may have different levels of importance in particular projects and must be considered from the point of view of the employer's and the contractor’s priorities. In some projects, price will be seen as a priority, in others the time for completion or the highest standard of performance.

A construction project—like any other industrial or non-industrial project—faces external hazards, internal hazards, and mixed hazards. A hazard of external origin can be defined as a hazard arising from the natural technical, economic and social environments in which the project takes place, for example, poor cash flows, religious unrest, floods, aircraft crashes, and unstable currency exchange rates.

A hazard of internal origin, on the other hand, arises from the project itself and includes hazards that threaten the project directly and indirectly. Examples of direct internal hazards include embezzlement, delays, as well as decision-making faults and errors. Indirect internal hazards are those that jeopardize the project in a secondary way and may involve external third parties, for example, disputes with authorities on matters of environmental pollution and activism by environmentalists. The latter may result in disruption through protests or even court-ordered injunctions.

A mixed hazard is one which arises when project management erroneously or inappropriately responds to an external hazard.
Hazardsthreateningaconstructionprojectcanbefurtherbrokendownintotwo 
broadgroups:

- *anthropogenic hazards*—causedbypeopleinvariousformsincludingindividuals,groups 
ofindividuals,anorganization,andthe-like;
- *natural hazards*—causedbynaturalelementssuchastorms,earthquakes,blackice, 
andothernaturaldisasters).

### 1.11 Risk analysis

Identificationofhazardsisfollowedbyriskanalysisinwhichtheprobability 
ofadverseconsequences(frequencyofoccurrences,implications,andlead) 
areevaluatedandleadtoadecisionregardingtheselectionofappropriaterisk 
managementstrategies.

### 1.12 Anti-risk measures

Measurlestobetakentoreducereliminariskdependonthedecision-maker's 
financialandhumanresourcesaswellasonthefeasibilityandavailabilityofrespec-
tivemeasures.Someriskscannotbepreventedatall.

Ingeneral,inriskanalysis,fourstrategiescandeistinguished,calledthe“4Ts”:

- Take
- Treat
- Transfer
- Terminate.

#### 1.12.1 Take

Ariskmanagementstrategythatreliesonthewilfulabsenceofanyprecautionsand 
involvesacceptingthelossofbenefitofgain,fromariskwhenitoccurs.Thisisa 
viablerestrategywherepotentialrisksareshallowerthancostofinsuringagainst 
theriskswouldbegreateroverthanypotentiallossessustained.Thesame 
cansaysforrisksthataresolargeithattheyareeitheruninsurableorthepremiums 
areunfeasiblyhigh.Asolidbudgetcontingencyistheonlyposiblewaytosecure 
againstthiskindofrisk.

#### 1.12.2 Treat

Thisriskmanagementstrategyisbasedonriskpreventionandallocation.Thistrategy 
followstheprincipleof“preventionbeingbetterthancure”andadoptsboth 
proactivesorreactiveapproaches.Thefirstrulegivestopreference toprowactive 
management,whichisfocusedonavoidinghazardssothattheyarenotrealized.Complete 
preventionmaynotalwaysbefeasibleso,incasethisinstance,hazardsneedtobeeffectively
mitigated. The realization of a hazard or a risk will always adversely impact upon the project as it may increase prices, cause delay or disruption, and potentially affect output quality. A reactive approach can be taken where proactive management is impossible. In this case, it is necessary to adequately prepare for the realization of potential hazards to mitigate potential, adverse consequences.

Good contracts push the construction project participants toward proactive approaches. This can be implemented through contractual duties such as early warning obligations (i.e., timely notification of events that will have an effect on time or price) and obligations to prevent and mitigate damage.

The treatment of risk also involves an efficient allocation of risk between the project participants. Two principles can be distinguished here. This first is the centralization principle where risk is borne by a single party, and, second, the decentralization principle where risk is borne by the party most able to manage it efficiently.

1.12.3 Transfer

Risk is transferred to a third party against payment, usually in the form of insurance. In fact, the risk always stays with the project participant and the insurer provides an agreed indemnity. Risk may also be shared, such as with a partner in a consortium or joint venture.

1.12.4 Terminate

It is easy to refuse a project because of a potential pending hazard, but “he who doesn’t risk never gets to drink champagne.”

1.13 Typical hazards in the international construction business

When trying to expand its business abroad, a contractor mainly considers the following areas and issues:

- the political situation or stability of the country and related trend prognoses;
- business-related legislative conditions, opportunities in the market;
- international treaties (e.g., on investment protection), bilateral conventions, diplomatic missions, membership of FIDIC;
- employment of foreign labour (or sending the labor abroad), the taxation, social security, and health insurance payments and other accounting requirements that would follow;
- legislative conditions under which local labor can be employed, the wage and social conditions, protection of health and safety, and visas;
- labor union requirements;
- availability and cost of local lawyers and other counsels;
- public procurement procedures and qualification criteria;
- customs duties, taxes and fees;
- forms and conditions for doing business in a particular market in respect of foreign entities;
- standard forms of contracts and related restrictions, if any, imposed by mandatory law;
- the enforceability of laws, local litigation, local arbitration, and the enforceability of their awards;
- building permit proceedings, the functions of local building authorities, and their control;
- the specifics of the governing law;
- the level of endemic corruption;
- technical standards and their sources, certifications, and licenses;
- the largest private and public employers and the financial institutions and their particulars;
- delivery methods of choice;
- the relationships between employers and contractors;
- the availability of technologies, equipment, labor, and materials;
- the main players in the construction market and their strengths, contractors/ suppliers and their references and strengths, a list of suppliers of key materials (steel, concrete, aggregate, sand, cement), power and other utility services;
- passing on of market experience, maturity of business relationships, reliability and availability of local business partners;
- reliability of internet browsers, and electronic sources of information;
- the currency in which the work, materials, plants, and equipment are to be paid;
- insurance availability and requirements;
- availability and requirements of securities (bank guarantees, bonds, suretyships);
- import restrictions, restrictions applicable to foreign companies and subsidies.

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**Corruption on Peruvian gas pipeline contract by Enrique Moncada Alcantara (Peru)**

On June 14, 2014, the Peruvian government awarded consortium “Sotl Peruvian Gas Pipeline” (or in Spanish called GSP) with the concession of project that had 1080 kilometers of pipeline and was valued in US$ 7 billion. The original partners of the consortium were Latin America’s construction giant Odebrecht with 75% stake and Spanish national gas pipeline operator ENAGAS with 25% stake.

Such a consortium had a contract with the Peruvian government that had main obligations of designing and engineering, building, operating, and maintaining the gas infrastructure. The designing engineering and building obligations where transferred throughout mirror clauses of a EPC Contract with a second consortium called in Spanish “Consorcio Constructor Ductos del Sur” or CCDS, which had as partners the main companies of Odebrecht in Peru: Norberto Odebrecht and Odebrecht Peru Ingeniería y Construccion. Later by the end of the 2015 a new partner appeared, Peru’s biggest engineering company Graña y Montero, would take up 20% of stake from Odebrecht, and would have around 29% stake in the construction consortium.
This second consortium made EPC contracts with three different companies, transferring all risks and construction responsibilities, but retaining control through management obligations on compliance of its programs: Environmental Protection, Community and Social affairs, Safety and Security, Pipe Welding, and Quality and Code of Conduct. The building activities started by September 2014, and went on uninterrupted until April 2016, when an important loan was denied to the GSP consortium by the 13 banks in charge of the financing a new loan for the project.

**Lava Jato case arriving to Peru**

Since the first semester of 2016 it was known in Peru of the urge of Odebrecht to find a buyer of its stake in the GSP consortium, since the banks that originally loaned the project the initial money found out of the Lava Jato case investigations. Back in Brazil the ongoing investigations against Odebrecht Ex-CEO Marcelo Odebrecht and dozens of employees, finally had 19-year sentence for Marcelo Odebrecht, finding him guilty of criminal charges. But no one on Peruvian soil at the time had evidence of a link between this and corruption activities at the highest levels of Peruvian government spheres.

The year 2016 was also a presidential and congres selection year, so the election process gave Odebrecht something to avoid media and public scrutiny, but this was not the case when it was made public during the second auction process (September 2016 to January 2017), which occurred after the presidential June election of Pedro Pablo Kucinsky, that the main candidates for buying Odebrecht’s stake in GSP were interested in changing the anticorruption clause of the concession contract. This turned the alarms on at the Peruvian Congress and specially because this happened during the last three months of 2016 when the GSP consortium was running out of time. According to the project planning of GSP they had a project finance milestone established for January 23, 2017, which if not accomplished would be a contract breach. As the year 2016 went by and Odebrecht wasn’t able to sell its stake, after two failed auctions, it was inevitable to start thinking that something was really wrong with the project.

By December 21, 2016, a report from the U.S. Department of Justice indicates that Odebrecht admitted to having engaged in a massive and unparalleled bribery and bid rigging scheme since 2001. During for about 15 years Odebrecht paid approximately US$ 788 million in bribes to public officers, politicians, and political parties from various countries as to be awarded over 100 projects. The criminal conduct as we mentioned was directed by the highest levels of the company, with bribes paid through a complex network of shell companies, off-book transactions, and off-shore bank accounts.

Among those countries, Peru’s officials and politicians had received 29 million dollars from bribes made by Odebrecht. By the time this news had made to Peru (December 22, 2016), the GSP project had been restarted twice and Odebrecht had already twice put on the market its total participation in the GSP consortium. There was no self-exclusion from the consortium, neither was it a declaration of guilt, Odebrecht only complied with the banks requirements to continue financing the projects. The new group of banks required Odebrecht to sell its total stake in GSP consortium as to reduce risk and approve a second project loan, but Odebrecht expected to be paid a part of US$ 2 billion for the works the GSP and CCDS consortiums had advanced, which was around 30% of project progress by April 2016. In order to do so, and according to the trust arrangements, the GSP consortium first had to pay off its loans with the banks, second with its partners (ENAGAS and Graña y Montero), third pay off its employees
and fourth pay local government sanctions. After paying of its loans and debts, it could have income. What never was contemplated in those arrangements was paying the three main contractors.

**The termination of GSP concession contract**

By January 2017, the Odebrecht had pleaded guilty in the United States of the bribery and having a financial department dedicated to funding bribery acts, they had not been able to sell their stake in the GSP consortium, but worst they finally breach the concession contract, the only real blue chip they had on the GSP project. The termination of the GSP concession contract occurred because of:

(a) Breach of the project finance milestone.
(b) The Peruvian government’s denial of changing the anticorruption clause of the concession contract.
(c) Odebrecht’s plea agreement on corruption activities.

I particularly think that the inflection point for the GSP project was the government position on the anticorruption clause not being negotiable. According to Fernando Zavala—Peruvian Prime Minister—and Guillermo Thorne—Minister of Economy and Finance until July 2017—they had a very upfront and straight strategy with Odebrecht, they wanted no more corruption and they wanted them out of Peru. For this they worked on the Urgency Decree No. 003-2017 that prohibited money or assets transfers to other countries and obligated companies found guilty of corruption activities in Peru and abroad to pay fines. The problem with this anticorruption regulation was judges never had fine calculation guidelines approved, so Odebrecht has tried to sell four of its main projects in Latin America, which all are in Peru, but no transaction has been able to be successful since the Peruvian government has not implemented an adequate calculation system in order for district attorneys to retain any money or the Ministry of Justice approve the project transfer to buyers.

Risk allocation and corruption activities just cross one out of another. Effective risk allocations like influencing the risk magnitude, controlling the effects of risk or incentive of risk reduction does not have to do with corruption. Corruption activities are either black or white, they either qualify as such or they do not, they are not a risk which can be controlled; they are just not accepted by the parties. So this is a basic part of why potential buyers of Odebrechts stakes in the GSP consortium did not have clear. They all thought about being able of changing the contract rules about the anticorruption clause, by indicating that any responsibility corresponded to the previous owner would not affect the new partners in the consortium. Somehow Odebrecht had misguided the potential buyers into thinking that corruption activities are contract risks that can be acceptable by the parties if allocated to a previous stake partner. This risky way of contracting by Odebrecht fortunately was discovered by the Peruvian government, and was understood as clear indicator of Odebrecht’s real intentions when later on the U.S. Department of Justice make its findings public.

Enrique Moncada

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*Elecnor Perú S.A.C.*
Anticorruption and construction contract law by Enrique Moncada Alcantara (Peru)

Corruption in its classic sense describes something that has become impure or perverted. In Aristotle’s words, “The true forms of government ... are those in which [rulers] govern with a view to the common interest; but governments which rule with a view to the private interest ... are perversions”. Aristotelian corruption as we know it, has served as the fundamental key for democratic systems to aim toward anticorruption measures. For example, U.S. courts since the nineteenth century have worked on different concepts around the terms of “corruption,” “intend to influence,” or describing bribery acts. To this day, over regulation is not the way U.S. courts and officers are fighting against corruption or looking for a better definition of intend to influence, instead jurors and scholars have proposed that *ex ante* regulation is worked on for specific situations. These regulations include campaign-finance limitations of the sort today’s Supreme Court strikes down, gratuity prohibitions, and ethical codes forbidding the creation of some conflicts of interest. Trying to block all functional equivalents of bribery even through specific, *ex ante* regulations, however, would do more harm than good.

Currently the Supreme Court has defined corruption acts: “[F]or bribery, there must be a *quid pro quo*—a specific intent to give or receive something in exchange for an official act,” and campaign contributions may be treated as bribes only when “the payments are made in return for an explicit promise or undertaking ... to perform or not to perform an official act.” In *McCormick v. the United States*, however, the court held that campaign contributions may be treated as bribes only when “the payments are made in return for an explicit promise or undertaking by the official to perform or not to perform an official act.” This does not go to extent of making contributions with the general hope of a universal well-being.

As so, general jurors and scholar positions understanding of corruption as a description of an emotional orientation, rather than a description of contract-like exchange a key result. Now following the idea of *ex ante* regulation, its more beneficial for public officers to be told what they can or can’t do before they act, instead of waiting for courts to define corruption acts. Also, we can engage preventing private acts of corruption by improving compliance methods and third-party codes enforcement through contractual clauses.

Private compliance and anticorruption

In today’s regulatory environment it is a constant challenge for anyone to achieve consistent legal compliance. This goes from governmental oversight and legal enforcement to companies having to face a variety of substantive and process oriented compliance obligations, which are imposed by trading partners and other private organizations, sometimes but not always promoted by government. Composed of contract clauses and codes of conduct for business partners, these obligations often go beyond mere compliance with law and recur to the methods by which compliance is assured. They do this by creating new compliance obligations and enforcement mechanisms and rely on the structure, design, priorities, functions and administration of corporate ethics and compliance programs. These obligations are increasingly accountable not only for their own compliance but also that of their supply chains, so therefore companies must seek corresponding contractual assurances upstream. Compliance is becoming privatized, and privatization along the supply chain and among employers and contractors is spreading.
Company compliance is covering up for government monitoring

Let’s take for example in the United States, its state incentive privatization model of compliance has been enforced since the establishment of the Federal Sentencing Guidelines for Organizations. The government’s limited regulatory and enforcement resources need some cover up, which is done by offering a strong incentive for companies to take on more of the state’s monitoring activities (prevention, detection and enforcement). So corporate compliance programs allow state oversight to be increased by performing tasks that governments lack the resources for. But even though it is a privatization model it still reflects the traditional vertical relationship between government and the governed.

Private-to-private compliance

Major corporations are requiring their business associates to commit to them on their own codes or to third-party codes of conduct and related contract clauses. Complying to internal codes makes the employer-contractor relationship asymmetrical in terms of experience, know-how and process methods, which all make the contractor side carry such a burden that can affect supply terms and time requirements. Committing to third party codes signals a growing appreciation that enterprises across the value chain share one another’s reputational and compliance risks, and that compliance processes play an important role in translating legal commands into lawful conduct. It reflects an awareness that if you are dependent on a business partner to keep you out of legal trouble, it might pay to take an interest in how they intend to accomplish that. Coming now from external business partners rather than just the internal ethics and compliance staff, this message has the potential to re-orient some attitudes and remove some ethical blinders. As more businesses are forced by their counterparties to examine their compliance processes and routinely accept business and legal consequences for them, we can expect increases in overall investment in compliance, in the scope and robustness of the average compliance program, and in ambient awareness of compliance issues outside the compliance, audit, and legal staffs.

Systems integration

The privatization of compliance is horizontal, networked, and qualitatively different, based upon the translating of legal commands into lawful conduct. We can trace the origins of this trend to three main protagonists:

(i) governments, both in their sovereign roles and as customers;
(ii) the human rights/corporate social responsibility movement; and,
(iii) companies themselves.

The sentencing guidelines model simply mitigates the risk of compliance failure. It does not expose companies to new forms of risk, liabilities, or forfeitures or to the possibility of multiple conflicting standards, but private-to-private compliance may do so. Program elements and ethical policies become contractual obligations, vulnerable to such contractual remedies as indemnities, damages, audits, default declarations, loan acceleration, and termination.

Private-to-private compliance is reshaping the compliance task portfolio and raising new questions about who is answerable to whom, both internally and across company boundaries.
Private compliance pressures may originate from any point in the value chain: suppliers, customers, capital markets, insurers. Compliance officers may find themselves caught in the middle between demanding customers and reluctant suppliers, or, in the other direction, between manufacturers vitally interested in how their products reach market and resellers seeking the shortest route to revenue. They may be simultaneously pitted against their own colleagues in charge of operations, procurement, business acquisition and contracting. And unlike the sentencing guidelines and most other government leniency programs, many of the privatized compliance requirements are truly mandatory—at least if you want to do business with the other party.

Government instigation in the enforcement and procurement spheres, blockbuster fines, civil penalties and disgorgements, monitor and burdensome settlement agreements are attention-getters. They provide not only object lessons about compliance risk—and lately, third-party risk especially—but also a bundle of examples from which officials can provide specific guidance to an increasingly attentive audience about compliance program features that will affect enforcement decisions.

For example, FCPA deferred/non-prosecution agreements today as its sending a message by routinely requiring settling defendants to institute appropriate compliance process controls over business associates, such as advance due diligence and ongoing oversight, “flowing down” codes of conduct, imposing training requirements, and securing contractual commitments covering recordkeeping, audit rights, vendor compliance undertakings, and associated termination rights—all principles that are echoed in more conventional Department of Justice guidance and in official guidance on the U.K. Bribery Act as well. The government's role as a customer may be even more influential. All the contractors of large federal contracts are now required to institute compliance programs that track the sentencing guidelines’ (otherwise voluntary) criteria, and are specifically required to contractually flow down these obligations to large subcontractors.

**Anti-corruption compliance**

Governmental enforcement and procurement mandates, corporate social responsibility, and risk management across the global supply chain all converge upon the problem of official corruption, and anyone curious about the future of privatized compliance should consider the current state of anti-corruption compliance. Enforcement of anti-corruption laws has reached new heights and, encouraged by the OECD anti-bribery convention, national anticorruption laws continue to proliferate. Several prominent NGOs including the World Economic Forum, Transparency International, the ICC, the World Bank, and the OECD itself have published detailed guidance on third-party compliance management, guidance that universally includes:

(i) due diligence,
(ii) flow-down of anti-corruption policies,
(iii) training and communication,
(iv) documentation of business associates' compliance efforts, and imposition of audit rights,
(v) ongoing monitoring, and
(vi) contract remedies such as termination.

These recommendations have been implemented by a growing number of companies as a way of adaptation of accepted anti-corruption methodology to other risks. Third-party
due diligence is commonplace and anti-bribery provisions appear frequently in international contracts and universally in private-to-private codes, quite often with domino-style flow-down requirements. With this pattern firmly established, code and contract language that was originally drafted only for the anti-corruption context is now being extended to cover other high-priority compliance domains such as export sanctions, money laundering, data privacy and conflict minerals.

1. **Anticorruption according to the FIDIC and ICC**

The FIDIC standard on anticorruption matters is of having the contractors comply with applicable laws of the host country that relate to corruption. This is not a risk itself when FIDIC contracts and standards have OECD countries as one of the contract parties, since those countries have developed specific regulation on anticorruption, which is a crucial matter because it is not or barely regulated in various underdeveloped countries that aren’t even part of the OECD. OECD looks to change this by requiring such regulation to be issued in case the underdeveloped country has the interest of forming part of the OECD.

On the other hand, lack of regulation is a situation that may be salvaged by applying FIDICs Multilateral Development Banks (MDB) general conditions of contract Sub-Clause 15.6. Now this clause only allows termination by the employer in case of determination of corrupt and fraudulent practices by the contractor. Some may see a danger in such provision as allowing the employer to abuse by threatening the contractor, and that reciprocity for contractors should be an available tool. This would mean additional provisions on Clause 15.6 like a mirror clause in favor of the contractor or the possibility to involve a third party who determines the occurrence of an act of corruption. The anticorruption clause is set on

Another type of tool we found was the ICC anticorruption rules for 2011, which are set of regulations that emphasizes the critical role of compliance by enterprises with self-imposed rules. This tool aims at fighting corruption, but form a double-post, which should be at the core of corporate responsibility and good corporate governance. These rules are intended as a method of self-regulation by business contrary to the applicable national laws and international instruments like FIDIC contracts. Such rules provide the enterprises to comply with their legal obligations and anti-corruption initiatives at the international level by:

(i) Establishing anticorruption rules.

(ii) Identifying the corporate policies required to support compliance with anticorruption rules.

(iii) Determination of efficient corporate compliance programs.

The ICC anticorruption clause aims at creating predictability and trust between parties by combating bribery and other corrupt practices. So not only before contract signing but also during its execution there is a need to ensure that corrupt practices do not achieve results and meanwhile maintaining trust in the *pacta sunt servanda*. Therefore, what is needed is a fine balance between the efforts to fight corruption and the treatment of corruption as a breach of contract, to have integrity prevail as the champion of the tender process, during contract execution and the life cycle of business transaction.

The anticorruption rules set is very simple, it concentrates on prohibited acts and zero tolerance for employer’s, contractor’s, subcontractor’s, and third parties acts of corruption
or usage to conduct any act of corruption. This are the prohibited acts of corruption are bribery, extortion or solicitation, trading influence and laundering property that proceeds from crime.

Eventually, an anticorruption clause according to ICC rules, would take the wording from paragraph 1 used in the OECD Convention on Combating Bribery of Foreign Public Officials in International Business Transactions (1997) and the United Nations Convention against Corruption (2003). The corrupt practices covered by such paragraph include: i) extortion (active corruption) and solicitation (passive corruption), ii) bribery and trading influence, iii) corruption of officials, iv) private-to-private corruption, v) corruption in the national and international sphere, vi) corruption with or without the use of intermediaries, vii) bribery with money or through any form of undue advantage, and viii) bribery with or without laundered money.

Zero tolerance on corruption demands that the enterprises ensure that is central management has adequate control over the relationship with third parties, or that with respect to a consortium or joint venture their partners anticorruption policies are consistent the enterprises standards. With respect to contractors and suppliers, the enterprise should take measures within its power and, as far as legally possible, to ensure that they comply with these rules in their dealings on behalf of, or with the enterprise, and avoid dealing with contractors and suppliers known or reasonably suspected to be paying bribes. The way out is to have provisions in which the enterprise can suspend or terminate the contract in case it has good faith concern that a business partner has acted in violation of the anticorruption rules or laws.

2. **Project risk allocation and corruption**

Risk can be defined from various perspectives, but I refer to it as a circumstance or an event that, if it occurs, it shall influence achieving the project’s goal. As so, owner’s goal can be best achieved by choosing that one contract that will motivate the contractor to achieve that same goal. Such a context is related to tender time, during which the amount of information put out for the bidders and the extent of risk the owner is willing to intake are set up front by the owner for the tenders to know and evaluate.

Construction projects due to their own “nature,” involve quite many interacting activities that are full of risks, each of which has its own impacts, to some extent, on cost, time and quality. This whole scenario allows us to acknowledge that every contract allocates various types of risks, but not all contracts allocate risk equitably or the power/authority to manage each risk allocation.

In an ideal world, efficient risk allocation would mean a parallel risk reduction and project performance improvement. Unfortunately, we humans do not always choose efficiently and therefore owners have commonly aim for avoiding risk by allocating risk on the contractor’s side.

Now on the tendering field and on the project execution, we engage risk with risk management systems, which usually comprises identification, analysis, and response, so that when they do eventually occur, they are overcome. A main task for employers, contractors, advisors, and subcontractors and all project participants should be risk source identification, communication and response, all as part of a risk management strategy and system. See construction Project Risk Categorization Framework in the Figure 1.1.
From a contractual point of view risk management strategy is to allocate risk, through contract regulation, in such a way as to enable parties to manage risk efficiently and effectively throughout the construction process. The five theoretical principles proposed by Abrahamson recognized in construction projects are the following:

(i) If the risk is of loss due to his own willful misconduct or lack of reasonable efficiency or care;
(ii) If he can cover the risk by insurance and allow for the premium in settling his charges, and it is most convenient and practicable for the risk to dealt with in this way;
(iii) If the preponderant economic benefit of running the risk accrues him;
(iv) If it is in the interest of efficiency to place in the risk on him; and
(v) If, when the risk occurs, the loss happens all on him, and there is no reason under any of the above headings to transfer the loss to another or it is impracticable to do so.

Since corruption acts can be made by any party of a contract it should be first understood that any anticorruption program, compliance system or rules will need to have ways of discovering, identifying and responding to corruption acts as a risk category (behaviors) and in respect of the principle which makes the corrupted party assume the risk of its loss due to willful misconduct. As so, any contract breach which comes from a willful misconduct, should make the corrupted party assume the contract termination. Now to complete the idea, we must understand that such breach in contract execution not only affects the opposite party, but also can affect subcontractor’s and third parties. So, anticorruption clauses should not only be designed about the termination are to assume the risk of corruption, since in a lot of cases when corruption acts are done by the contractor, this has cost impacts on its subcontractors, which may not know of the corruption acts. Main contract termination clauses upon corrupted conduct are the start of assigning behavioral risk, but termination procedures should allow subcontractors to recover costs assume in their contracts with corrupted contractors.

A very complex scenario for anticorruption measures occurs when a main contract between two parties has construction, design, built, operate and transfer clauses, which
later are transferred through mirror clauses to an engineering contract or a management contract and later to an EPC contract. This will mean different levels of compliance systems for companies that if they are of the same corporate group, the contracts binding all parties should have specific measures of anticorruption compliance specially detailed in a way that they reassure subcontractors and third parties for any cost in case corruption acts occur cause of the contractor’s misconduct.

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Indian law by C.K. Nandakumar and Rishabh Raheja (India)

Background

The growth and interest in the construction sector in India is reflective of the rapid strides that the Indian economy has been seeing in recent years. With among the fastest growing cities in the world, emphasis on housing and infrastructure have thrown several challenges to the legal system to respond to.

The construction industry has faced some challenges in gearing up to urban growth and the thrust on infrastructure. Infrastructure projects in India are often either sponsored, controlled or monitored by the government, increasingly in conjunction with the private sector. The level and nature of private participation has been increasing in this sector. So also, the “real estate” sector, focusing on development of land into apartment complexes, commercial buildings, has been a boom sector—mostly for private retail or commercial investment.

Some aspects from the Indian law relating to the construction industry are highlighted here—mostly on infrastructure and government construction contracts.

Pre-contractual stage

At the pre-contractual stage, letters of intent to and from government construction authorities are not uncommon in India. However, these are generally not considered binding. Notwithstanding that, preparatory works based on the letter of intent would be compensable under the principle of quantum meruit, even if a contract is not concluded. In fact, Indian courts have begun to refer parties to arbitration in pre-contractual disputes in cases where arbitration clauses are present in the letter of intent.

Standard forms

There is an increasing trend of Indian construction companies taking up projects outside India and for construction groups from outside India to participate in Indian projects. Various standards such as FIDIC are often prescribed in contracts. Indian government has a central standard
prescribed by the Central Public Works Department (CPWD) and another by several State Public Works Department (SPWD). These standard form contracts are often made the norm in contracts where the government or a government body is the employer.

**Force majeure at the performance and breach stage**

Indian law is largely consistent with the defences provided to parties under several popular standard form construction contracts, particularly the FIDIC suite of contracts. Unlike many civil law countries, Indian law does not explicitly provide the defence of force majeure. However, this concept is either read in contractually or as a part of the common law principles of contract (both as a part of the Indian Contract Act and from judicial precedent).

While Indian law does not stipulate for force majeure, it does provide the parties with an escape from their obligations where the contract is “frustrated.” However, the Indian Supreme Court has recently held that the doctrine of frustration will be inapplicable where the parties have included force majeure clauses in their contract. Since several of the standard form construction contracts popular in India contain force majeure clauses, parties do not have to worry about any interference or supplementation from Indian law in this respect as well.

**Dispute resolution**

At the dispute stage, there are various fora and mechanisms that parties resort to in Indian construction contracts. These include different combinations of non-binding processes such as dispute review boards, adjudication, conciliation, mediation, as well as binding processes such as arbitration and litigation. There has long been discontent in the construction community with arbitration and litigation in India for being lengthy, rigid, and unreliable. However, recent years have seen a revolution in both of these fora.

The 2015 Amendment to India’s Arbitration and Conciliation Act has addressed the two greatest concerns of construction players—court intervention and duration. There was a tendency of Indian courts to interfere at all stages of a construction arbitration—most notably, at the setting aside stage by revisiting questions of fact and law addressed by the tribunal. Given the highly technical nature of construction disputes, an evaluation of these matters by courts despite there being qualified and specialist arbitrators was considered to be inappropriate. Further, detailed setting aside proceedings would also cause the project in question great harm, cost and delay, especially in projects involving horizontal or vertical multiplicity.

However, the amendment has gone a long way in eliminating this problem. It limits judicial review of the merits of an arbitral award, and provides that an award shall not be set aside merely on the ground of an erroneous application of the law or by re-appreciation of evidence. This ensures that the arbitrators in construction disputes do not have to worry about being second-guessed by Indian courts in setting aside proceedings. The amendment also restricts the duration for determination of a setting aside application to one year. This greatly minimizes the risk and harm that will be faced in construction projects that involve multiple players and strict timelines. Judicial intervention has been minimized in the other stages of the process as well—for instance, courts are now required to refer almost all pre-arbitral controversies to the tribunal.
The greatest game-changer in the arbitration of construction disputes is however, the introduction of a mandatory one-year time limit (extendable by six months with the consent of the parties, and extendable further with the permission of the court) for the completion of all India-seated arbitrations. While this time limit definitely addresses the problem of lengthy arbitrations that has plagued the construction industry in India, its mandatory nature fails to account for the often inherent complexity of construction disputes.

Meanwhile, the litigation regime for construction disputes has also been greatly improved. The creation of specialized “Commercial Courts” for all construction disputes inter alia above the sum of INR 1,00,000,000 (10 million Indian rupees) has brought with it expertise and expedition, through specialized judges, and short and strict timelines for the conduct of cases, submission of documents, and delivery of judgment.

At the relief stage

Indian courts only require the establishment of the fact of breach and not the quantum of breach in construction contracts providing for liquidated damages, as long as the quantum specified is a genuine pre-estimate of losses suffered, rather than a penalty. In the absence of a price escalation clause, the specification of liquidated damages in the contract would deny a party the right to claim price escalation upon breach beyond the liquidated damages. Whereas the presence of a mere price ceiling (and not liquidated damages) would not apply to a price escalation claimed upon breach.

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1.14 Risk allocation in contracts

As previously mentioned, risk management may take the form of a contractual risk allocation between the project participants. In practice, an inefficient allocation (of an unclear risk or of a risk that the party is not able to control) will result in speculative claims, disputes, or even contractor bankruptcy. Furthermore, a contractor may allow for risk in their bid price via a “risk surcharge.” The employer pays for the transfer of risk in such a situation.

Standard forms such as the FIDIC conditions of contract will guarantee a balanced and efficient risk allocation, provided they are not significantly altered. Such standard forms are commonly prepared by professional organizations or representatives of various interest groups such as contractors, lenders, employers, consulting engineers, and so on, to achieve well-balanced risk allocation.
It is worth mentioning here that common law practitioners seek to exhaustively list and describe all risks in the contract. Civil law practitioners rely on civil codes. Lawyers in the Anglo-Saxon jurisdictions may then be surprised by the fact that the governing law can influence contractual risk allocation. Similarly, judges in the common law world respect contractual risk allocation more so than their learned colleagues from continental Europe.

Wrong forms of contract by James Bremen (UK)

Many state entities either have their own (usually common law-based) historic form of bespoke construction document, or prepare their own set of amendments to a standard form (e.g., FIDIC or NEC). Whether or not a bespoke form (or amended standard) is used, there are a number of recurrent problems which plague projects in the emerging markets:

- Where the contract has not been adapted for the location and governing law of the project, many of its provisions will either not operate or provide a basis for claims and disputes into the build-phase.
- Often sponsors use the wrong form of contract (e.g., a lump-sum turnkey form, where the appropriate form may be construct-only or design and build).
- Insufficient analysis carried out of project-specific risks, with the result that risks are often inefficiently allocated to the contractor where the employer ought to carry them, as they are in the best position to manage them. This rarely addresses the risks, and ultimately results in a claim by the contractor.
- Because different departments often prepare the forms of contract and technical schedules, there are very often significant inconsistencies in these documents which are the basis of contractor claims.

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The importance of early analysis of risk, knowledge of efficient risk allocation and right choice of delivery method by Conor Mooney (France)

Risk allocation

It is said that in construction, “the rewards should go to the efficient, not the lucky or the litigious” (Abrahamson, 1990). Much difficulty arises in construction projects through the inappropriate allocation of risk. Inappropriate allocation of risk is best explained by first outlining what is understood by appropriate allocation of risk. Leading thought on risk, in whatever form
it manifests, is best borne by the party in the best position to manage it (Pickavance, 2010). To expand on this simplistic statement, the Abrahamson Principles on risk allocation are that a party should bear risk where:

- the risk is within that party’s control;
- the party can transfer the risk (such as by insurance, for example), and it is most economically beneficial to deal with the risk in this fashion;
- the preponderant economic benefit of controlling the risk lies with the party in question;
- to place the risk upon the party in question is in the interests of efficiency;
- if the risk eventuates, the loss falls on that party in the first instance and is not practicable, or there is no reason under the above principles, to cause expense and uncertainty by attempting to transfer to another (Pickavance, 2010).

Inherent here is the concept of allocation of risk: that is, that risk must be allocated to one or other party to a construction contract. It may either happen by default, in that one party automatically and/or unknowingly retains or accepts a risk. Conversely, it may happen deliberately, whereby a conscious decision is made by one party (usually the employer, as the party who generally decides on the details of the tender and contract documents), to transfer a risk to the contractor or to accept a risk if it wishes to do so. Either way that this occurs, it is important to acknowledge that all risks in construction projects must be accounted for as being the responsibility of one or other party to the contract. The process by which the employer transfers some risks and retains others is the core subject of the Abrahamson Principles, which offer guidance as to which risks should be transferred and which should be retained. Since construction projects can only rarely determine all possible risks at the outset of a project, decisions must be made by the procuring body as to what risks are determinable, what risks are residual, and which party should bear those risks.

A simple and straightforward contract requires the parties to try to foresee all possible risks. Sometimes this is difficult to achieve in practice, when the complexity of the nature of the work covered by the contract is high. In construction project situations, where a feature of the work is its uniqueness, to whatever degree, there are almost invariably issues that arise during the project making it virtually impossible to allow for all eventualities in the contract. Construction projects can experience this situation to quite a profound level, due to the unforeseen and unforeseeable nature of some of the risks which manifest.

There are many categories of risk in projects in general; and construction projects encompass some specific types of risk. Each of these risk types, when considered at the outset of a project, can be contractually provided for to a greater or lesser degree. What is important to note is that regardless of the amount of pre-contract work conducted for the purposes of identifying and managing all risks, it is rarely the case where a construction project does not experience the eventuation of some risk which was not foreseen at the outset of the project.

Construction has been described as an industry where those involved in project delivery are “continually faced with a variety of situations involving many unknown, unexpected, frequently undesirable and often unpredictable factors” (Akintoye and MacLeod). These risks do not always disappear or reduce of their own accord; instead they must be dealt with in a satisfactory way to bring them to a tolerable level:
“No construction project is free of risk. Risk can be managed, minimised, shared, transferred or accepted. It cannot be ignored” (Latham, 1994).

In order to successfully manage risks on construction projects, a primary method of doing so is the allocation of risks between the parties (Binga et al., 2005). The web of risks: their interconnectivity and consequential effects, all require detailed consideration at the commencement of the project in order to allocate effectively and correctly. Failure to do so, together with the resultant eventuation of risks raise difficulties for their management because, if variations to the contract are required because of the risks occurring, the traditional rules of contract enforcement apply to construction (as with most other) contracts. The industry has adopted varying methods of project delivery in order to try to cope with differing degrees of residual risk. Most crucially, it should be accepted that changes will almost invariably occur on construction projects, but that the ability for all changes to be instructed under the contract is limited. Under such circumstances where the change cannot be instructed, then it becomes necessary to agree a variation to the contract. Agreeing such variations requires that all the formalities of contract formation are met once again, despite the fact that both parties may wish to continue their commercial arrangement, and, as far as the parties are concerned in practical terms, the change to be covered under a contract variation is little different to a change instructed under a variation order.

Note on terminology: variations, changes, and amendments

Construction contracts are somewhat unique in the world of contracts in that they have a mechanism to allow one party (the employer) to instruct (via the engineer) a unilateral change to that which was agreed originally in the contract, and the other party (the contractor) must follow that instruction, subject to certain limits. This mechanism within the contract is often referred to as variations or changes, but is sometimes confused with variations or changes to the terms of the contract itself. These are obviously two very different things. Given the risk of confusion between these two types of changes (i.e., inside the contract and outside of the contract), it is proposed here to refer to changes within the contract as “variations,” and changes to the contract itself as “amendments.” The engineer can order “variations,” but “amendments” require the agreement of both parties to be enforceable.

Risk allocation and delivery methods

A choice of procurement route (such as where design responsibility lies, the sequencing of design and construction) depends on a number of factors, including the risk appetite of the employer, the level of involvement the employer wishes to have during implementation, the requirement for time to be a high project priority, the level of specialization and technical complexity involved in the works, the requirement for a high degree of cost certainty at the outset, and the ability for the employer to make changes to the project during design and construction. To a secondary degree, it will depend also on the industry norms and capacity within the country, and political influences on project implementation. Each of these aspects should be weighed in terms of their relative importance (which can vary among stakeholders—the financiers may have different priorities to the investor, for example), and an appropriate procurement route selected.
The contract choice is a consequence then of the procurement route choice. The procurement decision is strategic; the contract selection is more operational. In terms of contract choice, civil and common laws provide a very wide measure of freedom of contract so that parties are generally free to choose their own terms. Although this is the case, in practice parties to an agreement rarely have either the desire or the ability to work out all the terms which are required to govern their construction contract, and as a result, standard forms are most widely used. Studies carried out in the UK indicate that bespoke forms of construction contract are used as infrequently as on less than 10% of construction projects (RISC, 2010). The need for a standard form of building contract became apparent in the nineteenth century (Hibberd, 2006), in view of the complexity of rights and liabilities in building projects, and to avoid the expense and hazard of special, bespoke contracts (Furst and Ramsey, 2006).

In the construction industry therefore, contracts almost invariably contain a set of standard conditions, but in addition many other contractual provisions must be specifically formulated. A feature of a combination of standard conditions and specially prepared provisions then is that the resultant contract is rarely identical to that used on previous projects, and as a consequence, decisions based on a standard form may not have universal application to that form of contract. Furthermore, it should be noted that since many parts of the standard forms are interdependent, to alter a provision in one clause but not in another upon which it depends is likely to produce ambiguities and may defeat the objective of the alteration.

A major advantage of using a standard form of contract is that those who use it regularly become familiar with its contents, and a body of case law emerges around its practice. Practitioners thus become aware of its strengths and weaknesses and its suitability for specific purposes. The actual choice of a standard form of construction contract will depend upon a number of considerations, which include the following as key considerations:

**Nature of Employer:** If the employer is commissioning a publicly funded project, the choice of form may be limited, for example in Ireland, to the Public Works Contract suite of contracts (as part of the Capital Works Management Framework), whereas with a private employer the choice is much wider. Moreover, since the choice of form of contract in Irish public works limits to two procurement routes, public works projects do not have the same level of freedom of choice of procurement route as private projects.

**Composition of the team:** The agreed contract will confirm who is to undertake certain specific duties and accept certain obligations. For example, the extent to which construction and design responsibilities are allocated as between the professional consultants, the main contractor and specialist subcontractors should be evident from the terms of the contract. If a specialist contractor is to become involved in the design process, then contractual provision must be made for this to be effected.

**Documents for pricing purposes:** With traditional procurement, the appropriateness of fixed price lump sum contract will depend on tenders having been prepared on the basis of the fullest possible information. Where that information is unlikely to be available at tender stage, lump sum contracts are unlikely to be satisfactory and alternatives, such as re-measurable, will have to be considered.

It is noted that risks can only be assessed in as much as is practicable, and allocated in an agreed manner. It is highly unlikely that, in the majority of cases, the completed project will
exactly resemble the initial, contracted project. In order to achieve the completed project, it is inevitable that all risks must have been somehow allocated, and some of these risks may have eventuated as the completed, varied project emerged. Consequently, how the variations are dealt with has a direct bearing on the successful completion of projects, or whether they result in lengthy and costly dispute proceedings. If construction contracts were a single standard construction contract the world over, it would still pose significant difficulty to determine and enforce each and every variation to the contract, but this matter is greatly compounded on the opposite dimension of often radically different conditions of construction contract themselves.

Construction projects can be complex undertakings, and the construction industry does have an undoubted degree of uniqueness: in the combination of characteristics evident in its nature; its risk profile; the magnitude of time, cost and effort expended in it; and the implications of ensuing difficulties. The complexity of construction projects stems from the type of project, the technology used, logistical issues, the scale of the project, the nature of the environment in which it is to be constructed, the personnel involved and the political issues associated with its delivery, and the changing needs of the end users. Such complexity cannot usually be fully understood at the outset of a project, save for the most trivial of projects.

Case study: when risk allocation goes wrong

As alluded to earlier, there is a risk of misunderstanding the differences between variations within a contract and amendment to the contract itself. The former is a vital and unique mechanism of construction contracts to facilitate the reality that projects will change as they progress through construction, and the variations facility of most construction contracts allow the engineer to make certain changes unilaterally in the interests of not having to renegotiate every change with a contractor. An example of this in practice, and where changes to the standard terms of contracts can have unintended effects during the construction phase, was on a building project in the former Yugoslavia. The FIDIC MDB contract had a comprehensive set of particular conditions to the standard version, as is normal. What was unusual about the particular conditions was a requirement, in Sub-Clause 8.4 [Extension of Time], that any “extension of time [be] approved by issuing an amendment to the contract signed by both parties.” The intention of this particular condition was (presumably) to ensure that a) the financier would be aware of any changes to the completion date for financing/control purposes, since any amendments to the contract required its approval, and b) to prevent the engineer from agreeing to extensions of time without the employer’s approval, since any amendments to the contract also required approval from the project’s inter-ministerial supervisory board.

Consequently, in an attempt to mitigate the risks of uncontrolled project extensions, the particular conditions resulted in removing the authority of the engineer to change the time for completion within the contract. Instead, the particular conditions put in place a requirement that every change to the date for completion became an amendment to the contract itself. Naturally, an amendment to a contract requires the agreement of both parties, which in and of itself can be problematic, but what about a situation whereby the contractor does not agree with the engineer’s determination over its request for an extension of time? A provision for extension
of time is a usual feature of standard forms of construction contract which is intended to defer
the date for the invocation of liquidated damages against the contractor in the event that the
employer has experienced a risk for which he is responsible, or has instructed a variation. Essentially
this is a provision for the benefit of the employer, since if the contractor causes the delay or
experiences a risk for which he is responsible, no extension of time would be permitted and
liquidated damages would be applied from the original date of practical or substantial com-
pletion. So the standard forms of contract therefore provide to allow the employer to make
changes it wishes on projects, and enable it to move the completion date accordingly, and with-
out penalty to him. In this case, the contractor sought 178 days’ extension of time, but the
engineer determined that the contractor was only entitled to 136 days, so the contractor refused
subsequently to sign the amendment to the contract as required by the particular condition
Sub-Clause 8.4, leading to a situation whereby time becomes at large once the agreed time for
completion (which was actually agreed) had elapsed. Since the contractor had to agree to any
change to the time for completion, the engineer had been stripped of its ability to grant exten-
sions of time, and the balance of power shifted dramatically away from the employer’s side and
firmly to the contractor.

Risk allocation is not a neat affair. Allocating certain risks to one party can have unintended
consequential effects on other risks, or create new risks in their own right. It is therefore impor-
tant when allocating risk to reassess the risks holistically during the allocation process to under-
stand if there may be new or altered risks, which were not considered previously.

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To deal with subcontracts in international construction projects by Giuseppe Broccoli and Fabio Zanchi (Italy)

In international construction projects, it is rather standard that the contractor will subcontract part of the scope of works. This may happen for different reasons such as, for instance, because the project is complex or because the contractor does not have the specific skills and expertise to carry out part of the works.

It happens often that the employer will request expressly that certain works (usually the supply and installation of highly technological items) or part of the design be carried out by a specialist subcontractor or supplier who has specific experience or track records. In such a case the employer could eventually award directly the execution of said works to the specialised contractor. This would certainly imply a substantial involvement of the employer, at least in terms of coordination between several contractors and risk of lack of cooperation between the contractors (see for instance Sub-Clause 4.6 [Co-operation] of the FIDIC books). This is the reason why in such a case the employer may prefer to award the entire execution of the scope of works to one main contractor who will be then under the obligation to subcontract part of the works to the specialist subcontractors designated by the employer.

In general terms, in many jurisdictions the subcontractor (even if designated by the employer) will have no direct recourse against the employer. As a direct consequence the liability for any fault of subcontractors will remain with the contractor (see for instance Sub-Clause 4.4 [Subcontractors] of the FIDIC books). The reason is quite obvious. The subcontractor is appointed by the contractor and the legal relation is between the contractor and the subcontractor. It goes without saying that, in the standard practice, the subcontractor is (or should) be selected directly by the contractor with no interference by the employer.

It is clear that the employer (and certainly the contractor) may suffer the consequences of a wrong selection of the subcontractor and this may have an impact on the timing for completion and/or on the quality of works executed.

In the present vignette two main issues are considered in relation to the subcontracting: (i) the selection process of subcontractors and, more importantly, (ii) the issue of risk allocation between the parties involved.

Selection of subcontractors

As mentioned above, the legal structure of the subcontracting is that the contractor will award part of its scope of works to a selected subcontractor. The legal structure of the entire project is, however, of such that the main contractor is in the middle, caught between its obligations toward the employer and the obligations of the subcontractor toward him.

In general terms (considering also that in certain jurisdiction the subcontract is not even legally feasible), the main contractor will be entitled to subcontract only “part” of the scope of works (see for example Sub-Clause 4.4 [Subcontractors] of the FIDIC books).

It is clear that, even in the phase of the bidding process, the tenderer shall consider very carefully the scope of works, its ability to subcontract and the skills and track record of potential subcontractors.
When allowed, the selection of subcontractors is without any doubt a key moment of the project. Traditionally, the appointment of subcontractors can be finalized either before or after the signature of the construction contract. Obviously, the choice is left up to the employer and it entails different implications.

**Appointment before the signature of the contract**

If appointed before the signature of the contract, the selection may be made by the main contractor alone or with a certain involvement of the employer.

There are various possibilities: (i) the contractor can state directly the name of the subcontractor (or a list of subcontractors among which the contractor will chose one); (ii) the contractor can submit the name of the potential subcontractor (or a list of potential subcontractors for the evaluation of the employer; the contractor can submit the name of a potential subcontractors (or a list) for the consent or approval of the employer.

As mentioned above, however, there can be cases where the employer can select directly the subcontractor and might even agree directly with the subcontractor terms and price of the works/supplies to be provided and, as such, impose them on the main contractor. The reasons behind this choice may be, inter alia, because the works require to obtain components with a long delivery time or situations where design of a specific part of the works or the manufacturing of highly technological components cannot be put on hold until the main contractor has been appointed.

Certainly, such approach might avoid potential delays, but might increase the risk of some “discussions” between the employer and the main contractor in relation to the performance of the subcontractor.

Sub-Clause 5.1 [Objection to Nomination] of the FIDIC Red Book, despite providing certain requirements under which the main contractor can object to the employment of a nominated subcontractor makes clear the most frequent issues that might arise out of engaging a subcontractor.

It must be stressed that even when the subcontractor is actually selected or designated by the employer, any legal liability attributable to the performance of the subcontractor will remain with the main contractor.

In cases where the subcontractor is designated directly by the employer, the contractor will be prevented from engaging in the (sometimes) unethical practice of bid-shopping, bid-peddling, and bid-chiselling. It is not rare, in fact, that once awarded the contract, the main contractor reaches out some of the subcontractors listed with the intent to obtain lower offers.

It is clear that the main risk involved with such practices is that any reduction in the original proposal put forward by the subcontractor will have an almost immediate impact on the quality of the works (and unfortunately sometimes on the costs of safety at workplace).

An even more “dangerous” risk is that the subcontractor, by accepting for various reasons a loss-making contract, might sooner or later prejudice the completion of the works.

In an alternative scenario, the employer may include in the tender documents a short list of potential subcontractors. The main contractor then selects one of the listed companies. While this approach does not eliminate in its entirety the risk of the abovementioned practices, it is certainly more appealing for both the main contractor and employer due to the fact that it
gives them more room to evaluate which subcontractor fits better for the works that have to be performed.

The employer must, however, keep in mind that under such approach the main contractor will incur extra expenses while selecting the subcontractor and this might be priced by the main contractor resulting in a higher price for the employer.

Unfortunately, in all those situations where the subcontractor is selected before the signature of the contract, it is not rare the main contract will not put the due attention to the skills and capabilities of the subcontractor. Rather often, in fact, the main contractor will look at the price offered by the subcontractor as the main important issue while neglecting to consider, for instance, the track records of the subcontractor, which certainly may affect the performance and execution of the entire scope of works.

**Appointment after the signature of the contract**

When the subcontractor is appointed after the signature of the contract, again the selection process may follow different routes.

In general terms, the employer, despite the fact it should have no direct power in the selection process, usually wants to maintain a certain control over the selection procedure. If on the one hand, the employer should fully rely on a proper evaluation of the main contractor on the most suitable subcontractor to perform the works (as for example in the EPC contract), on the other hand it is not unusual that the employer reserves the right to have the final word on the selected subcontractor (for instance with its consent and/or approval).

In particular it might happen that:

1. The subcontractor is appointed directly by the main contractor subject to the consent of the employer; or
2. The subcontractor is selected among a list of potential subcontractors agreed in advance with the employer.

In both cases, it is rather usual that the employer seeks to exclude expressly any responsibility in the selection process by inserting a specific provision which might read as follows:

“the engagement of any Subcontractor will not imply any direct relation between the employer and the Subcontractor and will not diminish in any manner the liability of the Contractor for any failure of the Subcontractor to perform its obligations”.

The approach of the FIDIC books is, as mentioned, in the same direction and, unless otherwise stated in the particular conditions, the main contractor shall be responsible for faults of any subcontractor engaged in the works (see Sub-Clause 4.4 [Subcontractors]).

The same situation will occur in all those cases when it is the employer who nominates directly a subcontractor. In such cases, however, the main contractor will be entitled to object to such nomination on the basis of reasonable grounds.

Sub-Clause 5.2 [Objection to Nominate] of the FIDIC Red Book mentions certain cases that would be considered as “reasonable objections” to the nomination of subcontractors made upon instructions of the engineer:
(i) the main contractor has a grounded belief that the subcontractor does not have enough competence, resources or financial strength to carry out its obligations;
(ii) the subcontract does not make clear that in case of negligence of the subcontractor, his agents or employees, the main contractor must be indemnified;
(iii) the subcontract does not make clear that the subcontractor will perform the works in such way to fulfil the obligations of the main contractor under the main contract;
(iv) the subcontract does not make clear that the subcontractor shall indemnify the main contractor in case of any failure to perform its obligations.

It is obvious that in all those circumstances in which a subcontractor is appointed after the signature of the contract a dispute might arise in connection with the selection process.

In such circumstances, it is desirable for parties to agree in the contract on a swift dispute resolution procedure concerning objections raised by the employer or the main contractor in order to downplay and prevent a potential suspension or delay of the works.

This can be achieved allowing either party to submit the dispute for settlement if the employer or the main contractor raise any objections within an agreed period of time from the notice of the intention to appoint a proposed subcontractor. The contract shall also provide that a final decision must be rendered within a short time so to avoid long and damaging discussions which will only delay the project.

In terms of effectiveness of one or the other option, it seems reasonable to suggest that the best approach would be to appoint or nominate a subcontractor before the contract is signed. This will certainly save time and avoid disputes and delays in the project completion.

**Risk allocation**

Regardless of when the subcontractor is designated and what selection approach parties select, the main contractor will, in any case, be liable toward the employer for any default of the subcontractor. As mentioned earlier, there is no direct legal relation between the employer and the subcontractor. This means that the main contractor, in the majority of the cases, will not be released from its liabilities for acts or omission even if attributable to the subcontractor.

As a consequence, one of the main relevant issues for the main contractor is to secure full “control” over the subcontractor last but not least by retaining a full right to terminate the subcontract (even in those cases where the employer has had an active role in the selection) by including in the main contract a provision such as the following:

“The Contractor shall reserve the right to replace at any time the Subcontractor in case of failure by the latter to properly and timely perform its obligations under the Subcontract”.

Having said the above, it is clear that the subcontractor will be in charge of some of the obligations that the main contractor has agreed to in the main contract. It will be therefore crucial to properly allocate the risk and find the right balance between the obligations that, on the one side, the main contractor has toward the employer and those that, on the other side, the subcontractor has toward the main contractor. In other words, the main contractor will need to be in the position to claim against the subcontractor any claim that comes from the employer and that can be actually attributable to the subcontractor.
It goes without saying that the subcontract (and its drafting) will have a crucial role in the risk allocation.

In terms of drafting, the aim of the main contractor will be to avoid any gaps and inconsistencies between the obligations assumed toward the employer and the obligations undertaken by the subcontractor.

In this respect there are different ways to achieve such result.

A. BESPOKE CONTRACTS

In particularly complex projects, it occurs rather often that the employer and the main contractor use bespoke contracts. In such case the best option for the main contractor when subcontracting part of the scope of work would be to go through every single clause of the main contract and carefully evaluate if (and how) the obligation of a specific clause should (and how) be passed down the chain to the subcontractor. Moreover, in such case the parties will have the opportunity to discuss relevant unique issues and, once executed, will only have to refer to the subcontract avoiding any cross-reference to the main contract, which can easily cause confusion. The main disadvantages are that a well-drafted bespoke subcontract requires a great deal of time and that in case of amendments to the main contract, the subcontract will have to be revised accordingly.

B. STANDARD FORMS

In other circumstances, parties might use standard forms of contract (for instance, FIDIC books). These forms are widely used since parties do not have to draft contracts from scratch and only have to amend the particular conditions.

In such case, the subcontract will be either governed by a specific standard subcontract (for instance, the FIDIC conditions of subcontract for construction) or will instead replicate mutatis mutandis the terms and conditions of the main contract.

Also in this hypothesis, however, the parties could pay not the right attention to the particular conditions, if any, and there might still be holes in the legal relation and in the risk allocation.

C. BACK-TO-BACK CONTRACTS

A third method (widely used and often the source of many disputes) is to use back-to-back agreements and clauses, also known as flow-down clauses. A flow-down clause is a contract provision by which the parties incorporate by reference into the subcontract agreement some or all of the terms and conditions of the main contract. Parties usually perceive this method as a short cut to make clear that the intention of the parties (main contractor and subcontractor) is for the subcontractor to bear toward the main contractor the same liabilities that the main contractor bears toward the employer.

However, parties are often not fully aware that, if poorly drafted (as it is often the case), a back-to-back agreement could lead to future disputes simply because inserted without a proper analysis of what clauses of the main contract can be actually applicable to the subcontractor. To have an efficient flow-down clause it would be sufficient a clear wording and that some of the relevant clauses of the main contract are expressly redrafted. A back-to-back agreement, despite the fact it saves a lot of time in terms of drafting, does not really avoid parties from digging into the contract.
In back-to-back scheme, particular attention should be paid to specific clauses such as:

(i) Conditional payment

In the attempt to produce a back-to-back effect, the main contractor will often request to include in the subcontract a provision pursuant to which payment to subcontractors shall be made only when the main contractor receives payment from the employer. Generally known as paid-when-paid clauses and despite any intent of the parties, this is a typical example where the parties should be very careful at drafting since it might be not enforceable under certain jurisdictions or in certain circumstances. Rather often the subcontractor would try to avoid any such clause especially because it might have a severe effect on its own cash flow.

(ii) Early completion bonuses

This clause is certainly one of those that should be redrafted with the utmost care. By way of example, if under the main contract the employer and the main contractor have agreed that for each day of early completion the main contractor will receive 100 Euro and the same concept applies to the subcontractor, it is pretty obvious that the subcontract should provide for a mechanism of fair apportionment of the early completion bonus that the main contractor will receive.

(iii) Liquidated damages

This is another clause that should be drafted with due care since a simple reference to the main contract liquidated damages clause may lead to consider the corresponding clause in the subcontract as a liability for indirect or consequential damages (and therefore unenforceable under certain jurisdictions). In addition, if the intent of the main contractor is to actually pass on to the subcontractor the liquidated damages eventually requested by the employer, it will be crucial to properly apportion the liquidated damages that can be claimed against the subcontractor.

(iv) Contractual dates

Reference here is made specifically to all those deadlines that are included in the main contract and that may refer to completion dates, submissions deadlines (for instance, in respect of document to be approved) and claims notification. All such contractual dates shall have to be included in the subcontract but shall be adequately adjusted so that they will be aligned with those included in the main contract.

(v) Dispute resolution

Another clause that should be examined carefully is the one on dispute resolutions such as the arbitration clause.

Parties often have a tendency to underestimate the implications of an arbitration clause embedded in the main contract. Referred to as boilerplate or midnight clauses, many contractors ignore that arbitration clauses incorporated by reference in the subcontract, in order to be enforced, might require to be expressly accepted by the parties. The first step for the parties is to check if, under the applicable law of the subcontract, the incorporation of an arbitration clause by reference meets the “in writing requirement” that, pursuant to the New York Convention on the Recognition and Enforcement of Foreign Arbitral Awards an arbitration clause must have.
The “in writing requirement,” however, is not applied uniformly by national courts (e.g., in some jurisdictions “an oral agreement to arbitrate will be regarded as being ‘in writing’ if it is made ‘by reference to terms which are in writing,’ or if an oral agreement ‘is recorded by one of the parties, or by a third party, with the authority of the parties to the agreement.’”

In addition, the law of the place of enforcement should be carefully considered when drafting the dispute resolution clause and this is another reason why a simple back-to-back clause might create additional disputes and require an ad hoc drafting.

(vi) Termination

The same applies to the termination clause. The main contract will usually contain provisions on termination for default or for convenience of the employer. It is clear that not only the subcontract should contain a clause, which will cause the automatic termination of the subcontract in case of termination of the main contract, but also the consequence of the termination of the main contract should be adjusted adequately to the termination of the subcontract (let’s consider for instance the payment obligations in case of termination for convenience or the obligation to vacate the site and those concerning the safety and security of the work site).

Conclusion

In the reality, the subcontract is one of the most important part of any mid or big size project. On the one side there is the difficulty for the employer to have full control over the subcontractor and on the other side there is often an underestimation by the main contractor of the various aspect of the subcontract that might have a negative impact on the execution of the scope of works.

The main contractor should pay particular attention to the drafting of the subcontract because it might have not only a massive impact on the completion of the scope of work (any delay or fault of the subcontractor will have to be remedied in a way or in another) but also in terms of liabilities of the main contractor that, in frequent situations, which do not flow down properly to the subcontractor due to a poor drafting of the subcontract agreement.

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Interface agreements between subcontractors by Bernd Ehle and Sam Moss (Switzerland)

Interface issues arise in virtually all construction projects that require coordination between several actors. For instance, in projects involving multiple subcontractors, a subcontractor may be prevented from accessing the construction site or commencing or completing parts of its scope of work by the activities and/or delays of other subcontractors. If such interface issues
are not managed adequately and expeditiously, they can have a considerable impact on the completion schedule and costs of a project.

One way of managing interfaces is for the subcontractors to conclude interface agreements addressing various issues such as duties of cooperation and reciprocal liability and indemnity between them. These agreements can provide a contractual framework for anticipating and resolving interface issues without having to involve the main contractor. For example, in the event that one subcontractor’s actions cause another to incur additional costs, an interface agreement may permit the first subcontractor to bring a “horizontal” claim directly against the other, instead of having to bring a “vertical” claim against the main contractor, who would then have to seek to recover amounts from the subcontractor that caused the additional costs. An interface agreement can therefore reduce the main contractor’s management obligations and costs, as it would not have to manage claims and act as an intermediary between subcontractors. They can also incentivize subcontractors to cooperate and coordinate their activities, as they cannot simply rely on the main contractor to resolve any issues arising from the activities of other subcontractors.

However, subcontractors will often be reluctant to conclude interface agreements, as such agreements can complicate the contractual framework for their involvement in a project by requiring them to undertake obligations both vertically to the main contractor, and horizontally to the other subcontractors. Indeed, such agreements can impose an additional source of liability, and require subcontractors to coordinate activities that the main contractor would otherwise be responsible for coordinating. Interface agreements therefore tend to be used in construction projects in which there is a particular reason to conclude them, due to the specific characteristics of the project.

For instance, interface agreements are frequently used in public-private partnerships (PPP) or private finance initiative (PFI) projects, in which private firms are contracted by public authorities to finance, build, and manage public projects. These projects often involve a thinly capitalized project company that acts as a main contractor, and several key subcontractors, including a construction subcontractor and a facilities management subcontractor, to which the project company steps down its obligations to build and operate the project. Interface agreements are used in this context to protect the project company from issues arising between the subcontractors. By way of example, the project company could be exposed to cashflow risks if any claims between the subcontractors had to go through it, as it might be liable to pay compensation to one subcontractor before it is able to recover the amounts from the other subcontractor. Interface agreements can also provide a framework for the reallocation between the subcontractors of liabilities passed down by the project company to one or several of the subcontractors.

Interface agreements are also often used in the context of complex construction projects in which the scope of works is split into several contractual packages, and in which there is no general or main contractor and the employer is not equipped to deal effectively with the significant interfaces of the project. Employers may adopt such a structure for various reasons, including to save costs. In such projects, interface agreements provide the contractors with a forum for addressing interface issues.

The content and structure of interface agreements can vary significantly from one project to another. However, issues that are commonly addressed in such agreements include the following:
• **Delays**: delays in the works of one subcontractor will often impact the work of other subcontractors, for instance, because aspects of their scope of works are interdependent, or because they are prevented from accessing the site. In PPP/PFI projects, the facilities management subcontractor may also lose revenues or incur additional costs if it is prevented from commencing its operation of the project due to a delay by the construction subcontractor.

• **Defects**: In PPP/PFI projects, the facilities management subcontractor is often liable under its subcontract with the project company for defects caused by the construction subcontractor. Interface agreements therefore often define the obligations of the construction subcontractor towards the facilities management subcontractor in respect of defects.

• **Coordination of works**: In addition to identifying who has the responsibility to coordinate the works, interface agreements may set up tools and structures to facilitate coordination, for example, a coordination committee that acts as bridge between the different subcontractors. Such committees may be assigned specific roles, such as managing claims, and/or preparing weekly risk reports.

• **Risk management**: Interface agreements will often establish tools to help the parties manage risks. One such common tool is the risk register (also referred to as a risk log), which seeks to identify common and project-specific risks, their potential cost and delay impacts, and which party is responsible for monitoring and mitigating each risk. The agreements may also set out arrangements to split the benefit of underspend and the cost of overspend on the project.

• **Dispute resolution**: Interface agreements will usually contain dispute resolution provisions that permit subcontractors to bring claims directly against other subcontractors.

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1.15.1 **Representative office and domestic or foreign subsidiary**

In general, there are two ways of doing non-collaborative business abroad. This can be done through a representative office based abroad or via a domestic or foreign subsidiary. Selecting the appropriate business form for a particular country or for a particular construction project is one of the keys to success.

The right to do business will usually be granted on completion of an entry in the local business register. The cost and time demands in connection with setting up a representative office or a subsidiary will vary depending on the target market.

Both forms of doing business abroad have to be chosen with the social-political situation, tax considerations, financial planning, commercial objectives and priorities, risk management, and business-related legislative conditions in mind.

The major difference between both forms is in the legal status and responsibility. A representative office is not a separate legal entity—it is merely a tool to prolong the company’s reach. As a result, any contract-related liabilities or even damages can
still be borne by the company itself. A brand-new, independent legal entity, on the contrary, will arise if a subsidiary (sometimes also called a “daughter company”) is founded. The reasons for creating a subsidiary to operate in a foreign country usually center on tax and liability concerns. However, subsidiaries with limited liability may experience difficulties in obtaining credit, insurance, securities, and so on.

1.15.2 The consortium and the joint venture in construction

Consortiums and joint ventures are collaborative forms of business organizations. In construction, it is not always clear what the factual and legal meanings of these particular terms are. Both of these business forms are commonly used in joint construction projects by contractors. In practice, the contractors usually unite for large construction projects because the nature and demands of such projects are beyond the capacity of an individual contractor. A single contractor is sometimes unable to meet the qualification criteria for the project or is lacking the resources as they are engaged in other projects. Take, for example, the construction of a railway corridor—such a project will require the cooperation of companies specializing in landscaping, traction power lines and design.

Another reason is the need for strategic partnerships in international business. A local partner is often indispensable whenever a new market is entered, as they already have established relationships with the employer, designer, or contract administrator, have experience with local subcontractors, suppliers, and unions, and are familiar with local business rules and practices. The formation of an association is also a way to deal with risk and to improve marketability and credibility. Risks are divided between the parties and the specialist skills on offer collectively strengthen the bid.

As in life, the biggest challenge is to find a reliable partner for a particular collaboration. Therefore, it is important that a contractor learns as much as possible about their potential partner. In particular, their financial status and good references. After such a “due diligence” check has been completed, a contract can be signed and a successful partnership developed.

Employers often require bidders to enter into collaborative forms of business organizations so that they are jointly and severally responsible for the fulfilment of their obligations under the contract with the employer. Having become part of such a venture, each of the participants must be prepared to deal with the issue of becoming solely liable for the other participants' obligations should the latter collapse (e.g., due to insolvency).

In practice, potential contractors join forces at the tender stage, though there is nothing to prevent such a joint venture from being created during the construction phase. In the latter case, such a joint venture is internal in its nature and therefore excludes any joint and several liability to the employer.

The governing law, its respective limitations and accepted forms of association should always be evaluated whenever a consortium or a joint venture is to be established. Contractors must take into consideration any statutory requirements and the mandatory provisions of a particular applicable law. For example, they must consider if it is necessary to conclude the respective contract in writing, how to determine the
governing law in the absence of a selected jurisdiction, when exactly the consortium or joint venture is to be founded, etc.

It is the responsibility of the contractors and their actual priorities in particular projects to determine what kind of “form” of cooperation they choose. Consortiums are easier to create and require fewer resources and commitments than joint ventures.

1.15.3 The consortium

A consortium is the most widely used association by contractors to join their efforts in construction projects. A consortium consists of two or more contractors uniting to set up an association of independent contractors. A consortium is not a legal entity, bids are jointly submitted and the parties are jointly and severally liable for work performed under the contract. Commonly, consortium members perform the works separately as they distribute the particular parts of the work between themselves. Moreover, the consortium’s losses and profits are borne separately by the particular members. Right from the bidding phase, the project is usually subdivided into a number of parts that are then priced and executed independently by the members of the consortium. Not being a legal entity, the consortium is represented in dealings with the employer and third parties by a leading participant who also, as rule, prepares invoices for the employer (being paid to the common account) and distributes the received payments to other participants afterward.

At the top management level, the consortium is usually managed by a board consisting mainly of the participants’ executive directors. The board can resolve disputes and give instruction to the consortium’s “on-site” administrative body, which coordinates design, construction, accounting, and engineering. The administrative body acts on the consortium’s behalf, communicating on a daily basis with the employer’s representatives or the contract administrator.

Relationships between the members of a consortium can take other forms. The works, for example, may be carried out separately with one shared profit and loss account, the balance of which is then distributed among the venture participants once the project is completed (perhaps on a pro rata basis), depending on the individual participants’ share in the project.

A further example of a different kind of consortium is the “tacit association” or Beihilfegemeinschaft in Germany. Such a “silent association” comes into being where a contractor executes part of the works through a third party under the consortium contract but not via a subcontract. Despite being associated with the contractor, such a third party is not a party to the contract entered into with the employer (the main contract). This form is particularly useful where a part of the works necessitates the close cooperation of human resources, special equipment, technology, copyrights and know-how, and where the contract for works cannot adequately regulate such part of the project.

Consortium agreements may contain various rights and obligations ranging from loose to strict forms of contractual relationships. It is common for the consortium agreement to deal with matters such as the purpose of the consortium, mutual rights and responsibilities, joint and several responsibility to the employer, bid
evaluation, representation, decision-making, management, duration, account and payments, profit and loss distribution, insurance, bonds and guarantees, insolvency, termination, and so on. Consortia are often regulated by statute in civil law countries as they are recognized forms of business cooperation. This factor must be taken into consideration when negotiating or preparing a contract. In Poland, for example, a consortium can be created by a verbal agreement with the consequence of joint and several liability imposed by statute.

1.15.4 The joint venture

Joint ventures are more complex than consortia. They exist as distinct legal entities—often with their own employees and objectives as well as financial, tax, and legal issues to deal with. Joint ventures differ among jurisdictions and the actual form will depend on the requirements of particular contractors.

There also exist associations known as equity joint ventures (EJVs). In this case, a joint venture or partnership of a domestic and foreign entity operates under the umbrella of a limited liability company. In China, an EJV is a limited liability entity established by a foreign investment entity and Chinese investors. Under Chinese law, all foreign business activity in China must be conducted in this way. In the UK, the principal types of joint ventures are contractual joint ventures, general partnerships, consortium companies, limited liability companies, and hybrid companies. A consortium company, where each partner takes an agreed percentage of the issued share capital, is probably the most common form of joint venture in the UK (Venoit, 2009).

If there is no mandatory regulation prescribing the use of the EJV there can be a strategic interest in creating an EJV where business priorities include long-term business relationships, risk and liability limitation, tax, and other practical issues.

1.15.5 ARGE

The Arbeitsgemeinschaft (ARGE) is a specific form of joint venture in Germany. Issued by the Hauptverband der Deutschen Bauindustrie (the German Construction Industry Association), it stands apart from other European jurisdictions by unifying sample forms of joint venture contracts in law.

Unlike the consortium, the ARGE is a legal entity (a Gesellschaft des bürgerschen Rechts (“civil rights company”)) whose characteristics are defined by the German Civil Code (BGB). The ARGE is independent from its shareholders, can sue or be sued and can act independently of its joint venture partners. In contrast to a common consortium whose participants perform the work separately, the ARGE participants execute the works as individual contractors, with the profits distributed and losses to be borne on a pro rata basis, depending on their shares in the ARGE. As an independent legal entity and a daughter company of its participants, the ARGE enters into the main contract with the employer.

At the bidding phase of a project, the future participants in the ARGE will first enter into the Bietergemeinschaftsvertrag (“contract on joint bid submission”). Sample forms of this contract are unified in law as well as in the wording of future ARGE contracts. The Bietergemeinschaft will turn into ARGE only when the
contract is awarded. Otherwise, the Bietergemeinschaft lapses and does not give rise to ARGE.

An ARGE foundation agreement is valid when made orally but has to be concluded in writing for practical reasons. Partners may freely depart from the provisions of the BGB except in two specific cases. Case 1: no participant shall acquire a controlling stake in ARGE (be in control of it). Case 2: no participant shall be deprived of the option to leave ARGE.

References


Further reading