

CONSTRUCTION LAW INTERNATIONAL

FROM THE IBA INTERNATIONAL CONSTRUCTION PROJECTS COMMITTEE OF THE ENERGY, ENVIRONMENT, NATURAL RESOURCES AND INFRASTRUCTURE LAW SECTION (SEERIL)

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Construction project eschatology: sustainable project decommissioning

Risk management and dispute avoidance through efficient contractor due diligence

Soaring global construction costs under FIDIC: whose risk?



The eyeWitness mobile app; seeking justice for the worst international crimes

eyeWitness to Atrocities begins with a simple vision: a world where the perpetrators of the worst international crimes are held accountable for their actions. As an initiative of the **International Bar Association (IBA)**, with the support from **LexisNexis Legal & Professional**, the eyeWitness to Atrocities app provides a means of documenting human rights atrocities in a secure and verifiable way so that the material can be used as evidence in a court of law.

Every day, around the world, human rights defenders, investigators, journalists and ordinary citizens capture photos and video of atrocities committed by violent and oppressive states and groups. eyeWitness provides these individuals with a tool to increase the impact of the footage they collect by ensuring the images can be authenticated and, therefore, used in investigations or trials.

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eyeWitness becomes an advocate for the relevant footage it receives, ensuring it is used to promote accountability for the atrocities filmed. An expert legal team analyses all footage received and identifies the appropriate authorities, including international, regional or national courts, to investigate further. eyeWitness also works closely with organisations already documenting such crimes to incorporate the app into existing workflows that seek accountability for these same crimes.

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Demolition of coal bunkers at the GRES-1 power station, Kazakhstan.
Credit: Alexey Rezvykh/Adobe Stock

FROM THE EDITORS

Dear readers,
We are delighted to introduce our first issue of 2023, which is packed with contributions which we hope our readers will find both insightful and instructive for their day-to-day practice.

Given the uncertainty facing the construction industry during the past year and continuing in 2023, it is not surprising that a number of the contributions to this month's issue touch on managing risk, including, in particular, related to changing costs.

We are pleased to include in this issue two highly informative contributions from the Project Execution Subcommittee – an in-depth look at the treatment of unforeseen subsurface conditions, and an introduction to project decommissioning, building on a presentation given at the IBA conference in Miami last year. We encourage other ICP subcommittees to consider sharing their collaborative work with the group through publication in *CLInt*.

The March issue also includes several articles relevant to construction projects under FIDIC Contracts, including the latest instalment in our FIDIC around the world series, examining the use of FIDIC form contracts in Turkey; an introduction to FIDIC's latest amendments to its suite of contracts; and a look at the allocation of risk of cost increase under FIDIC contracts.

We thank all our contributors for their efforts and look forward to another year of *CLInt*. As always, we encourage all ICP members to share their experiences by submitting articles to China Irwin at cirwin@lalive.law.

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FROM THE CO-CHAIRS

Dear International Construction Projects Committee members,
When you receive this issue of *Construction Law International*, the Christmas holiday season will already be a vague memory. We hope everyone had a good start of this new year.

The year 2022 will be remembered with mixed feelings. Finally, after two years of Covid restrictions, most of us were able to travel again. Given the success of not only the Working Weekend in Vevey, but also the attendance at the Annual Conference in Miami, it is fair to say that we all have missed these in-person gatherings. On the other hand, 2022 was overshadowed by the war in Ukraine. The war not only affected the Ukrainian people and all those personally hit by the war, it also fuelled a global economic crisis, leading to an increase in inflation and uncertainties about energy supplies. This crisis also had an adverse effect on the construction industry due to price increases and shortages of building materials. Sadly, a quick resolution for this conflict is not to be foreseen.

Perhaps a positive side effect of the energy crisis is that it accelerated the development of more sustainable resources and the development of new construction methods and building materials that help reducing our carbon footprint and led to an increased focus on environmental, social and corporate governance (ESG) in construction.

Looking back at a successful Working Weekend in Vevey and a well-attended Annual Conference in Miami, we realise that all this was only possible thanks to the hard work and dedication of all our officers, our ICP members and IBA staff. Thank you all for your relentless support of our ICP Committee.

The start of the new year also marked the second year of our tenure as Co-Chairs. We feel privileged that ICP is able to host three different in-person events this year. The first one being our Biennial Conference on Construction Projects, from Conception to Completion, which will take place from 16–18 March 2023 in Berlin, Germany. Preparations are progressing well for our second event, the traditional Working Weekend. We are delighted that our past Co-Chair Ricardo Barreiro-Deymonnaz offered to organise the 2023 Working Weekend in Mendoza, Argentina. This weekend will take place from 5–7 May this year. Given the success of previous Working Weekends, this weekend has already been fully booked. Our final in-person event will be the IBA Annual Conference in Paris, France, from 29 October until 3 November. More information on the ICP session topics and calls for expressions of interest to participate in our sessions, will follow in due course.

Our committee is privileged in having its own magazine, *Construction Law International*, also known as ‘*CLInt*’. We encourage ICP members to contribute papers or smaller contributions to *CLInt*, so that we can continue publishing this excellent magazine.

Finally, since we only have a few opportunities in a year to meet in-person, we invite all ICP members to reach out to us and share your thoughts and suggestions on how to make the ICP Committee a better committee and a tool to share our knowledge.

We are looking forward to meeting with you at one of the ICP events this year.

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Call for submissions – D&I Questionnaire

We invite contributions to the diversity and inclusion questionnaire, a recurring feature of *Construction Law International*. If you are inclined to share your experiences, the questions are:

1. What is your name and current job, role or title?
2. When starting out in your career, did you have any role models?
3. What advice did you receive which helped you progress in your career?
4. Do you think that diversity is improving in your particular professional area?
5. What positive steps have you seen organisations take to progress diversity and inclusion?
6. What aspects do you think are still ripe for improvement in organisations?
7. What are the indicators of when a reasonable diversity balance is reached?
8. What do diversity and inclusion mean to you and why are they important?



FIDIC Questionnaire – Turkey

Ceyda Sıla Çetinkaya, Ege Buket and Yavuz İskit

Esin Attorney Partnership

1. What is your jurisdiction?

The Republic of Turkey (Türkiye).

2. Are the FIDIC forms of contract used for projects constructed in your jurisdiction? If yes, which of the FIDIC forms are used, and for what types of projects?

Application of FIDIC in Turkey

Turkey became a member of FIDIC in 1987 through the Union of Turkish Consulting Engineers and Architects (UTCEA). Throughout the years, the use of FIDIC forms of contract became more common in internationally financed, large infrastructure and construction projects in Turkey. For instance, some of the largest international projects, namely, the Marmaray Tunnel Project, the Baku-Tbilisi-Ceyhan Pipeline Project and the Istanbul-Ankara Highway Project were carried out under FIDIC forms of contract.

On the other hand, in terms of locally financed projects, the contract form included in the annexes of the Regulation on the Execution of Construction Works Tenders, which is prepared by the Public Procurement Authority, in line with the provisions of Turkish Public Procurement Law No 4734 (the ‘Public Procurement Law’), is preferred instead of FIDIC.¹ That said, Article 3 of the Public Procurement Law foresees certain

exceptions, including where foreign financing is provided in accordance with international treaties that foresee specific procurement methods, and the use of FIDIC forms of contract is more common for these procurements.

With regard to the private sector, although there are exceptions, FIDIC forms of contract are not widely used in purely domestic projects in Turkey, where international financing is generally not required, and parties usually choose to apply the above-mentioned national standard contract form.

Which FIDIC form is used for what type of projects?

The most common FIDIC contract forms in Turkey are, respectively, the Silver Book, Yellow Book, Red Book and Gold Book. Which FIDIC contract form is preferred depends on the nature of the project, the employer’s familiarity with FIDIC, the size of the project’s budget and the technical specifications. In addition, 1999 versions of FIDIC forms of contract are the most commonly used ones, rather than the new versions.

The Silver Book is used for engineering, procurement and construction (EPC)/turnkey projects, and it is suitable for use on process, power and private infrastructure works where the contractor is to take on full responsibility for the design and execution of a project. Accordingly, in Turkey, the Silver Book is used in complex and innovative construction projects which do not fall under the scope of the employer’s area of expertise and experience.² In this respect, the Silver Book is preferred by the parties to decrease the risk carried by the employer, and to provide more security to the employer in terms of constructions’ technicalities, timing and financing.

The Yellow Book is used in design and build projects where the

construction, installation and design of the project are undertaken by the contractor. Compared to the Silver Book, the Yellow Book is preferred in projects that involve more risk sharing between the employer and contractor. The Yellow Book’s application in Turkey is also recommended for works where the technicalities of the work are not important for the employer, but where efficiency and product quality become much more important when the investment enters the operational phase, and where the employer wants to give its opinion on, and approval for, the design details. Thus, projects regarding the construction of pumping stations, water and waste treatment plants, industrial plants and flue gas filtration are typical projects where the Yellow Book is used.

The Red Book is applied to projects where the design is undertaken by the employer itself or by a contractor appointed by the employer, and therefore the construction risks belong to the employer. Accordingly, the Red Book is mostly preferred in projects where the employer is familiar and experienced with the work and the technical aspects thereof. In this context, the Red Book is applied to construction projects for roads, bridges and buildings where simple civil engineering works are predominant. In Turkey, these projects are usually small-scale, domestically financed works where the parties prefer to apply the standard contract forms issued by the Turkish Government instead of FIDIC forms.

In rare cases, the Gold Book – which is intended to accommodate the needs of a project with long-term operation – is also used in projects in Turkey; however, its application is rather narrow compared to the other FIDIC forms of contract.

3. Do FIDIC produce their forms of contract in the language of your jurisdiction? If no, what language do you use?

Although FIDIC does not provide Turkish versions of the FIDIC forms of contract, the UTCEA has prepared official Turkish translations of all FIDIC contract forms included in the 1999 edition and a translation of the 2017 Red Book is currently being prepared. Accordingly, in Turkey, parties can incorporate the official Turkish translation of FIDIC into their contracts, or can conclude the contract in English. That said, in Turkey, the majority of the FIDIC contracts are concluded in English or in a dual language format including an English version. It is very rare to encounter a FIDIC contract that is solely in Turkish.

With regard to the contracts' language, it is worth noting that the Law No 805 on the Mandatory Use of the Turkish Language in Commercial Enterprises ('Law No 805') provides that all Turkish companies are required to conduct their business transactions, conclude their contracts and keep their correspondences, records and books within Turkey in Turkish.

Requirements for foreign companies to use the Turkish language are limited and Article 2 of Law No 805 does not set forth a requirement for agreements to be signed in Turkish for foreign companies. Nevertheless, in some conflicting and rare decisions, the Court of Cassation of the Republic of Turkey ('Court of Cassation') has adopted an approach that mandates that Law No 805, Article 2 also requires foreign companies to execute their agreements with Turkish companies in the Turkish language.³

Failing to fulfil these requirements results in the failing party being unable to rely on the respective contract or the relevant provisions in its favour. For example, in one of its decisions, the Court of Cassation refused to enforce an arbitration clause drafted in English between a Turkish party and a foreign party based on Article 2 of the Law No 805, stating that a party cannot rely

on the arbitration clause drafted in a foreign language.⁴ The contract in question was a distribution agreement executed between a Swiss producer and a Turkish distributor in English only and governed by Swiss law.

A very risk averse approach would be to have documents and agreements written in dual column format (which is common practice in Turkey), one in a foreign language and one in Turkish, ideally with the Turkish version prevailing.

4. Are any amendments required in order for the FIDIC Conditions of Contract to be operative in your jurisdiction? If yes, what amendments are required?

FIDIC forms of contract are generally considered to be in compliance with Turkey's domestic legislation. Therefore, in principle, there are no specific provisions that need to be amended in order for the contract to become operative in Turkey, but a case specific analysis is recommended, and certain amendments may be needed in specific cases. In any case, if a provision of the contract contradicts a mandatory rule under Turkish law, then the latter shall override the contractual provision.⁵ As such, no requirement is mandatory, per se, to the text of the FIDIC forms of contract. That said, it should be noted that there are certain issues elaborated under Question 10 below, which do not affect the validity of the contract but have implications that differ from the provisions of FIDIC forms of contract and parties should, therefore, be cognisant of these issues.

5. Are any amendments common in your jurisdiction, albeit not required in order for the FIDIC Conditions of Contract to be operative in your jurisdiction? If yes, what (non-essential) amendments are common in your jurisdiction?

Yes, certain amendments to FIDIC forms of contract are common in

Turkey, even if not mandatory. These amendments are usually made to accommodate the specific needs of the employer or the project. The most common amendments are as follows.

- **Delay damages:** One of the most commonly encountered amendments is to the delay damages provisions (Sub-Clause 8.8). Delay damages as provided under FIDIC forms of contract can qualify as either a 'contractual penalty' or 'liquidated damages' two legal concepts that differ in their legal nature and implications under Turkish law.⁶ Liquidated damages serve as an agreed pre-determination of damages meant to ease the employer's burden in proving its loss, while a penalty clause may provide for damages exceeding the actual loss and serves to pressure the contractor to properly perform its obligations. A contractual penalty is also independent of the defaulting party's fault, whereas liquidated damages require the employer to prove the contractor's fault.⁷ Therefore, it is common practice in Turkey for contracting parties to amend the delay damages provision to clarify whether it constitutes a contractual penalty or liquidated damages provision. It is equally common to amend the limitation of liability under FIDIC forms of contract to include indirect and consequential loss, both of which are common concepts under Turkish law.
- **Notice periods:** It is common in Turkey for parties to amend the various notice requirements and periods provided under the FIDIC forms of contract.
- **Variation and price difference:** The price difference is one of the most commonly amended provisions. The conditions and calculation formula for the price difference are often amended or, in certain cases, the calculation of the price difference is expressly excluded from the contract.

- **Dispute resolution:** Parties often amend the dispute resolution mechanism provided under FIDIC forms of contract to exclude dispute boards or amicable settlement periods.
- **Force majeure:** The scope of what constitutes a force majeure event is often amended under the specific contract.
- **Payment terms:** Payment terms are almost always amended to suit the specific needs and timeline of the project. These amendments may include the calculation method of the payments as well as frequency and timing thereof.
- **Insurance:** Another common amendment is to the insurance provisions, whereby the type and limits of insurance may be altered to suit the specific needs of the project.

6. Does your jurisdiction treat Sub-Clause 20.2.1 of the 2017 suite of FIDIC contracts as a condition precedent to Employer and Contractor claims?

FIDIC forms of contract foresee a multi-tier dispute resolution mechanism, beginning with the dispute board to amicable settlement then to arbitration as the final and binding dispute resolution forum. In that sense, engineers no longer serve the function of a step in the dispute resolution mechanism. Instead, the employer and contractor apply to the engineer, as the first step, for their claims before a dispute arises. As such, Sub-Clause 20.2.1 governs claims by the contractor or the employer, regardless of whether they are monetary or temporal in nature.

Under Turkish law, construction contracts are considered ‘work contracts’ and are regulated under the Turkish Code of Obligations (TCO), which does not stipulate a specific requirement or procedure for the contractor or the employer to raise their claims. In other words, Turkish law leaves this issue to the agreement of the parties under the principle of contractual

freedom enshrined under Article 26 of the TCO.⁸

Under Turkish law, as a natural consequence of contractual freedom, if the contractual provisions stipulate a condition precedent, which is the case for Sub-Clause 20.2.1 of the 2017 suite of FIDIC contracts, then the stipulated procedure constitutes a condition precedent.

Sub-Clause 20.2.1 does constitute a condition precedent for the purposes of Turkish law, which has been confirmed by the Court of Cassation⁹ (although some commentators consider the time limit provided under Sub-Clause 20.2.1 to be invalid under Turkish law). Please refer to our explanations under Question 9 below for a summary of the Court of Cassation’s decision.

7. Are dispute boards used as an interim dispute resolution mechanism in your jurisdiction? If yes, how are dispute board decisions enforced in your jurisdiction?

Use of dispute boards in Turkey

Turkish law does not prevent the use of a dispute board. Therefore, there is no legal obstacle against using dispute boards.

Dispute boards under FIDIC forms of contract can either be standing dispute boards, which is the case for FIDIC Red Book or ad hoc dispute boards, which is the case for the Silver Book and Yellow Book. Both types of dispute boards are available under Turkish law and are used in Turkey.

In practice, dispute boards are commonly used in Turkey for FIDIC forms of contract where arbitration is chosen as the ultimate dispute resolution mechanism.

Enforcement of dispute board decisions in Turkey

Parties may willingly comply with the decisions of the dispute

board and perform their duties thereunder. However, if a party does not willingly comply with the decision of the dispute board, such decisions cannot be directly put to execution in Turkey.¹⁰

As a rule, only Turkish court judgments and certain documents (such as local arbitral awards) that have been attributed the quality of a court judgment under Article 38 of Execution and Bankruptcy Law No 2004 and certain other codes can be directly put to execution in Turkey. Dispute board decisions do not fall under either of these categories, as they are not Turkish court judgments nor have they been attributed the quality of a court judgment by law.

In light of the above, the main option available to a party whose opposing party refuses to willingly comply with the decision of a dispute board is to resort to arbitration as provided in the multi-tier dispute resolution mechanism under FIDIC forms of contract. The arbitral award can then be enforced in Turkey. Depending on whether the seat of arbitration is outside of Turkey, the enforcement procedure will differ. Local arbitral awards can be directly put to execution in Turkey as if they are a Turkish court judgment, whereas foreign arbitral awards need to be enforced in Turkey before they can be put to execution.

On a separate note, in Turkey, the creditor may first file execution proceedings and then refer to arbitration or litigation upon the debtor’s objection thereto. In other words, the parties can initiate execution proceedings without a dispute board decision or an arbitral award.

8. Is arbitration used as the final stage for dispute resolution for construction projects in your jurisdiction? If yes, what types of arbitration (ICC, LCIA, AAA, UNCITRAL, bespoke, etc) are used for construction projects?

And what seats?

Use of arbitration as dispute resolution mechanism for construction projects

Yes, under Turkish law, construction contracts are ‘work contracts’ meaning that they consist of the performance of a work, which is arbitrable under Turkish law. That said, disputes concerning rights *in rem* on immovable property in Turkey are not arbitrable. Accordingly, if, for example, a contractor is compensated with ownership of a portion of the land on which it is performing the construction or the construction contract otherwise transfers ownership of immovable property in Turkey, disputes arising from the ownership right to the immovable property will not be arbitrable. As such, construction disputes are usually arbitrable and arbitration is not only used but is increasingly becoming the preferred method of resolving complex construction disputes involving foreign counterparties in Turkey.

Institution and seat preference

The International Chamber of Commerce, London Court of International Arbitration and Istanbul Arbitration Centre (ISTAC) are the most commonly preferred arbitral institutions for arbitration of construction disputes in Turkey. In fact, in 2017, the Implementation Regulation for Construction Tenders was amended to include ISTAC as the default choice of arbitration institution for public procurement contracts.¹¹ Ad hoc arbitration is generally not preferred due to the lack of secretarial services in ad hoc arbitration.

The choice of seat depends on the specifics of each project, such as the nationality of the parties and where the parties have assets. That said, in our experience, Geneva and London are two commonly preferred arbitral seats.

9. Are there any notable local court decisions interpreting FIDIC contracts? If so, please provide a short summary.

There are few Turkish court decisions that have interpreted FIDIC contracts. Among these, there is one notable example regarding the procedure for extension of time, which we would like to share.¹² The dispute arose out of a FIDIC form of contract signed in 1994 for the construction of 588 residences. Clause 44 of the contract regulated the procedure applicable for extension of time requests. The contractor was required to notify the engineer of its request within 28 days along with the documents evidencing the necessity for the extension of time, with a copy of the request also sent to the employer. The contractor had failed to make its request in accordance with the procedure stipulated under the contract, and the extension of time request was rejected by the engineer.

The Court of Cassation held that FIDIC forms of contract foresee strict rules for extension of time requests for the purposes of ensuring consistent practice on an international level. The Court of Cassation further emphasised that it is essential for extension of time requests to be made in a timely manner and accompanied with the necessary evidence in order to prevent unjust outcomes. The Court of Cassation then evaluated the case before it and ruled that the engineer was justified in refusing the extension of time request considering that the contractor had failed to make its extension of time request in due time and to document it.

10. Is there anything else specific to your jurisdiction and relevant to the use of FIDIC on projects being constructed in your jurisdiction that you would like to share?

Termination of a public procurement contract by the contractor

As explained at Question 2 above, FIDIC forms of contract are mainly used in public procurement projects in Turkey. Contracts signed as a result of public procurement are mainly regulated by the Public Procurement Law No 4734 and Public Procurement Contracts Law No 4735. Neither of these codes nor their secondary legislation provide for a termination right to the contractor due to the employer’s breach of its obligations under the public procurement contract. Certain scholarly views have interpreted this absence as an indication that the contractor cannot terminate a public procurement contract. On the other hand, there are also views that a contractor can terminate a public procurement contract in accordance with the general provisions of the TCO, which apply in the absence of an express provision in the public procurement legislation.

FIDIC Red Book Sub-Clause 16.2 extensively regulates the reasons and conditions for the contractor’s termination. Therefore, although it is not crystal clear, parties should be aware that depending on the view taken by the dispute resolution authority, Sub-Clause 16.2 may be found in contradiction with the public procurement legislation and, therefore, invalid (although such invalidity does not render the contract invalid as a whole).

Penalty clause

In principle, the parties are free to determine the amount of a contractual penalty, which the delay damages provision under Sub-Clause 8.8 may constitute as explained above under Question 5. According to Article 182 of the TCO, Turkish courts can readjust excessive penalty amounts *ex officio*. That said, in practice, courts hold a high threshold to adjust contractual penalty amounts

determined under contracts where both parties are merchants and are therefore expected to act as prudent merchants and carefully consider the consequences of contracts they execute.

Defect liability period

FIDIC forms of contract include a defect notification period but do not set a liability period for defects. As such, the relevant provisions of the governing law shall apply. If Turkish law is selected as the governing law, the parties must be aware of the liability periods set for defects in construction contracts. According to Article 478 of the TCO, Turkish law foresees a five-year liability period for defects for the contractor, starting from the date of delivery. If the contractor has caused the defect intentionally or by gross negligence, the liability period is 20 years from the date of delivery.¹³

Principle of good faith

Under Turkish law, as opposed to common law systems, the parties to a contract have a general obligation to carry out their obligations in accordance with the principle of good faith enshrined under Article 2 of the Turkish Civil Code. In terms of construction contracts, the principle of good faith is often used in the context of determining whether the performance is defective or whether a certain notification period is enough (especially when no express period has been set in the contract).

General terms and conditions

Under Turkish law, contract terms previously and unilaterally prepared by one party (without being negotiated) with the purpose of using them for several similar contracts and submitted to the other party for signing are considered general terms and conditions. If any provision of the general terms is contrary to the interests of the other

party, the party who unilaterally drafted the contract is required to provide clear information to the other party regarding the existence of any such clause or provision, provide the other party with the opportunity to read, learn and understand the content of any such provision prior to or at the signing of the contract and, ideally, provide an opportunity to negotiate the provision. The validity of any such provision depends on the acceptance of the other party. Without such acceptance, any such clause or provision will be deemed not to have been written (ie, not to have been incorporated into the relevant contract). That said, contractors in FIDIC contracts are merchants, who are subject to the obligation to act as a prudent merchant in all their commercial activities. This obligation encompasses the need to carefully consider the content of any contract before executing it. As such, under Turkish law, contractors will not be able to claim that provisions of the FIDIC contract constitute general terms and conditions, save for exceptional cases and depending on the specific conditions thereof.

Notes

- 1 See the annexes in this link for the Turkish version of the standard contract form at www.mevzuat.gov.tr/mevzuat?MevzuatNo=12916&MevzuatTur=7&MevzuatTertip=5, accessed 22 January 2023.
- 2 The Marmaray Tunnel Project used the Silver Book, as it was considered to be an unconventional project in Turkey. The Baku-Tbilisi-Ceyhan Pipeline Project also used the silver book.
- 3 11th Civil Chamber of the Court of Cassation, File No 2012/4088, Decision No 2013/3972 dated 4 March 2013. 11th Civil Chamber of the Court of Cassation; File No 2016/5836, Decision No 2017/4720 dated 26 September 2017; 11th Civil Chamber of the Court of Cassation; File No 2014/1385, Decision No 2014/3815 dated 28 February 2014.
- 4 11th Civil Chamber of the Court of Cassation; File No 2016/5836, Decision

- No 2017/4720 dated 26 September 2017.
- 5 Nuray Ekşi, *İnşaat Hukuku ve Uygulaması* (Construction Law and Practice), 2017, pp 187–188.
 - 6 Numan Tekinoğlu, *İnşaat Sözleşmelerinde Cezai Şart ve Götürü Tazminat* (Penalty Clause and Liquidated Damages in Construction Contracts), 2017, p 179.
 - 7 *Ibid*, pp 180–181.
 - 8 Eda Şahin Şengül, *FIDIC Kırmızı Kitap Kapsamında İnşaat Sözleşmelerinde Süre Uzatımı* (Extension of Time in Construction Contracts within the Context of FIDIC Red Book), 2022, pp 155–156.
 - 9 15th Civil Chamber of the Court of Cassation, File No 2000/4429, Decision No 2001/1032 dated 26 February 2001.
 - 10 Note 5 above, pp 206–208.
 - 11 Article 2 of Regulation Amending the Implementation Regulation for Construction Tenders dated 30 December 2017.
 - 12 15th Civil Chamber of the Court of Cassation, File No p 2000/4429, Decision No p 2001/1032 dated 26 February 2001.
 - 13 Zafer Kahraman, *6098 Sayılı Türk Borçlar Kanunu Hükümleriyle Karşılaştırmalı Olarak 1999 FIDIC Kırmızı Kitap Kurallarının Kabul Edildiği İnşaat Sözleşmelerinde İşin Kabulü ve Yüklenicinin Ayrıntılı Doğan Sorumluluğu* (Acceptance and the Contractor's Liability from Defects in Construction Contracts for which 1999 FIDIC Red Book Rules Have Been Adopted in Comparison with the Provisions of the Turkish Code of Obligations No 6098), 2014, p 2562.

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**FIDIC’s amendments
Issue No 3 (1 January 2023)**

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Introduction

FIDIC started off the new year with a third set of Amendments to the FIDIC 2017 suite of model forms (also known as the ‘FIDIC Second Editions’), affecting the Red, Yellow and Silver Books. Set out below is a brief outline of the content of these Amendments, with a focus primarily on the substantive changes.

Overview

In December 2018, FIDIC published Errata¹ to each of the FIDIC Second Editions. They identified around 25 ‘significant errata’ to be corrected, not including minor typographical errors and layout irregularities. This was followed by a second round of amendments in the form of a memorandum published in June 2019, which corrected a further three layout irregularities.² Subsequently, FIDIC reviewed the text of the FIDIC Second Editions, having regard to comments and queries raised by users and commentators, with the aim of clarifying the original intent of the FIDIC Contracts Committee. The outcome of this review was a set of three ‘Amendments No 3’ – one for each of the model forms. They were published in November 2022 and became effective for procurement purposes on 1 January 2023.

Simultaneously, FIDIC published reprints of the FIDIC Second Editions, which incorporates the three successive amendments noted above.

The substantive amendments

There are six areas where substantive amendments are apparent – four

of which concern claim/dispute-related definitions, and two involving substantive matters.

The ‘Dispute’

FIDIC has altered the scope of a ‘Dispute’ in several respects. Sources indicate that the dual aims of these changes are to clarify what distinguishes a ‘Claim’ from a matter to be agreed or determined; and to establish the primacy of the determination of the Engineer/Employer’s Representative and the Notice of Dissatisfaction (NOD) as the only instruments by which a ‘Dispute’ may be created (or ‘crystalised’ to use the popular term) (subject to three exceptions, as explained below).

As regards the conceptual distinctions, by virtue of the relevant amendments, the ‘matter to be agreed or determined by the Engineer is now defined by reference to sub-paragraph (a) of Sub-Clause 3.7 (in the case of the FIDIC Red and Yellow Books) and of Sub-Clause 3.5 (in the case of the FIDIC Silver Book).

In addition, the amendment has expanded the role of the Engineer/Employer’s Representative and the NOD by requiring that the Claim or matter must have been the subject of a determination and a relevant NOD before it may correctly be regarded as a ‘Dispute’. While the original text of Sub-Clause 1.1.29 (FIDIC Red and Yellow Books) and Sub-Clause 1.1.26 (FIDIC Silver Book) defines ‘Dispute’ as any situation where a ‘claim’ is made by one Party against the other, the claim is then rejected, and the claiming Party does not acquiesce to such rejection,³ the amendment clarifies that the Claim or a Party’s assertion(s) in respect of a matter (as the case may be) must be the subject of a formal determination and a NOD. It is no longer sufficient that the first Party has not indicated acquiescence with the determination by some other means.

However, there may be a deemed Dispute in the following instances:

1. In the case of:
 - (i) the FIDIC Red and Yellow Books, the Engineer has failed to issue a Payment Certificate, or the Contractor does not receive any amount due under a Payment Certificate within the required time;
 - (ii) the FIDIC Silver Book, there is a non-payment as referred to under sub-paragraph (b) of Sub-Clause 16.2.1 [Notice];
2. the Contractor does not receive financing charges due under Sub-Clause 14.8; *or*
3. a Party has given Notice of intention to terminate, and the other Party does not agree the first Party is so entitled.

FIDIC explains that it has introduced the third exception above to make clear that the Dispute Avoidance and Adjudication Board (DAAB) is competent to determine whether a termination was valid.

It is perhaps noteworthy that the three exceptions from the requirements for a formal determination and a NOD do not include a situation in which a Party might wish to enliven the enforceable powers of the DAAB to grant provisional relief without a determination and NOD, for instance where there has been a call on the Performance Security.

CLAIM

FIDIC’s amendments to Sub-Clause 1.1.29/1.1.26 have also had the effect of removing a ‘claim’ from the definition of a ‘Dispute’ attracting the DAAB’s jurisdiction.³ While the definition of a ‘Claim’ remains broad, the ‘claim’ – not an explicitly defined term under either the original or revised versions – appears to have undergone some change. Whereas under the original versions, it was either a ‘Claim’ or a ‘matter to be determined’,⁴ it is now any claim that may be made

against a third party, say, under the Performance Security, or an insurance policy⁵ and is subject to the more general Sub-Clause 1.3 notification procedure as opposed to Sub-Clause 20.1.

MATTER TO BE DETERMINED

FIDIC also considered that greater clarity was needed as to the meaning of ‘a matter to be determined by the [Engineer/Employer’s Representative] under the Conditions, or otherwise’, which is now defined by reference to Sub-Clause 3.7/3.5. In turn, Sub-Clause 3.7/3.5 has received a makeover to include a list of specified matters (which varies between the Red, Yellow and Silver Books). Thus, these amendments in turn clarify the difference between (1) a ‘Claim’; and (2) ‘a matter to be determined by the [Engineer/Employer’s Representative] under the Conditions, or otherwise’, and they distinguish both from a ‘claim’ of which neither Party is a direct recipient. It may be said that these ‘amendments’ only make clearer (and perhaps under some systems of law, codify) those various matters that the Engineer (or Employer’s Representative as the case may be) is empowered to agree or determine and which might become a ‘Dispute’ requiring the assistance of the DAAB. This should assist Parties with the proper discharge of their administrative obligations.

‘EXCEPTIONAL EVENTS’

As readers will know, the original FIDIC Second Editions swapped the moniker ‘Force Majeure’ for ‘Exceptional Events’ as used in the FIDIC First Editions. The Amendments No 3 have now clarified that an Exceptional Event must indeed be exceptional, in addition to the four elements found at Sub-Clause 18.1, namely, something that:

- is beyond a Party’s control;

- the Party could not reasonably have provided against before entering into the Contract;
- having arisen, such Party could not reasonably have avoided or overcome; and
- is not substantially attributable to the other Party.

This perhaps begs the question, ‘exceptional to what?’. Moreover, one might also consider whether a superadded requirement of exceptionality was necessary in view of the combined nature of four distinctly enumerated elements.

In addition, FIDIC has sought to clarify the relationship between Sub-Clauses 17.2 and 18.4. Whereas it was previously unclear how the relief available to the Contractor under Sub-Clause 17.2 interacted with that available under Sub-Clause 18.4, FIDIC has now amended the third paragraph of Sub-Clause 17.2 to state that the Contractor’s obligation to rectify the loss and/or damage and subsequent entitlement to a Variation is without prejudice to any rights it may have to an extension of time (EOT) and/or Cost under Sub-Clause 18.4.

FIDIC Yellow Book – Error in the terms of reference and errors, etc in the Employer’s Requirements

Sub-Clause 4.7 of the FIDIC Yellow Book obliges the Contractor to (inter alia) set out the Works in relation to the items of reference under Sub-Clause 2.5, verify the accuracy of all the items before they are used for the Works and to give a Notice to the Engineer describing any errors. Similarly, Sub-Clause 1.9 of the FIDIC Yellow Book obliges the Contractor to give a Notice to the Engineer within a certain period of any error, fault or defect that the Contractor finds as a result of its scrutiny under Sub-Clause 5.1.

While in the original versions of the FIDIC Yellow Book, the Contractor is entitled to a Variation where such an error is discovered,

FIDIC has recognised that such errors may not, in fact, require a Variation, yet may still cause the Contractor to suffer delay and/or incur Cost – for instance, because the Engineer/Employer’s Representative instructs the Contractor to suspend the execution of a part of the Works while the error (etc) is being investigated.

Accordingly, amendments have been made to the second paragraph of Sub-Clause 4.7.3 and the fourth paragraph of Sub-Clause 1.9 of the FIDIC Yellow Book to reflect that the Contractor is entitled to EOT and/or payment of Cost Plus Profit in such a scenario.

FIDIC appointments

FIDIC has sought to address two possible scenarios in the practice of constituting a DAAB. The first involves a failure by the Parties to agree the terms of the DAAB Agreement with an agreed appointee. The original wording of Sub-Clause 21.2 does not explicitly cater for this scenario. The amendment provides that in such circumstances (as well as the original conditions set out in Sub-Clause 21.2, subparagraphs (a) to (d)), unless otherwise agreed, either or both Parties may apply to the President of FIDIC or a person appointed by the President (whereas previously it was ‘the appointing entity or official named in the Contract Data’) for a suitable appointment of the member(s) of the DAAB or the replacement thereof; or to set the terms of the appointment, including the amounts of the monthly fee and the daily fee for each member or replacement – in both cases ‘after due consultation with both Parties and after consulting the prospective member(s) or replacement’.

The second scenario concerns the constituency from which the prospective member(s) or replacement may be drawn.

In this regard, FIDIC has sought also to address the perceived lack of clarity of the source for these appointments⁶ by adding a second paragraph to Sub-Clause 21.2 that states as follows:

‘Selection of the member(s) or replacement to be so appointed shall not be limited to those persons named in the list in the Contract Data or, in the case of sub-paragraph (d) above, to the member(s) or replacement agreed by the Parties.’

Although it might be thought that this diminishes party autonomy by taking the choice out of the hands of the Parties, who have agreed a list of proposed members of the DAAB, FIDIC appears to be seeking to strike a balance between the competing interests of economy and party autonomy – one that recognises the value of the certification standards applied to the members of the FIDIC President’s List of Approved Dispute Adjudicators.

DAAB Member’s disclosure-relation period and prior disclosure

Clause 4 of the Appendix [General Conditions of DAAB Agreement] sets out positive requirements and prohibitions on a DAAB Member’s state of affairs and past or future actions. One such prohibition is on the Member’s employment as a consultant or otherwise by one of the parties or their personnel for a certain period prior to signature of the DAAB Agreement. In the original version of the FIDIC Second Editions, that period was ten years. FIDIC has since taken the opportunity to review the limits of this prohibition. In this regard, it has duly noted the published guidance of the IBA⁷ concerning the significance of prior services by an arbitrator for one of the parties or other involvement in the case,⁸ or relationship with counsel in the arbitration, within a preceding

period of (only) three years;⁹ or an arbitrator being a former judge who has heard a significant case involving one of the parties or its affiliates.¹⁰ FIDIC has also recognised the role that prior disclosure might play in avoiding any real or perceived ‘imbalance within’¹¹ the DAAB. Accordingly, Sub-Clause 4.1, paragraph (c) has been amended to reduce the ‘relation period’ for prior employment from ten years to five years and to create an exception to the prohibition where the circumstances of prior employment were disclosed prior to the parties’ signature of the DAAB Agreement (or where they are deemed to have done so). FIDIC’s concern for due access to an adequate body of available DAAB Members is evident here.

The clarifications

In addition to the substantive changes noted above, FIDIC has also clarified the following five aspects of the FIDIC Second Editions:

- performance security ‘Guaranteed Amount’ adjustments;
- constructive taking-over;
- partial certification of the content of an application for final certification deemed an IPC;
- preparation and award writing included in the daily fee; and
- the use of the internet.

Conclusion

Amendments No 3 became ‘effective’ (ie, for use in procurement documentation) on 1 January 2023, and FIDIC recommends that all new users of the FIDIC conditions take due note of the content. Licensing organisations and institutions are also advised to reflect on the amendments and take the necessary steps to update their documentation. Going forward, parties that are considering draft contracts that reference the

FIDIC Second Editions ought to check whether they are expressly incorporating by reference the original or revised versions thereof.

Notes

- 1 FIDIC refers to these as Amendments Issue No 1 – December 2018.
- 2 FIDIC refers to these as Amendments Issue No 2 – June 2019.
- 3 See paras 638–643 of Chapter 8 of Brown N A, *FIDIC 2017: A Definitive Guide to Claims and Disputes*, 2021, ICE Publishing.
- 4 See Sub-Clauses 1.1.29 of both FIDIC Red and Yellow Books.
- 5 See ‘The FIDIC 2017 Contracts Guide’, at p 7.
- 6 But see Brown, note 3 above, at [45].
- 7 See ‘IBA Guidelines on Conflicts of Interest in International Arbitration’ (Adopted by resolution of the IBA Council on Thursday 23 October 2014).
- 8 *Ibid*, para 3.1.
- 9 *Ibid*, para 3.3.
- 10 *Ibid*, para 3.4.5.
- 11 Adopting the expression employed by the IBA, *ibid*. at para 6.

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COUNTRY UPDATE – AUSTRALIA

Trailing liability for asset decommissioning in Australia

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Australia's total asset decommissioning liability is estimated to exceed AUD60bn between 2020 and 2050.¹ This issue is particularly acute with many fossil fuel assets facing early retirement as a result of the clean energy transition. Consequently, decommissioning stranded or end-of-life assets is becoming an increasingly significant consideration for businesses across a wide range of industries.

Australia's piecemeal legislative framework for dealing with decommissioning is, in many respects, confusing and inconsistent. Presently, the framework consists of an industry-specific array of federal and state-based legislation and regulations. For example, the Offshore Electricity Infrastructure Act 2021 (Cth) regulates decommissioning of offshore wind farms and associated electricity transmission infrastructure, while the Water Act 1989 (Vic) regulates decommissioning of public and private dams.

Until recently, this legislative framework rarely extended

decommissioning liability beyond the asset's current titleholder. For example, the Petroleum (Onshore) Act 1991 (NSW) holds the current titleholder of onshore petroleum assets in NSW responsible for decommissioning but does not provide any safeguards against the titleholder's insolvency or inability to decommission the asset.

The dangers of such a regulatory framework are obvious and were highlighted by the collapse of the Northern Oil and Gas Australia Pty Ltd (NOGA) corporate group in February 2020. One of the NOGA companies, Timor Sea Oil & Gas Australia Pty Ltd (TSOGA) held a petroleum title in the Timor Sea and owned and operated the Northern Endeavour floating production, storage and offtake (FPSO) facility.

TSOGA had acquired the FPSO from Woodside Energy Ltd ('Woodside') after Woodside had decided that the asset and the field had reached the end of their commercial operating period.

NOGA intended to extend the life of the FPSO. However, a number of technical and commercial issues arose (including concerns with corrosion and operational safety issues). These issues resulted in the National Offshore Petroleum Safety and Environmental Management Authority (NOPSEMA) issuing a Prohibition Notice on 10 July 2019 and, ultimately, a General Direction requiring the FPSO to cease production on 18 July 2020.

As a consequence, the group entered into voluntary administration in September 2019. When it subsequently entered into liquidation on 7 February 2020, it was left unable to decommission the FPSO and the field. The AUD250m decommissioning liability eventually fell upon the Commonwealth Government, which will recover the costs of decommissioning through a temporary levy on offshore petroleum production (under the Offshore Petroleum (Laminaria and

Corallina Decommissioning Cost Recovery Levy) Act 2022 (Cth)).

In response to the NOGA liquidation, on 2 September 2021 the Federal Parliament passed the Offshore Petroleum and Greenhouse Gas Storage Amendment (Titles Administration and Other Measures) Act 2021 (Cth) (the 'Act'), which came into force on 2 March 2022. The Act introduces a trailing liability mechanism for decommissioning offshore oil, gas and carbon capture and storage assets.

The Act only applies where the current titleholder is unable to meet its decommissioning obligations or where previously completed decommissioning work is defective. Trailing liability is intended to be a last resort; the primary obligation to decommission the asset still falls upon the current titleholder.

The Act permits NOPSEMA to issue remedial directions extending liability to former titleholders, their related bodies corporate and any other person who, on or after 1 January 2021:

- has or could have significantly benefited from the operation of the asset;
- has been in a position to influence the extent of another person's compliance with the Act; or
- has acted jointly with a titleholder in operating the relevant asset.

The scope of NOPSEMA's power is broad enough to potentially capture a wide range of non-titleholder parties, including joint venture partners, secured financiers and royalty holders. This provides a stark contrast to the broader national decommissioning liability framework, which does not impose decommissioning liability on any parties beyond the current titleholder.

Similar trailing liability legislation already exists in international jurisdictions including Norway, the United Kingdom and the United States.²

Whilst the NOGA collapse may have prompted the introduction of

the Act, there is no conceptual reason why trailing liability should be limited to offshore oil, gas and carbon capture and storage assets.

Certainly, the potential cost exposure for these assets is considerable and the immediate environmental risks from a catastrophic failure makes their safe decommissioning a priority. However, the fundamental issue of an insolvent or incapable titleholder ultimately passing a ‘clean-up bill’ back to the taxpayers is something which one may expect to have broader application than just under the Act.

Consequently, having regard to the very significant pipeline of decommissioning activities noted above, we may well see the introduction of state or federal trailing liability legislation which extends decommissioning liability to a far wider class of assets. For example, the Victorian Government has already announced an intention to introduce trailing liability for decommissioning coal mines under the Mineral Resources (Sustainable Development) Act 1990 (Vic).³

As such, it will become increasingly important for parties to consider their potential decommissioning liability exposure and structure transactions accordingly. This may include a consideration of a variety of risk mitigation measures such as security arrangements, indemnities in favour of prior asset holders and cross-guarantees. Such exposure may also have an effect on the commercial value of assets which are close to the end of their life, which will also become an increasingly important consideration for parties dealing with these assets.

Notes

- See ‘Australia Oil & Gas Industry Outlook Report’ (March 2020) Wood Mackenzie at <https://appea.com.au/wp-content/uploads/2020/06/Australia-Oil-and-Gas-Industry-Outlook-Report.pdf>, accessed 21 January 2023.
- See ‘Discussion Paper – Decommissioning Offshore Petroleum Infrastructure in

Commonwealth Waters’, pp 71–77, at https://storage.googleapis.com/converlens-au-industry/industry/p/prj1a4840b4d0ea81fed6711/public_assets/Decommissioning%2520Discussion%2520Paper.pdf, accessed 22 January 2023.

- See www.premier.vic.gov.au/sites/default/files/2022-05/2205006%20-%20Improving%20Certainty%20For%20Coal%20Mine%20Rehabilitation.pdf, accessed 22 January 2023.

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COUNTRY UPDATE – SWEDEN

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Can the agreed price be changed due to abnormal changes of cost for materials? A study of the Swedish standard form contracts AB 04 and ABT 06

During the past two years, the construction industry in Sweden has faced major challenges due to price

increases of building materials. The pandemic, raw material shortages, the war in Ukraine and sanctions against Russia are some of the factors behind the cost increases that have come to affect the Swedish construction industry. In November 2022, Statistics Sweden (*Sw: Statistikmyndigheten SCB*) announced that the annual rate of the construction cost index in Sweden was at its highest since 1974.¹ As a result of these cost increases, the provisions in the Swedish standard contracts for construction projects, AB 04 and ABT 06, allowing for the adjustment of agreed prices have seen renewed relevance. The specific provisions are set out in chapter 6, section 3 and allow for changes to the agreed price in case of increases or decreases of the cost of material or other necessities. The provision reads as follows in the official English translation:

‘Agreed prices shall be adjusted with regard both to changes in costs resulting from the official action, and changes in costs caused by war or other crisis situation with similar effect which relate to supplies or services which are essential to the Total Works, and changes in costs due to abnormal price changes relating to materials included in the Total Works. Adjustment of the agreed price must however be made only if the change in costs has not been foreseeable and it substantially affects the whole cost of the Total Works.’

The requirements in the provision are the following:

- Changes in costs caused by:
 - official action (ie, actions by government authorities);
 - war or other crisis situation with similar effect on essential supplies or services; or
 - abnormal price changes relating to materials included in the Total Works;
- unforeseeability; and
- substantiality.

The legal consequence relevant when Chapter 6, section 3 is applicable is a *change of the agreed price*. The provision does not specify how a court or tribunal is to quantify the ‘change’ and, consequently, the sum to be awarded. However, it is likely that a court or tribunal faced with interpreting this part of the provision will be left to base any award on an assessment of the reasonability in the claimed adjustment.

The provision has close links to a clause often used in Swedish construction contracts during the oil crisis in the 1970s. The association for contractors (*Sw: Svenska Byggnadsentreprenör föreningen*) provided their members with a clause to incorporate in their contracts, referred to as ‘Reservation 2/71’. Reservation 2/71 is almost identical to the provision in Chapter 6, section 3. It therefore seems that Reservation 2/71 was incorporated into the standard contracts at their respective inception in 2004 and 2006. There is no known case law regarding either Reservation 2/71 or Chapter 6, section 3, apart from a Court of Appeal decision from the 1970s, that is, the Court of Appeal over *Skåne and Blekinge*, 17 April 1978 in case No T 188/76. The application of the provision includes several elements of uncertainty. This is partly due to the lack of relevant case law and partly since the provision consists of several requirements that are vague in themselves: unforeseeability, substantiality and reasonability.

This uncertainty has left the provision open to contract interpretation. As AB 04 and ABT 06 are standard agreements developed by an organisation called *Byggnadets Kontraktsskommitté*, which consists of representatives from contractors as well as employers, the standard agreements are a result of compromises between both sides of the construction industry. It follows from the nature of such ‘agreed documents’ that interpretation is given a prominent role. The Swedish

Supreme Court has during a series of cases established a method for interpreting these standard form contracts in line with general principles of Swedish contract law. This method takes as the starting point the common intention of the parties. If no common intention can be established, and there is no other evidence, outside the contract, as to how the parties understood the disputed provision, the interpretation should be focused on the wording of the provision itself. This assessment must be guided by the system established in the standard contracts seen as a whole, meaning that things such as the content of the relevant chapter and words, terms and definitions used in other provisions is taken into account. Such assessment should also take into account other provisions in the standard contracts that may be relevant. There may also be reason to interpret the conditions in light of the special features of construction law. Lastly, the interpretation should examine the conditions in light of the dispositive law that would have been applied if the agreed conditions had not existed.

Chapter 6, section 3 is a so-called fixed provision. In the preface to AB 04 and ABT 06, it is stated that the standard agreements ‘... are based on a reasonable balance between rights aimed at an economically optimal distribution of risk between the parties. Changes to these regulations must therefore be avoided ...’. Fixed provisions are treated differently than so-called framework conditions, with respect to which the preface states that ‘... it is left open for the parties to agree on another regulation ...’. Accordingly, there is reason to assume that the fixed regulations play a special role for the intended optimisation of economic risk allocation between employer and contractor.

During the spring of 2021, memorandums were written by the

industry organisation *Byggherrarna*,² which represents the employers, and *Byggföretagen*,³ which represents the contractors, addressing how Chapter 6, section 3 should be interpreted in the absence of relevant case law. In the light of the above-mentioned method for interpretation of standard contracts, the organisations sought to provide their member companies with good arguments to support their negotiations with their respective counterparties. The question that chiefly split the positions of the two organisations was the interpretation of ‘substantiality’. *Byggföretagen* referred to the low profit margins within the construction business and to historical statements about Reservation 2/71. They also referred to Chapter 6, section 6, noting that this provision deals with compensation for contract variations and that in such case, an increase or decrease above 0.5 per cent of the contracting sum is considered substantial. With regard to this, *Byggherrarna* considered that the limit for substantiality should be between 0.5 and three per cent of the contracting sum. *Byggföretagen*, on the other hand, considered that the employer’s calculations, in order to protect themselves against a potential risk of price increase, would play a major role in the assessment of substantiality. Therefore, the organisation considered that a particular limit for substantiality should not be predetermined but should be a matter of examination on a case-by-case basis.

The latest development in the matter is that the Swedish Transport Administration (*Sw: Trafikverket*), released a memorandum on 24 November 2022, dealing with the interpretation of Chapter 6, section 3. As the Swedish Transport Administration serves as the client for the majority of road, rail and waterway design and construction works in Sweden, the memorandum was received with great interest from the construction industry. As set out in the memorandum, the

Swedish Transport Administration noted that a reasonable limit for the condition of *substantiality* should be 2.5 per cent of the contract sum. As relates to the question of *abnormality* of cost increases, the administration stated that the contractor must show what the cost for material amounted to at the time of the start of the period during which the abnormal cost changes occurred, as well as actual costs at the time of purchasing the material. According to the administration, the costs must be verified with invoices or other evidence – index development is not acceptable as evidence.

The administration has also taken a position regarding *when* the price changes became abnormal, using the historical development of the Swedish Transport Administration's investment index as basis for its analysis. This index shows a sharp increase at the beginning of 2021. Accordingly, the administration considers that the abnormal cost increases started as of 1 January 2021. As for the potential price adjustments, the administration considers that the contractor must bear the risk up to the limit for substantiality – 2.5 per cent of the contract sum. However, the administration undertakes to bear the risk of all cost change above that, provided that the contractor has acted loyally and in good faith.

It is obvious that the Swedish Transport Administration intended to make a clear statement through its memorandum. However, this position should not be confused with a *de lege lata* position. Even though the Central Bureau of Statistics announced that construction costs had started to decrease in December 2022, the basis of many construction contracts has been severely impacted by the reigning market conditions of the last two years. In many of these cases, it is still uncertain how the applicable standard terms and conditions will

be applied if a claim is brought in court or arbitration and whether, and to what extent, the contractor will be entitled to adjustment of the agreed price.

Notes

- 1 <https://www.scb.se/hitta-statistik/statistik-efter-amne/priser-och-konsumtion/byggnadsprisindex-samt-faktorprisindex-for-byggnader/byggkostnadsindex-bki/pong/statistiknyhet/byggkostnadsindex-for-byggnader-oktober-2022/>.
- 2 <https://www.byggherre.se/aktuellt/2021/2021-05-07-vagledning-om-andring-av-avtalat-pris-till-foljd-av-okade-materialkostnader>.
- 3 <https://www.byggherre.se/avtal-och-juridik/vagledning-om-andring-av-avtalat-pris-till-foljd-av-okade-materialkostnader>.

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Demolition of coal bunkers at the GRES-1 power station, Kazakhstan. Credit: Alexey Rezykh/Adobe Stock

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International Bar Association Annual Conference – Miami 2022

Construction project eschatology: sustainable project decommissioning

International Construction Projects Committee

Introduction

Although the Great Pyramid, the Parthenon, and the Roman Colosseum are all still standing after many centuries, most modern construction and mining projects are viewed as having a finite useful life. When that useful life is achieved (and sometimes sooner), there are social and environmental incentives to

decommission the facilities. In many cases it makes sense to remove the facilities completely.

This decommissioning process can, however, be highly controversial, especially when it proves to be very expensive. In recent decades, some projects were constructed with budgets that prudently made financial allowances for future decommissioning. Many projects were built, however, without any budget for

decommissioning costs. Moreover, plant decommissioning under contemporary standards often proves much more costly than what could reasonably be expected when the project was originally built.

Lawyers have important roles to play in negotiating and drafting contracts to anticipate costs and liabilities associated with decommissioning that will ultimately occur. Lawyers are also needed to coordinate the multiple risks and liabilities that will arise when the decommissioning process actually begins.

This article is intended to offer an introduction to the key legal issues, and its accompanying bibliography allows readers to find much more detail that should be helpful if they are called upon to participate in the decommissioning process.

Decommissioning categories

Plant decommissioning tends to achieve the most publicity when it is motivated by concerns of the environment or public safety.

Germany has been a recent focus of attention as its federal government adopted a policy that simultaneously moved to decommission all coal-burning and nuclear power plants. The phasing out of coal plants was motivated by a desire to cut carbon emissions, while the exit from nuclear power generation was largely a result of fears following the nuclear accidents at Chernobyl and Fukushima. This programme of shutdowns was balanced by an increased reliance on importing natural gas from the Russian Federation, a decision that drew substantial criticism after Russia attacked the Ukraine in February 2022 and threatened to use natural gas as leverage against customers in the NATO alliance. This criticism has led to re-examination of the German policy and tentative decisions to prolong use of some facilities that were scheduled for shutdown. Meanwhile, the German experience has given rise to a substantial body of academic commentary that helps focus the issues relating to plant decommissioning.

Categories

One category of projects that obviously have a finite operating life is facilities for extracting natural resources from the ground. These



Demolition of coal bunkers at the GRES-1 power station, Kazakhstan.
Credit: Alexey Rezykh/Adobe Stock

facilities are obviously no longer needed when the natural resources are exhausted (or when the licence for extracting them expires). Principal examples include:

- open pit and shaft mines; and
- land-based and offshore oil drilling platforms.

In 2009, the World Bank and the Government of Norway launched a Petroleum and Governance Initiative entitled ‘Towards

Sustainable Decommissioning and Closure of Oil Fields and Mines: A Toolkit to Assist Government Agencies'. The March 2010 edition of that Toolkit offers many practical details for decommissioning that can reasonably be adapted to other industries.

A second category of projects, that has a fairly clear finite operating life, is power generating plants. These facilities are typically licensed for a fixed period (often 50 years), after which the operators can expect that they will either have to decommission the facilities or apply for an extended licence. Some plants (eg, hydroelectric dams) have demonstrated that they can operate efficiently for longer periods, which has led to some licence extensions. If power generating facilities are constructed on leased land, however, the applicable lease agreements are likely to require decommissioning and/or site restoration after the lease expires.

Lawyers have important roles to play in negotiating and drafting contracts to anticipate costs and liabilities associated with decommissioning that will ultimately occur.

A third category of projects includes facilities that are not set up with fixed expiration dates, but which become less functional or unsafe if they are not periodically rebuilt or replaced. Some of the many examples include:

- elevated bridges;
- marine piers, jetties and sea walls;
- factories and mills;
- schools and office buildings;
- power transmission towers;
- long distance pipelines;
- hydroelectric dams.

The useful lives of such facilities will, of course, depend in part on the environmental conditions that impact them (eg, storms, earthquakes, wars or civil unrest).

A fourth category is facilities that governments may decide to terminate, even though they have not yet functioned for their expected useful lives. Again, the German experience is a prominent example. By setting fixed timelines for shutting down coal-burning and nuclear plants, the German Government required decommissioning at earlier dates than the operators reasonably anticipated, raising multiple legal issues.

A fifth category is facilities that are often expected to continue indefinitely, assuming they are properly maintained. Examples might include:

- surface roads;
- surface railway lines;
- port facilities; or
- military bases.

Of course, these facilities may also require decommissioning if leases expire or social priorities change.

Financing

A key issue in plant decommissioning is deciding who should pay for it.

One approach is to require a deposit, bond or letter of credit for decommissioning costs when a new plant is first built. On public facilities, a government agency may accept responsibility for future decommissioning cost even if no funds are actually set aside for that purpose. In limited cases (eg, when decommissioning accompanies clean-up after partial or complete plant destruction), insurance proceeds may play a part in funding.

Another approach is to establish a sinking fund that sets aside money from operating revenues to make sure money is available when the time for decommissioning arrives.

On certain types of facilities, the components or materials in a plant may have substantial recycling value, in which case that value can help pay costs of decommissioning.

In many cases, however, none of the foregoing steps have been taken, and the operator of an old facility may simply lack sufficient funds to cover decommissioning costs. This is particularly likely to occur where decommissioning includes substantial costs to handle and dispose of undesirable materials like spent nuclear fuels or oil-contaminated soils. In these situations, the taxpaying public often ends up paying a share of cost in exchange for removing an environmental hazard.

Even when some level of funding has been established in anticipation of decommissioning, issues can arise if clean-up costs far exceed what was predicted. If the operator has become financially insolvent, this may pose another obstacle.

If decommissioning is being required due to a change in government policy (as in Germany), there may also be legal challenges claiming denial of fundamental rights or wrongful expropriation of private property rights. These issues are addressed in articles listed in the accompanying bibliography.

Methods of decommissioning

One obvious method of decommissioning is to physically remove an existing plant and restore the site to its *status quo ante*. This level of complete restoration is not always practical or affordable, however, so there are other alternative approaches.

One alternative is to seal or encapsulate a decommissioned facility. In the case of a nuclear facility, spent nuclear fuels are typically transported to a secure storage location, although commentators debate the degree to which such locations can be truly secure over the long half-lives of nuclear materials. In the United States, the decommissioning of nuclear facilities, in accordance with the regulations of the Nuclear Regulatory Commission (NRC), can take up to 60 years.

Participants in a decommissioning process should commence their work only after satisfying themselves that a comprehensive insurance programme is in place to protect against accidental personal injury or property damage.

There are also obvious hazards in demolishing large antiquated facilities, especially when this process is undertaken without accurate as-built information on the structures to be demolished. Decommissioning, therefore, may require a detailed engineering analysis, just as the original construction project also depended on engineering.

There is also a genuine question as to how far decommissioning should reasonably go. Is it enough to remove above-ground structures while leaving underground structures in place? Does demolition of an offshore oil drilling platform also require removal of all underwater pipelines connecting to the mainland? Is it enough to fill underground fuel tanks with sand, or do the tanks themselves need to be removed? Is redevelopment of the area a viable alternative? Can a new site be constructed for another type of technology? The answers to these and similar questions can greatly affect the overall cost of decommissioning.

Administration

In addition to the question of financing decommissioning, there are many issues relating to allocation of risk during the decommissioning process.

Operators are generally liable for personal injuries or property damage caused by a power generating facility, and this liability is likely to extend through the period of plant decommissioning. This provides added incentive for operators to take great care in dismantling plants and handling the transport and disposition of hazardous materials that are being removed or buried.

Since decommissioning may be tied to fixed dates (eg, expiring leases or government-imposed mandates), it is important the contracts for the work have reasonable mechanisms to achieve those dates.

In addition to the question of financing decommissioning, there are many issues relating to allocation of risk during the decommissioning process.

As mentioned above, it is also important to assure that proper insurance is in place before decommissioning begins at a project site.

In the US, the NRC publishes a list of regulatory activities that helps outline the scope of issues to be addressed:

Decommissioning programme activities include:

- ‘Decommissioning program activities include: (1) developing regulations and guidance to assist staff and the regulated community; (2) conducting research to develop data, techniques, and models used to assess public exposure from the release of radioactive material resulting from site decommissioning; (3) reviewing and approving decommissioning plans (DPs) and license termination plans (LTPs); (4) reviewing and approving license amendment requests for decommissioning facilities; (5) inspecting licensed and non-licensed facilities undergoing decommissioning; (6) developing environmental assessments (EAs) and environmental impact statements (EISs) to support the NRC’s reviews of decommissioning activities; (7) reviewing and approving final site status survey reports; and (8) conducting confirmatory surveys.¹

With regard to military bases, the US Department of Defense actually has a full-time process called Base Realignment and Closure (BRAC), which determines which facilities should best be closed. Members of Congress often fight against base closures in their home states, because those facilities tend to generate many jobs.

Sustainability

'Sustainability' is a word that is frequently used today.

When designing and constructing a new facility with a fixed operating life, it is, of course, useful to consider how to minimise its consumption of non-renewable resources. It is also helpful to consider using materials in a way that may promote recycling at some future date when the plant is decommissioned.

Not everything, however, is sustainable or renewable. And many types of facilities do not contain enough valuable recyclables to cover the future cost of their decommissioning. For these and other reasons, it makes sense to provide in advance a budget that will cover the anticipated costs of future decommissioning. If governments adopt policies requiring plants to be shut down long before the end of their planned operating lives, those governments should expect that they may have to offer compensation to the affected owners.

Conclusion

The projects discussed in our bibliography offer a variety of approaches to plant decommissioning. They suggest advance planning when possible, and when decommissioning has not been anticipated, the resulting cost should be weighed against the public benefit of removing hazardous and unsightly facilities.

Lawyers can help parties plan for these liabilities in advance, and they can help negotiate equitable allocations of the related costs.

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Jeddah Tower, planned to be the first skyscraper to exceed 1,000 metres in height. Construction has been on hold since 2018. Credit: Leo Morgen

Better safe than sorry: Risk management and dispute avoidance through efficient contractor due diligence

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Introduction

Construction projects can be derailed in many ways and end up in complex legal proceedings, for example, due to delays in execution or poor execution caused by liquidity shortages, possibly leading to severe issues or even insolvency of the contractor.

No employer likes to think about contractor failure or massive project overruns – and yet they happen regularly, and when they do, they can have massive negative consequences for the employer. This is unfortunate, because there are simple ways to avoid or efficiently mitigate such negative consequences by thoroughly vetting the contractor beforehand.

Employers should not only ensure that all risks are properly allocated contractually and that effective bank and/or parent guarantees are in place, but also conduct a rigorous due diligence review of the financial and commercial performance of all bidding contractors as part of their risk management procedures before awarding contracts.

It is well-known that cashflow is the ‘lifeblood’ of the construction industry. A contractor’s financial strength is as important as its technical skills and previous relevant experience. However, contractors often operate on razor-thin margins, even more so at a time of rising costs and widespread economic uncertainty, recently exacerbated by the Covid-19 pandemic, global supply chain disruptions, shortages of skilled staff and now significant inflationary pressures on raw materials and salaries, among other factors.

A contractor’s financial strength is as important as its technical skills and previous relevant experience.

Beyond a due diligence process that is strictly limited to a contractor’s financial statements, proper due diligence on corporate governance and execution risk can also serve as an important ‘insurance policy’ against financial misconduct or fraud that is otherwise not always readily apparent in the financial information provided to the employer.

This article aims to provide employers with a checklist for conducting comprehensive due diligence on contractors’ financial risks before signing a contract in order to avoid pitfalls.

Due diligence checklist for financial risks

In order to assess the risk of medium-term financial failure of a potential contractor, as well as possible execution and delay risks, employers need to have a comprehensive picture of the financial situation and prospects of the bidding contractors.

To this end, they should request that comprehensive financial documents (in particular, full audit reports including balance sheets, profit and loss accounts and cash flow statements for the last three years) and other key company information (minutes of general meetings and board meetings, if available) be posted in a data room as part of the tender documents. Any

confidential issues that may arise (especially in the case of private companies) can be addressed by having intermediaries inspect the relevant documents.

An experience-based classification of contractors’ financial risks and the respective reasons for their significance

The contractors’ financial risks to be assessed are, in fact, a broad combination of different financial risk areas that need to be examined and analysed separately.

These different risk areas originate in different types of possible causes, show up in different indicators and warning signals to be aware of in different sources and interpreted differently; they run through different types of mechanisms and processes and at different speeds. Finally, they require different approaches and tools for risk mitigation.

The most commonly observed types of contractors’ financial risk areas can be usefully divided as follows:

- Financial risks related to the soundness of a contractor’s *existing financing structure*, that is, its expected ability to repay or refinance all its existing liabilities on good terms. The significance of this category of financial risk should be seen in the light of the fact that an unmanaged financial risk in this category can lead to one of the following consequences for each contractor:
 - bankruptcy;
 - the opening of certain preventive mechanisms available depending on the jurisdiction (eg, ‘*sursis concordataire*’ in Switzerland, ‘*procédure de sauvegardé*’ in France, ‘*Schutzschirmverfahren*’ in Germany or ‘*concordato preventivo*’ in Italy), which in turn may lead to a court deciding to compulsorily release the contractor from some of its liabilities and/or from some of its contractual obligations towards the employer;
 - a legally valid possibility for each contractor (if subject to such a preventive mechanism) to renegotiate material terms of the contract under the protection of a court in its respective home jurisdiction;
 - the practical unenforceability of guarantees provided by some contractors (or their subsidiaries, affiliates or even parent companies).
- Financial risks related to a contractor’s *financial performance* as measured by

recent business performance (based on financial indicators from their income statements (P&L) and cash flow statements) and other publicly available information in their annual reports or other public sources. The significance of this category of financial risk should be seen in the light of the fact that an unmitigated financial risk in this category may result in the following for any of the contractors:

- The same risks identified in the previous type of financial risk, that is, bankruptcy or the opening of certain preventive mechanisms, which in turn could lead to a court deciding to release a company from some of its liabilities and/or from some of its contractual obligations towards the employer and/or allow a company to renegotiate material contractual terms under the protection of a court in their respective jurisdiction and/or render the guarantees provided by some contractors unenforceable in practice.
- Even if a contractor remains solvent and continues to operate normally, this category of financial risks may result in the contractor no longer being able to perform its obligations and duties under the contract. Depending on the situation, it may also result in the employer being unable to enforce some or all of the agreed contractual penalties and guarantees – particularly if this could result in a contractor or guarantor being driven into insolvency and the penalty or guarantee becoming essentially worthless.
- Financial risks that may arise from a contractor’s *recent operating track record and corporate culture*, as well as certain characteristics of its respective corporate practices, trading practices or corporate values.
- Financial risks that may arise from poor, or lack of, *corporate governance* practices at the contractor.
- Financial risks that may arise from issues relating to *key personnel* of the contractor, that is, its employees, directors or otherwise contracted professionals who have a significant impact on the project and/or on the contractor’s ability to perform its contractual obligations.

The latter three categories of financial risk can be assessed using documents available in the data room or easily accessible

through public sources and social media. Their significance for employers must be understood in light of the fact that unmitigated risks in this category for any of the contractors may not only result in delays or additional costs in completing the project but also in unplanned and unbudgeted additional operating costs for the employer that become necessary to address a delay.

- Financial risks that may arise from performance or *execution* problems, that is, the temporary or permanent inability of the contractor to fulfil its contractual obligations (in particular with regard to the nature, quality, timing or cost of certain works for which it is responsible) and/or to effectively implement the appropriate remedial measures required of it.

The assessment of a contractor’s financial risk can be based on two dimensions: (1) the likely probability of occurrence; and (2) the severity of the material financial impact if it were to occur.

- Financial risks that may arise from problems related to *contractual risks*, that is, already identified or foreseeable provisions in the contract that may pose a downside risk to the timely and qualitative execution of the project at the agreed cost.

The importance of the latter two categories of financial risks must be understood against the background that unmitigated financial risks in this category can lead to financial risks for the employer related to (1) additional costs incurred for appropriate remediation measures; (2) significant delays in the project and/or work interruptions; and (3) the practical enforceability and hence practical financial value of any agreed contractual penalties and guarantees.

Assessment of the significance of the identified financial risks

The assessment of a contractor’s financial risk can be based on two dimensions: (1) the likely probability of occurrence; and (2) the severity of the material financial impact if it were to occur. These can then usefully be presented in a matrix such as the one below.

Each of the above types of financial risk is now explained in more detail.

Financial risks due to considerations about financial reporting standards and usages

It is advisable to require significant contractors to ensure that the financial information they provide for the due diligence purposes has been prepared in accordance with appropriate financial reporting standards. Such standards ensure that their financial statements can be fully relied upon and that they are comparable to those of any external benchmarks against which the employer or a third party may wish to compare them.

The following financial reporting standards should always be required:

- The contractor's auditors should be from the top tier of internationally active audit firms whose independence and quality standards and procedures are usually unquestioned (or, in the worst case, who have sufficiently large financial resources to be successfully sued for any damages). Smaller firms, while in some cases also able to provide impeccable (or even better) services, do not always enjoy the same reputation. Their auditing standards and procedures are not known to the public, they may or may not be good enough, and their independence vis-à-vis their (less numerous) clients may not always be guaranteed either.
- The contractor's auditors have issued a so-called 'unqualified' audit opinion on the company's financial statements. This means that the auditor has confirmed that the financial statements presented give a 'true and fair' view of the firm's finances. If this is not the case, the reservations stated by the auditors must be examined in detail to determine how serious the reasons are

that led them to withhold the unqualified audit opinion. Any qualification that is unclear or inadequately explained, or one that is repeated from year to year, should be considered a serious warning sign as it raises the possibility that the financial statements as presented by the contractor are not reliable.

- The contractor's financial statements have been prepared in accordance with generally accepted accounting principles (GAAP). These are usually the International Financial Reporting Standards (IFRS) in Europe and US GAAP in the United States. In various countries there are other national accounting standards. In Switzerland, for example, the so-called 'Swiss GAAP', sometimes used by medium-sized contractors, or the even less demanding standards of the Swiss Code of Obligations (SCO), which are the bare minimum to ensure compliance with Swiss law and taxes, but which otherwise do not ensure that any kind of generally accepted accounting standards have been followed.

In the construction industry, most national accounting standards (including those of various European countries or, for example, the SCO) differ greatly from IFRS. Some national auditing standards are more susceptible to lower accounting standards and/or to deliberate manipulation. It is to be expected that financial statements prepared in accordance with IFRS will differ significantly from those prepared according to another reference system. For example, the most common differences between the SCO and IFRS accounting standards, which are often relevant in the construction industry, include the different treatment of revenue recognition,

SELECTED BALANCE SHEETS ITEMS <i>Amounts in M€</i>	A			B			C				D				E				
	22 (H1)	2021	2020	22 (H1)	2021	2020	2019	22 (H1)	2021	2020	2019	22 (H1)	2021	2020	2019	22 (H1)	2021	2020	2019
	N.A.	SA	SA	N.A.	Pro-Forma	Conso	Conso	Conso	Conso	Conso	Conso		SA	SA	SA	Interim Report	Conso	Conso	Conso
B) FIXED ASSETS	N.A.	0	0	N.A.	56	43	32	159	168	177	204	25	24	11	8	2,952	2,838	2,639	2,013
C) CURRENT ASSETS	N.A.	53	6	N.A.	181	201	191	592	860	826	783	81	69	62	11	9,572	9,449	9,027	6,194
C-6 Of which Cash & Cash Equivalents	N.A.	20	3	N.A.	11	24	13		199	234	199	7	11	15	0	1,520	2,370	2,455	1,021
TOTAL ASSETS	N.A.	54	7	N.A.	242	247	225	752	1,034	1,008	991	105	93	73	19	12,525	12,330	11,677	8,219
A) NET EQUITY	N.A.	9	1	N.A.	37	24	35	233	231	232	236	14	10	10	11	1,918	1,860	2,070	1,504
+ A-1 Of which Subscribed Capital	N.A.	0.1	0.1	N.A.	29	20	20		27	26	27	2	2	2	5	600	600	600	600
+ A-2 Of which Profit / Loss (Year & Carried Forward)	N.A.	9	1	N.A.	-30	-33	-10		2	1	6	-3	-7	5	5	478	541	249	134
D) PAYABLES	N.A.	45	6	N.A.	201	219	187	518	784	759	736	90	82	62	8	10,354	10,123	9,211	6,506
+ D-2 Of which Debt	N.A.			N.A.	59	73	57	78	221	267	222	17	18	14	0	2,775	2,641	3,537	2,238
+ D-5 Of which to Suppliers and future invoices	N.A.	43	6	N.A.	76	73	77	409	368	282	299	26	26	23	6	3,551	3,062	2,552	2,320
TOTAL LIABILITIES	N.A.	54	7	N.A.	242	247	225	752	1,034	1,008	991	105	93	73	19	12,522	12,330	11,677	8,219

asset leasing and goodwill, the different treatment of deferred taxes (for example, there is none in the SCO) and the absence of certain explanations and details in the notes to the financial statements.

Financial risk from considerations about the financing structure soundness (capitalisation and asset structure)

The assessment of this category of financial risks is mainly based on balance sheets where specific risk areas can be identified, and their potential severity assessed. Below is an example of the assessment of the soundness of the financial structure of four different contractors from a real matter.

In this particular case, it was found that only contractors C and E had a size that would normally be considered sufficient to take on construction projects of the size of the project awarded by the employer. In addition, contractors A, B and D appeared to be rather weakly capitalised and some of them had a history of accumulated losses and/or had minimal cash reserves.

Financial risk from considerations about financial performance

The assessment of this category of financial risk is mostly based on the profit and loss and cash-flow statements submitted by the contractors. An example drawn from the same real matter is shown below:

In this particular case, it was noted from the profit and loss accounts that all the assessed contractors operate on razor-thin margins (low single-digit percentages in both value added and net profit) and sometimes make significant losses, such as B and D in 2019 and in 2020 and E in 2021. Therefore, they could easily be knocked off their feet by a lopsided major project (both by the planned project and by another major project).

In addition, the cash flow statements noted that all the contractors assessed had unstable and/or weak cash flows from operations and that E was the only contractor with sufficiently high cash flows to normally be eligible for construction projects of the size of the project awarded by the employer.

EXCERPTS FROM P&Ls :	A			B				C				D				E			
	22 (Hi)	2021	2020	22 (Hi)	2021	2020	2019	22 (Hi)	2021	2020	2019	22 (Hi)	2021	2020	2019	22 (Hi)	2021	2020	2019
	N.A.	SA	SA	N.A.	Pro-Forma	Conso	Conso	Conso	Conso	Conso	Conso	SA	SA	SA	SA	Conso	Conso	Conso	Conso
A) PRODUCTION VALUE	N.A.	89	12	N.A.	141	136	187	371	773	579	579	52	83	69	19	3,836	6,420	5,013	5,130
B) PRODUCTION COST	N.A.	-78	-11	N.A.	-140	-159	-186		-764	-568	-569	-50	-98	-67	-19	-3,796	-6,454	-4,620	-4,873
(A + B) VALUE ADDED	N.A.	11	1	N.A.	0	-23	1	EBIT: 8	8	11	10	3	-15	1	1	39	-34	393	257
(In %):		13%	8%	N.A.	0%	-17%	1%	2%	1%	2%	2%	5%	-18%	2%	4%	1%	-1%	8%	5%
D) NET PROFIT (LOSS)		9	1		-1	-26	-4	2	5	2	6	4	-12	0	-2	33	-279	133	-14
(In %):		10%	7%		0%	-19%	-2%	1%	1%	0%	1%	8%	-14%	-1%	-8%	1%	-4%	3%	0%

CASH-FLOW STATEMENTS	A		B			C			D			E			
	2021	2020	2021	2020	2019	2021	2020	2019	2021	2020	2019	H1,2022	2021	2020	2019
	SA	SA	Pro-Forma	Conso	Conso	Conso	Conso	Conso	SA	SA	SA	Conso	Conso	Conso	Conso
A) CASH-FLOW FROM (USED IN) OPERATING ACTIVITIES	10	3	4	-2	26	23	-12	52	-5	N.A.	N.A.	-612	1,202	81	-23
(In % of Prod. Value)	11%	25%	3%	-1%	14%	3%	-2%	9%	-6%			-16%	19%	2%	0%
B) CASH-FLOW FROM INVESTMENTS	0	0	-12	-17	-1	-4	1	-17	-5	N.A.	N.A.	-116	-194	336	-180
C) CASH-FLOW FROM FINANCING	-1	0	-5	31	-20	-55	48	-42	6	N.A.	N.A.	-175	-1,082	958	90
D) TOTAL CHANGE IN CASH POSITION	9	3	-13	12	5	-35	36	-7	-4	N.A.	N.A.	-840	-85	1,434	-86

Use of externally generated credit reports

It can also be helpful to refer to credit reports prepared by reputable financial advisory/ financial information companies, which include items such as failure scores, acid tests, current ratios, etc. Below are examples from the above-mentioned real matter using reports produced by Dun & Bradstreet:

Summary of Key Financial Ratios :		Assessed Company (when distinct) :				
		A	B	C	D	E
Return on Equity (RoE) :	2022 (H1)	n.a.	84%	2.0%	4.9%	1.8%
	2021	1286%	-120%	2.0%	-7%	-13%
	2020	800%	-3%	0.2%	-81%	-32%
	2019	n.a.	-14%	1.5%	-2%	5%
	2018	n.a.	n.a.	2.5%	4.0%	13%
Overall Assessment :						
Current Ratio :	2022 (H1)	n.a.	1.5	1.3	1.4	1.2
	2021	1.2	1.5	1.5	1.2	1.2
	2020	1.0	1.7	1.5	1.3	1.2
	2019	n.a.	1.6	1.2	1.4	1.5
	2018	n.a.	n.a.	1.2	1.4	1.2
Acid Test Ratio :	2022 (H1)	0.0	0.7	0.6	0.9	0.8
	2021	0.5	1.1	0.9	0.9	0.8
	2020	0.5	0.9	0.8	0.9	1.0
	2019	n.a.	1.2	0.6	1.1	1.0
	2018	n.a.	n.a.	0.7	1.1	0.9
Overall Assessment :						

Financial risk due to operational track record and company culture considerations

This type of risk can be assessed, amongst other things, on the basis of a contractor's reputation and/or length of experience with construction projects of a similar type and size to the project to be awarded by the employer, but also on the basis of the existence of relevant quality insurance certificates and information that may be included in the notes to the financial statements or in the auditors' reports.

Financial risk from corporate governance considerations

Apart from publicly available information (if any), this type of financial risk can also be assessed using annual reports, board reports, a detailed review of a contractor's risk management procedures (sometimes described and commented on in detail in the notes to the financial statements and auditors' reports). For example, in the case of one recent contractor, the notes to the

Summary of Dun & Bradstreet Credit Reports					
Legend :	Lower than, or at Average	Higher than average	Moderate to High	High	
Assessed Company :					
	A	B	C	D	E
Financing Structure Solidity	N.A.	24-months history of Failure Score : Stable	24-months history of Failure Score : Strongly declining	24-months history of Failure Score : Consistently below average	24-months history of Failure Score : Strongly declining after mid-2021
Overall	N.A.				

Summary of Dun & Bradstreet Credit Reports						
Legend :	Lower than, or at Average	Higher than average	Moderate to High	High		
Assessed Company :						
	A	B	C	D	E	
D&B	Financial Performance	N.A.				
	D&B Maximum Recommended Credit Amount (US \$)	N.A.	4 M€	11 M€	1 M€	44 M€
Overall	N.A.					

financial statements and auditors' reports highlighted a long series of areas where information was missing, disputes were ongoing or risks and uncertainties had been identified. In another case, it was a medium-sized multi-generational company where the family managers also played an important role in other areas (high-profile professional sports association, political mandates, etc.) and which was finally restructured after several years of repeated losses, although it was still open whether the improved financial performance would prove sustainable.

For these reasons, the financial risk based on corporate governance considerations was considered moderate for both. Another contractor failed to provide proper governance information and it was noted that his finances were managed by his parent company and that it did not appear to have its own finance department. As a result, for governance considerations, his financial risk was rated as significant.

Financial risk from key personnel considerations

It is always advisable to check a contractor's key management and board members (in public sources and social media) to see if this indicates any problems. For example, it was recently discovered with a client that the list of key personnel for the project provided by a bidder in its tender documents consisted of the top management and key technical and commercial executives of the parent company. While it was positive that this would likely attract the attention of the project's top executives, in practice they do not represent the key personnel who will ultimately be responsible for the success (or failure) of the project on the ground, and this was raised as a point of discussion to be explored further with the contractor.

Financial risk from execution risk considerations

Execution risk refers to the potential risk that a particular contractor runs into difficulties and is unable to fulfil its obligations towards the employer (in particular with regard to the budget and/or the schedule of deliveries). This can represent a significant financial risk for the employer and can be

viewed from a number of angles: assessing the financial reliability of the contractor, the soundness of its financial structure, its financial performance, the operational track record and the corporate culture discussed above, but also previous experience of the employer or external references provided by the contractor for projects of similar type, geography and size.

For example, in a recent client project, information about a similar project currently underway was submitted late, incomplete, partly unfounded, and in an overly complex and contradictory manner. There seemed to be some resistance to disclosing the relevant information. Certain documents relating to the expected completion date of the current project were in fact 'risk' sensitivity analyses for possible scenarios (using Monte Carlo models), which resulted in very large differences in possible completion dates. This generated little confidence that the currently envisaged completion dates were considered realistic. In addition, a discussion with an external expert involved in the project indicated that the tender drawings appeared to have been used as execution drawings, without additional surveys of existing conditions and with little/no interdisciplinary coordination prior to installation on site; that work was proceeding without drawings submitted or approved; and that amendments were being made to the specifications without prior discussion or approval. As a result, in this particular case, the financial risk from execution risk was assessed as high.

Experience with previous client contracts has also shown that a significant financial risk from execution risk can arise when a new project (or project phase) is awarded to a contractor who is still carrying out a previous project for the same employer. Indeed, it can sometimes be seen in construction disputes that part of the advances paid for the new project were in fact used to cover losses from the previous project. This situation can lead to a shortage of funds at a later stage and eventually to a shortfall in the later phases. It may be difficult, or even impossible, to detect such undesirable developments before it is too late to stop them or rectify them in a satisfactory manner.

Although this may be considered fraudulent behaviour or mismanagement, it is unfortunately not that rare in the construction

industry. It can either be the result of initially minor mismanagement on a project that eventually grows to the point where it cannot be remedied (hence the need for proper financial reporting and accounting), or it can be the result of deliberate manipulation on the part of a contractor's top management – the latter sometimes being a delayed consequence of the former.

risk. For example, in one project, the limitation of liability requested by a bidding contractor was found to have a potentially significant impact on the assessed financial risk. Another issue related to the practical enforceability of a joint and several liability agreed by several joint bidders and a parent guarantee provided by a major shareholder, particularly in view of a questionable financial structure, as highlighted above.

Financial risk from contractual considerations

This article does not aim to discuss contractual risks in general. However, some contractual risks identified by the employer's legal counsel should sometimes also be considered when assessing financial

Risk mitigation strategies

Once the various sources of financial risk discussed above have been sufficiently researched and assessed, it may be useful to summarise them in a summary table. An example of such an overview can be found below.

Summary of Financial Risks Assessment

Legend :

Low	Moderate	Significant	High
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		Assessed Contracting parties (when distinct) :					Overall	
		A	B	C	D	E		
Financial Risk Category :	Financing Structure Solidity						Moderate but real risk of defaults	
	Financial Performance		(Significant in isolation of HoCo)	(Low margins & Cash-Flows, but high Cash)		(Low margins & Cash-Flows, but high Cash)	Moderate but real risk of defaults	
	Operational Track Record / Company Culture	N.A.					Low Risks	
	Corporate Governance			(One outstanding check to carry out by Counsel)			To be improved at A + Check on C and D	
	Key Personnel						Low Risks	
	Execution Risk (including Phase 2 transparency)	(Only for Phase 2 transparency)					(Only for A in Phase 2)	
	Contractual							(only for Joint & Several Liability and Perf. Guar.)
	Comparison with similar past Project							Low Risks
	Overall Financial Risks	Significant	Low	Low	Significant	Low	Actions Needed	

A financial risk assessment is even more useful to the employer if it is accompanied by proposals for risk mitigation measures for each identified financial risk, as shown in the following example.

Overview of Recommended Risk Remediation Measures		
	specific Risk Area	Description
		Financial Risk Category & Severity Assessment :
D : Sub-par timeliness + quality of the Financial Information provided Assume that D Financial Statements may not be reliable, and focus on ensuring Project's continuity and enforceability of Joint and Severable Liabilities / Performance Guarantees (if any) to cover any (however likely limited) damage in case of serious financial difficulties at D;		
A : Small Auditor, poor quality of the Financial Information provided Request that A produces more than the 'bare legal minimum' of Financial Reporting to Employer, in order to ensure reliable transparency on their financial situation. This should include quarterly, or at least half-yearly financial statements prepared according to IFRS; Failing that, assume that A's financial health may not ever become known, and cannot be assumed by default to be good, as it will always only depend on its ongoing projects with Employer which are its only ones. Any serious delay or difficulty in any of these projects could derail the company financially. Ensure Project's continuity in such case by focusing on enforceability of Joint and Severable Liabilities / Performance Guarantees (if any) to cover any damage in case of future serious financial difficulties at A;		
C and E are the only solid companies. D is a source of particular concern. Assume that D (and maybe other Assessed Companies) may need to restructure or go bankrupt. Hence focus on ensuring Project's continuity and enforceability of Joint and Severable Liabilities / Performance Guarantees (if any) to cover any damage in case of serious financial difficulties at any of the Assessed Companies;		
Financing Structure Solidity	Weak Financial Performance of all Shareholders	
Financial Performance	None	
Operational Track Record / Company Culture	Lacking Anti-Corruption clearance at C and D (If not already done) : Employer and/or their Counsel to complete a full assessment of the anti-corruption status of C and D, in order to avoid any reputational damage in case of a future issue.	
Governance	None	
Key Personnel	A : Poor Financial Data quality and apparently no Management Accounting Make it a precondition to a potential adjudication of Phase 3 to A, that : <ul style="list-style-type: none"> o i) They agree to improve their Accounting Standards and change their Auditor; o ii) They commit to providing separate Management Accounting information on at least a quarterly basis, showing a clear separation of financial data related to different Project phases; (as an alternative if impossible to obtain) : Make it a precondition to a potential adjudication of Phase 3 to A, that : A new, separate JV be set-up independently of A to receive this award, and that this new JV strictly adheres to improved Financial Reporting	
Execution Risk	Lack of transparency re: current performance of A in Phase 2 Mandate an independent party (Employer internal audit or external advisor unrelated to the Phase 2 renovation works) to create more transparency as to how A's Phase 2 performance should be evaluated and measured (in all dimensions : technical, commercial, contractual and in terms of costs control and deadlines' management). (as an alternative if impossible to obtain) : Re-open the Tender process to look for alternatives.	
Contractual	Importance of solid Joint & Several Liability and Performance Guarantees Work with Employer's Counsel to ensure proper extent, terms and good practical enforceability of Joint and Severable Liabilities / Performance Guarantees (if any) to cover any damage in case of serious financial difficulties (particularly at C or at A, but not only);	
Comparison with previous Projects	None	

Other aspects of an efficient contractor due diligence

This article focuses on due diligence in the areas of finance and corporate governance/execution risks. But of course, employers should also take into account many other legal and contractual considerations which, although not the focus of this article, are worth briefly recalling here:

- ensuring that the bidding contractor has a good reputation and is generally trustworthy;
- verifying the existence of relevant licences for the award of the contract;
- verifying compliance with laws and the contractor's track record of (pending) legal disputes or fraud investigations involving the contractor or any of its affiliates;

The costs and slight delays associated with proper due diligence will always be incomparably lower than the costs associated with project failure or cost overruns

- collecting records of working relationships with other construction companies and contractors; and
- reviewing a contractor's 'digital capabilities', that is, whether it can effectively navigate a project where modern digital technologies are used (eg, Building Information Modelling – BIM) and where a digital data environment is in place.

Conclusion

There is no 100 per cent protection against a contractor's default or insolvency during

an ongoing construction project. However, employers can – and should – mitigate these risks by conducting thorough due diligence on potential contractors before entrusting them with their construction project. The same applies to contractors, who should similarly conduct due diligence on their subcontractors.

The costs and slight delays associated with proper due diligence will always be incomparably lower than the costs associated with project failure or cost overruns – even if weighted according to their likelihood of occurrence, which is not very low, especially in times like these. In addition, such due diligence can also help to identify potential risks that can then be better mitigated through appropriate contractual clauses and guarantees and/or by ensuring that they are properly enforceable in a court of law or arbitration, thereby greatly improving the chances of success and reducing the costs of proceedings in the event of a dispute.

All in all, this is a wise investment for employers to make before awarding a contract: better safe than sorry!

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Credit: Joaquin Corbalan

Soaring global construction costs under FIDIC: whose risk?

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It is well documented that construction and engineering projects around the globe are being affected by extreme and sometimes unprecedented price escalation. This is for many reasons including the ongoing effects of the Covid-19 pandemic and the Russia-Ukraine war.

In this article, we look at FIDIC’s allocation of risk – in particular, the ‘Adjustments for Changes in Cost’, ‘Force Majeure’ and ‘Exceptional Events’ provisions.

Type of contract

The type of contract usually informs as to which party takes the risk (or benefit) of price fluctuations:

- In reimbursable or cost-plus contracts, the employer takes the risk. The contractor is

reimbursed the actual cost, plus allowances for overheads and profit. If the contractor’s actual costs increase, the contract price will increase also.

- In remeasurement contracts and fixed price/lump sum contracts the contractor usually takes the risk, unless there is a mechanism for cost adjustment.
 - In remeasurement contracts (such as the FIDIC Red Book – For Building and Engineering Works Designed by the Employer) the contract price is based on approximate quantities and a schedule of rates and prices. But, if the rates and prices can be adjusted where price fluctuations occur, the contract price is recalculated using the new rates and prices and the final agreed quantities. The actual work done is remeasured when the works are completed.

- In fixed price/lump sum contracts (such as the FIDIC Yellow Book – Plant and Design Build) the contractor provides an overall figure, ‘a lump sum’, for all the works that are agreed to be carried out under the contract. But, if the amounts due to the contractor can be adjusted where price fluctuations occur, the contract price is recalculated.
- The FIDIC Yellow Book Guidance suggests that in a plant contract, formulae which are more directly related to the timing of costs incurred by the manufacturers be adopted.
- The FIDIC Silver Book 1999 and the FIDIC Gold Book 2008 do not set out a formula. The FIDIC Silver Book Guidance suggests that the wording for provisions based on the cost indices in the FIDIC Yellow Book be considered.

Escalation clauses under FIDIC 1999 and 2017

FIDIC includes a mechanism for cost adjustment. In the FIDIC 1999 editions this is at Sub-Clause 13.8 (Adjustments for Changes in Cost), and in the FIDIC 2017 editions at Sub-Clause 13.7. It is an ‘opt-in’ clause. It applies only if under:

- the FIDIC Red and Yellow Books 1999 – a table of adjustment data is included in the Appendix to Tender;
- the FIDIC Silver Book 1999 – provided for in the Particular Conditions;
- the FIDIC 2017 forms – a Schedule(s) of cost indexation is included in the contract.

The table of adjustment data or Schedule(s) is a complete statement of the adjustments to be made to the cost of labour, Goods and other inputs to the Works (for example, fuel). Any other rises or falls in the Costs are deemed to be included within the Accepted Contract Amount. No adjustment is applied to work valued on the basis of Cost or current prices.

Where it applies, the amounts payable to the contractor are adjusted for both rises and falls ‘in the cost of labour, Goods and other inputs to the Works’ by adding or deducting amounts calculated in accordance with:

- under the FIDIC 1999 editions – a prescribed formula (in the FIDIC Red and Yellow Books) or as set out in the Particular Conditions (in the FIDIC Silver Book); or
- under the FIDIC 2017 editions – the Schedule(s).

In the FIDIC Red and Yellow Books 1999, a formula is set out, but this may be amended as the parties choose. The wording states: ‘The formulae shall be of the following general type’. The formula is as follows:

$$P_n = a + b \frac{L_n}{L_o} + c \frac{E_n}{E_o} + d \frac{M_n}{M_o} + \dots$$

The FIDIC 2017 editions do not set out a formula either. The Guidance states: ‘It is recommended that the Employer be advised by a professional with experience in construction costs and the inflationary effect on construction costs when preparing the contents of the Schedule(s) of cost indexation’.

It is recognised that the formula set out above to calculate the adjustment multiplier (P_n), which is to be applied to the estimated contract value, is crude, but it is a fast and reasonably credible way of calculating and reimbursing fluctuations in costs.

The formula relies on:

- a fixed element (a), representing the non-adjustable portion in contractual payments, which is fixed at the time of contract. FIDIC suggests ten per cent in the Appendix to Tender or Guidance;
- the weighting of the resources (b), (c) and (d), which is determined at the time of contract. For example, a road project might be 20/40/40 for labour, equipment and materials;
- cost indices for the current ‘now’ value (n) and the original value (o) for each of, for example, labour (L), equipment (E) and materials (M), which need to be updated frequently to stay current (preferably monthly rather than quarterly or annually, but that will depend upon the cost indices chosen).

Fixed element (ten per cent)

Where there is contractor compensable delay which pushes the project into a period of inflation, it seems unfair that this portion is non-adjustable. Perhaps, it might be claimed as a prolongation cost as it falls squarely within the definition of ‘Cost’. The authors are not aware of any precedent on this.

Weightings

In the FIDIC Red and Yellow Books 1999 (but not the FIDIC Silver Book 1999 or the FIDIC 2017 editions), the weightings may be adjusted if they have been rendered unreasonable by way of a Variation to the Works.

The last paragraph of Sub-Clause 13.8 of the FIDIC Red and Yellow Books 1999 states: ‘the weightings for each of the cost factors stated in the table(s) of adjustment data will only be adjusted if they have been rendered unreasonable, unbalanced or inapplicable, as a result of Variations’.

Therefore, the claiming party would need to demonstrate that the original contract weightings were correct at the time of contract and that a Variation had rendered them unreasonable, unbalanced or inapplicable. Inflation alone would be insufficient.

This provision does not apply simply where the original contract weightings fail to reflect the actual contract weightings. Sub-Clause 4.11 of the FIDIC 1999 editions states: ‘The Contractor shall be deemed to have satisfied himself as to the correctness and sufficiency of the Contract Price. [...] Unless otherwise stated in the Contract, the Contract Price covers all the Contractor’s obligations under the Contract (including those under Provisional Sums, if any) and all things necessary for the proper design, execution and completion of the Works and the remedying of any defects’. The FIDIC 2017 editions have similar wording.

Cost indices

Cost indices provide a simple way to relate the original value to a corresponding cost now. Unfortunately, cost indices are not an accurate reflection of the actual costs, but they are easy and reasonably credible.

The choice of cost indices is important, and when choosing them it is necessary to understand, for example:

- exactly what they measure. Many indices are intended to reflect only general building construction;
- in which location. The indices ought to align with the source of materials. Changes might be needed to the indices if there is a change in supplier or country of origin for the supply of materials, for example because of sanctions;
- in which currency. The currency of the cost

indices and the currency for payment ought to align, otherwise there may be scope for further adjustment when the currency of the cost indices is converted into the currency of payment.

The categories of the cost indices are usually broad and not necessarily linked to specific items in the bill of quantities. Therefore, they do not work well with bespoke construction elements.

Occasionally, the parties will create their own indices if there are no appropriate existing indices.

It has also been suggested that the parties might consider using different indices for different phases of the works.

The claiming party would need to demonstrate that the original contract weightings were correct at the time of contract and that a Variation had rendered them unreasonable, unbalanced or inapplicable. Inflation alone would be insufficient

In the FIDIC Red and Yellow Books 1999, if the source of the cost indices is ‘in doubt’, the Engineer may determine the correct source. This wording is not in the FIDIC 2017 editions.

If the cost indices are not ‘current’ the Engineer may determine a provisional index for the issue of the Interim Payment Certificates, and subsequently adjust when (if) a current cost index becomes available. In the FIDIC Red and Yellow Books 1999, Sub-Clause 13.8 makes no reference to Sub-Clause 3.5 (Determinations), which only applies: ‘Whenever these Conditions provide that the Engineer shall proceed in accordance with this Sub-Clause 3.5 ...’, so the determination referred to does not need to be made in accordance with Sub-Clause 3.5. In the FIDIC 2017 edition, reference to a determination has been deleted to avoid any confusion.

After the time for completion

Under the FIDIC Red and Yellow Books 1999 and the FIDIC 2017 editions, if the contractor fails to complete within the Time for Completion (meaning the time for completing the Works including any extension of time due to the contractor), further price rise risk is allocated to the contractor, and the benefit of any falling prices is allocated to the employer.

Adjustments to prices after the Time for

Completion are made using the most favourable to the employer of:

- the index or price applicable from the date 49 days (ie, seven weeks) before the expiry of the Time for Completion; or
- the current index or price.

Procedure

Under both the FIDIC 1999 and 2017 editions, an application for an Interim Payment Certificate under Sub-Clause 14.3 must include any amounts to be added or deducted for changes in cost under Sub-Clause 13.8. The contractor is not obliged to give notice under Sub-Clause 20.1 of the FIDIC 1999 editions.

Force majeure under FIDIC 1999

Under the FIDIC 1999 forms of contract, if either party is prevented from performance of its obligations by Force Majeure (FM) then, subject to giving notice, it may be excused performance of those obligations. The contractor may also be entitled to an extension of time and/or cost.

Definition of FM

Sub-Clause 19.1 contains a definition of FM. It is:

‘an exceptional event or circumstance (a) which is beyond a Party’s control, (b) which such Party could not reasonably have provided against before entering into the Contract, (c) which, having arisen, such Party could not reasonably have avoided or overcome, and (d) which is not substantially attributable to the other Party.’

The ‘exceptional event or circumstance’ might be the price escalation itself or something else, such as the Russia-Ukraine war or Covid-19, the effect of which is price escalation

The ‘exceptional event or circumstance’ might be the price escalation itself or something else, such as the Russia-Ukraine war or Covid-19, the effect of which is price escalation, and there is scope for argument on this point.

It has been noted in respect of current price escalation in the construction sector that for some countries ‘these are some of the highest rates of inflation we have seen in decades, yet not in the hyperinflationary territory of the Weimar Republic in Germany following World War I, or Zimbabwe from 2007 to 2009’ and ‘Whilst the definition of hyperinflation is loose, for it to materialise, we’d expect significant increases to inflation on a month-on-month basis, above double-digit growth’.¹

On this basis, it could be argued for some countries that price escalation as currently seen is not exceptional.

If price escalation is the ‘exceptional event or circumstance’, it seems likely that Sub-Clause 19.1, sub-paragraphs (a) and (d) will also be satisfied unless, for example, the party in question is a government with control over, or responsibility for, the price escalation. Regarding Sub-Clause 19.1, sub-paragraph (b), the provisions that a contractor can make before entering the contract are generally limited to price and planning and in Sub-Clause 19.1 are expressly limited to what is ‘reasonable’. Sub-Clause 19.1, sub-paragraph (c), which refers to the event having arisen not being ‘reasonably [...] avoided or overcome’, appears to exclude from FM an event/circumstance whose effect could reasonably be completely negated. The fact that the effects of an event/circumstance can (or should – see below) be mitigated does not mean that the event cannot be FM.²

Sub-Clause 19.1, sub-paragraphs (i)–(v) contain a list of example events or circumstances which, if they otherwise satisfy the definition, could constitute FM. Price escalation (or volatility) does not appear on this list but this is not fatal if it otherwise satisfies the definition. The real significance of this list is that four of the events listed may (subject to other criteria) give the contractor entitlement to money as well as time. If an event – such as price escalation – is not listed, there will be no monetary compensation for it (see below).

The requirement for prevention

If the price escalation in question were to satisfy the definition of FM, it would only

have contractual effect – and so be of use to the affected party – if it were also to prevent the affected party from performing any of its obligations under the contract.

This requirement for prevention is set out in two provisions.

- Sub-Clause 19.2 provides that if a party ‘is or will be prevented from performing any of its obligations under the Contract’ by FM, it shall give notice and ‘shall specify the obligations, the performance of which is or will be prevented’. Having given notice, the party shall ‘be excused performance of such obligations for so long as such [FM] prevents it from performing them’.³
- Sub-Clause 19.4 provides that if the contractor ‘is prevented from performing any of his obligations under the Contract by [FM] of which notice has been given [under Sub-Clause 19.2] and suffers delay and/or incurs Cost by reason of such [FM]’, then the contractor shall be entitled, subject to Sub-Clause 20.1, to an extension of time for any such delay and, in limited circumstances, to additional cost.

These provisions refer to the prevention of ‘any’ obligations⁴ so a shutdown of the whole project is not necessary.

If the price escalation falls within the definition of FM set out above, are there circumstances in which it might prevent performance? It is easy enough to see how price escalation may make it more onerous for a contractor to perform its obligations, or may cause delay or disruption, but at what point can it be said that the price escalation is preventing the contractor’s performance?

In English law, prevention has been interpreted in the context of force majeure as meaning physical or legal prevention and not mere economic unprofitability.⁵ The mere fact that the cost of performance has increased is insufficient for prevention. The position may be different in other legal jurisdictions.

What if the scale of the loss resulting from the price escalation means that a contractor cannot continue to trade? Clearly, there is scope for argument about the tipping point after which prevention may occur and that point will be different in each case. It is suggested, however, that it will usually be difficult to show prevention because of price escalation alone.

Entitlement to time and/or cost?

If a contractor is prevented from performing obligations under the contract by FM, has given notice, and suffers delay or incurs Cost by reason of such FM, Sub-Clause 19.4 provides that the contractor shall be entitled, subject to Sub-Clause 20.1, to an extension of time and – if the event or circumstance is of the kind listed in Sub-Clause 19.1 subparagraphs (i) to (iv) (and in the case of subparagraphs (ii) to (iv) occurs in the Country)⁶ – to payment of such Cost.

In other words, FM and prevention will only entitle the contractor to an extension of time, unless the FM is on the list of causes giving rise to Cost. These causes include war and, if it occurs in the Country, terrorism, strikes, munitions of war (etc).⁷

A contractor may therefore be entitled to an extension of time for delay caused by price escalation (or Covid-19) if this otherwise satisfies the definition of FM and prevents the contractor, but not to payment of Cost, which would only be available (in the context of the present article) if the contractor can show instead that the FM is war.

In summary: Covid-19 might, in the correct circumstances, entitle a contractor to time but not money, and war might, in the correct circumstances, entitle a contractor to time and Cost. But, whilst the FM clause may give the contractor extra time to procure materials that were prevented from being procured on time because of Covid-19 or the Russia-Ukraine war, it is unlikely to assist a contractor who is merely obliged to pay higher prices than originally estimated.⁸

Mitigation

Sub-Clause 19.3 requires each party to use ‘reasonable endeavours’ to minimise delay resulting from FM. It does not require mitigation of any other consequence, although most legal systems will require mitigation as a general principle. In terms of price escalation, were this to constitute FM, ‘reasonable endeavours’ might include changing suppliers or transport options, although, of course, that may not be possible or may have no effect if there is price escalation across the board. The usual rule, subject to the governing law, is that mitigation does not require a party to incur additional cost. The parties may agree, in

the interests of the project, to overcome price escalation by changing, for example, the physical works to avoid, reduce or share the impact of costly items.

No FM but obligations unlawful or impossible

Under the FIDIC 1999 editions, Sub-Clause 19.7 provides a remedy where if any ‘event or circumstance outside the control of the Parties (including, but not limited to, Force Majeure) arises which makes it impossible or unlawful for either or both Parties to fulfil its or their contractual obligations or which, under the law governing the Contract, entitles the Parties to be released from further performance of the Contract then, upon notice by either Party...’, the parties shall be discharged from further performance.

It is probably true to say that when drafting the contracts in 1999 and in 2017, FIDIC did not foresee the global shocks of the past three years.

There is similar wording at Sub-Clause 18.6 of the FIDIC 2017 editions.

It is difficult to see how price escalation could make it unlawful for a party to fulfil its contractual obligations.⁹ Whether price escalation makes it impossible for a party to fulfil its obligations may depend on the meaning given to the word ‘impossible’ in the relevant jurisdiction (it may for example, encompass impracticability because of extreme and unreasonable expense or loss)¹⁰ and the facts (in respect of which there may be a tipping point as mentioned above).

Exceptional events under FIDIC 2017

In the 2017 forms, FIDIC does not use the term ‘Force Majeure’ and instead uses the term ‘Exceptional Events’.¹¹ The requirement for the event or circumstance to be ‘exceptional’ no longer features in the definition. In other words:

- it must be an event or circumstance;
- which must be beyond the parties’ control;
- which such a party could not have reasonably provided against before entering into the contract;
- which having arisen such party could not have reasonably avoided or overcome; and

- which was not substantially attributable to the other party.

The omission of the word ‘exceptional’ has been corrected in the FIDIC 2017 second edition, as reprinted in 2022 with amendments.

Apart from this, the provisions in FIDIC 2017 are largely similar to those in FIDIC 1999 and so the considerations identified above will continue to apply.

The governing law

It is important to keep in mind that, in addition to the FIDIC provisions mentioned above, the law governing the contract may include additional remedies or legal principles that may be relevant including change of circumstances, impossibility, frustration, and good faith requirements.

Conclusion

The contract allocates risk according to FIDIC’s assessment of which party is best able to respond to that risk. FIDIC fiercely protects its risk allocation, for example with Golden Principle 3 (GP3) which states: ‘the Particular Conditions must not change the balance of risk/reward allocation provided for in the GCs’. However, it is probably true to say that when drafting the contracts in 1999 and in 2017, FIDIC did not foresee the global shocks of the past three years.

The same might be said of the parties, many of whom may not, when entering into the contract, have: (1) given much thought to the optional escalation clause; or (2) taken professional advice on the correct cost indices to apply when preparing the contract documents.

Whether price escalation affecting FIDIC contracts constitutes FM or an Exceptional Event will be assessed on the wording of the relevant provisions (which, despite GP3, may include amendments to the standard FIDIC wording) and the facts of each case. Prevention is essential. Even then, as price escalation is not on the list in Sub-Clause 19.1, the contractor will not be entitled to compensation for it (ie, payment of Cost) but only (if the contractor suffers delay) to an extension of time.¹²

Parties should take advice on the governing law of their contract as that may provide alternative relief.

Practical solutions might be the smarter solutions.

Notes

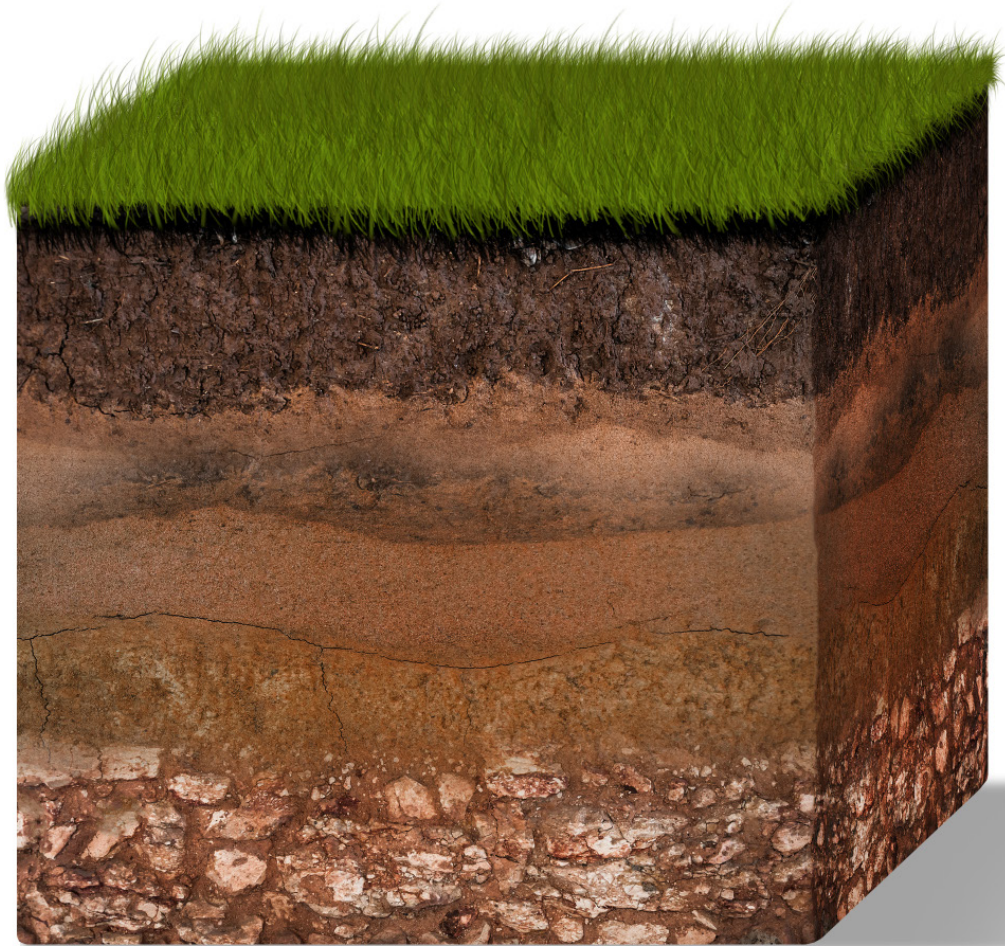
- 1 See the Turner & Townsend survey report on its 'International construction market survey 2022' in the section 'Global economic outlook': www.turnerandtownsend.com/en/perspectives/international-construction-market-survey-2022, accessed 26 January 2023.
- 2 See further Corbett & Co, 'FIDIC 2017: A Practical Legal Guide' (2020) Clause 18.
- 3 This excuse from performance does not apply to the obligation of either party to make payments to the other party under the contract.
- 4 Sub-Clause 19.4 of the MDB Harmonised Edition (June 2010) refers to 'substantial obligations'.
- 5 *Tennants (Lancashire) Ltd v G S Wilson & Co Ltd* [1917] AC 495.
- 6 'Country' is defined in Sub-Clause 1.1.6.2 as the 'country in which the Site (or most of it) is located, where the Permanent Works are to be executed'.
- 7 See Sub-Clause 19.1 for the complete list.
- 8 There is no entitlement to Cost in respect of natural catastrophes, and to be entitled to Cost in respect of the other specified categories, the FM must have occurred within the Country unless the force majeure arises out of 'wars, hostilities (whether war be declared or not), invasion, act of foreign enemies'.
- 9 Although unlawfulness might arise if, for example, one party to a contract is prohibited from continuing a contractual relationship with the other party as a result of sanctions.
- 10 See Knutson, 'FIDIC An Analysis of International Construction Contracts' (Kluwer Law, 2005) at p 237 in relation to the law of Malaysia and the reference to *Kung Swee Heng v Paritam Kaur* [1948] MLJ 170 in which Hill J referred to the definition adopted by the American Law Institute: 'Impossibility means not strict impossibility but impracticability because of extreme and unreasonable difficulty, expense, injury or loss'.
- 11 Clause 18 of the Red Book 2017.
- 12 Subject to compliance with notice requirements.

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The content of this article is not legal advice. You should always consult a suitably qualified lawyer regarding a particular legal issue or problem that you have. Please contact Corbett & Co if you require legal assistance.



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Unforeseen subsurface conditions: A problem beneath us

Introduction

The natural and geotechnical conditions found in the subsurface of a project site and surrounding areas are often a point of stress for parties during contract negotiation, execution and dispute resolution. From the contractor's perspective, it can be hard to assume responsibility for a factor that it has little time or opportunity to evaluate when submitting a tender. For the employer, it may be impractical to bear the risk of such conditions, especially when it lacks technical expertise and is constrained by limited project financing.¹

Common examples of unforeseen subsurface conditions include the

unexpected encountering of hard rock, flows of pressurised groundwater, or hazardous materials requiring remediation. These difficulties can require changes in the construction schedule, designs, materials and, in some extreme cases, can mean that completion of the work in accordance with the original design is impossible.

The issue gains further relevance, beyond contractual risk allocation between employer and contractor, if, for example, an unexpected condition causes the soil to subside significantly or even collapse. There can be potential liability towards third parties as well, with losses far exceeding monetary compensation and which may go as far as criminal implications, depending on the jurisdiction.²

Although practitioners have devoted considerable energy to this issue worldwide, it seems that no one-size-fits-all solution to the problem has been found. The determination of the party responsible for resulting delays and/or cost overrun can vary across different jurisdictions and may ultimately depend on how subsurface risk is contractually allocated and treated under the governing law. Jurisdictions and contract forms also vary in the ways they allocate responsibility for subsurface testing, the required level of diligence, and the reasonable degree of reliance that can be placed on information, reports and test results provided by the employer or third parties.

This paper compares the legal treatment given to unforeseen subsurface conditions in several jurisdictions and will comment on the FIDIC Emerald Book form of contract.

Risk allocation and responsibility for subsurface conditions in common law traditions

Construction contracts typically identify the scope of works, the time in which they are to be performed and the price the contractor is to be paid for carrying them out. In the absence of express provisions to the contrary, contractors are required by most legal systems to carry out the agreed scope and bear the associated burdens of doing so.

Under English law, for example, an employer does not impliedly warrant that the works undertaken by the contractor are possible (legally or physically). The employer is entitled to rely upon the contract and the expertise of the contractor to carry out the works, and the contractor will generally not be entitled to be compensated (time and/or money) in dealing with more onerous conditions than anticipated. In short, the courts assume that the costs and risks of unforeseen difficulties are included in the contractor's tender price.

In the 1876 case of *Thorn v London County Council*,³ a contractor undertook to construct a new Blackfriars Bridge in London. Cast iron caissons forming part of the permanent works were to be used. However, the design of the caissons by the employer's engineer was found to be deficient, preventing the contractor from working in high tides. This required the contractor to work at low tides only. The House of Lords (acting as

England's most senior court, a role now performed by the Supreme Court) ruled that no warranty was implied from the employer that the works could be done in any particular way, confirming the principle that the contractor is expected to do everything necessary to complete the works.

In 1942, the Supreme Court of Canada applied this principle against a claimant contractor, making the point that it could also benefit a contractor where conditions are more favourable than anticipated. See *The King v Paradis & Farley Inc.*⁴

'Expenses incurred for unforeseen difficulties must be considered as being included in the amount of the tender, and the respondent has the legal obligation to execute the contract for the price agreed upon, in the same way as would have been its indisputable right to benefit, if the soil had been more favourable and easier than foreseen.'

Case law surrounding subsurface conditions claims has developed significantly, however, as contract forms have evolved to allocate risk to the party best able to bear it

The 1942 decision was heavily dependent on contract language indicating that the contractor was liable for any increase in costs of the proposed work.

The above principles of English and Canadian law are reflected in some civil law jurisdictions, such as the United Arab Emirates (UAE). For example, Article 246 of the UAE Civil Code provides that the contract shall not be restricted to an obligation upon the contracting party to do that which is (expressly) contained in the contract, but shall also embrace that which is appurtenant to it by virtue of the law, custom, and the nature of the transaction. This provision is commonly taken to include unforeseen subsurface conditions which remain the responsibility of the contractor unless expressed to the contrary in the contract.

Case law surrounding subsurface conditions claims has developed significantly, however, as contract forms have evolved to allocate risk to the party best able to bear it. Especially in the United States, there is a perception that employers are likely to be most familiar with their project sites and have the best opportunity to conduct geotechnical investigations that disclose potentially adverse subsurface

conditions. In part for this reason, US courts tend to resist efforts by employers to disclaim liability for unforeseen subsurface conditions.⁵ Even a design-build contractor can be entitled to rely on pre-contract geotechnical information from the employer that formed a basis for the contractor's tender price.⁶

Over the last several decades, a number of contracts have sought to share the risk of encountering unforeseen subsurface conditions. The principal mechanism for doing this is to compensate the contractor for subsurface conditions that are not foreseeable. Clause 4.12 of the FIDIC Red Book 1999 edition, for example, entitles a contractor to claim an extension of time for delay to completion and payment of cost for adverse physical conditions that were not reasonably foreseeable by an experienced contractor, subject to giving appropriately timed notices and meeting other criteria. However, a raft of English law cases show that it remains difficult for contractors to satisfy the necessary requirements, particularly the test of foreseeability.

In *Obrascon Huarte Lain SA v Her Majesty's Attorney General for Gibraltar*,⁷ a contractor undertook to design and build a road around the perimeter of the Gibraltar airport. A desk study gave bidders an indication as to the degree of soil contamination likely to be encountered. When the contractor encountered unexpected contamination and stopped work, the government terminated the contract due to lack of progress. The English Court of Appeal upheld a rejection of the contractor's claim, holding that 'an experienced contractor at tender stage would not simply limit itself to an analysis of the geotechnical information contained in the pre-contract site investigation report and sampling exercise'.

Compensation for unforeseen subsurface conditions remains more difficult under English law than under the common law in Canada and the US.

Likewise, in *Van Oord UK Ltd and Others v Allseas UK Ltd*,⁸ the contractor asserted various claims for disruption and prolongation due to unexpected subsurface conditions on a gas export pipeline project. The court held that an 'experienced contractor' must consider and allow for the possibility that more adverse conditions may

exist as 'every experienced contractor knows that ground investigations can only be 100% accurate in the precise locations in which they are carried out. It is for an experienced contractor to fill in the gaps and take an informed decision as to what the likely conditions would be overall'. Again, the contractor was held liable for an unforeseen subsurface condition.

Two Canadian cases, *Opron Construction*⁹ and *Golden Hill Ventures*,¹⁰ are relevant as they examine the employer's role in respect of issues such as disclosure of information and making a construction site available for inspection.

Opron Construction involved the discovery of waste material from prior construction that was buried in an area hidden from view. Information regarding the placement of this waste material was known to the employer and not disclosed in the bid documents. The court accepted that the waste material significantly disrupted and delayed the construction¹¹ and awarded damages to the contractor on the basis of implying two terms into the contract.¹² In reaching this conclusion, the court looked at whether all material facts had been disclosed by the employer and whether there were facts within its knowledge that had not been disclosed which were inconsistent with other representations of fact made by the employer.¹³

Golden Hill Ventures is another Canadian case which examined an employer's duty of full and complete disclosure. The court found that 'owners do not comply with their duty of full and complete disclosure by providing incomplete information on the assumption that the bidders should "ferret out" the information "from clues"...'.¹⁴ The court found that the employer 'failed to meet its obligation to provide all information in its possession which was relevant to the question of the soils that would be encountered at the Site'.¹⁵ The court further held that because this information was fully within the employer's control, its failure 'to provide this information results in damages available to Golden Hill rather than merely an extension of time as is provided under GC 36.2'.¹⁶

An important variable in the extent to which subsurface conditions may be unforeseen is the extent and accuracy of geotechnical and other information

supplied to the contractor. Where such disclosure reveals the conditions that are actually encountered, there remains little scope for the contractor to contend that such conditions were unforeseeable.

Compensation for unforeseen subsurface conditions remains more difficult under English law than under the common law in Canada and the US. To the extent recovery is allowed, the contractor must generally prove that it encountered a condition not reasonably disclosed by documents in the tender package or by a visual examination of the project site. Contractors must make an independent assessment of the available information, adding the benefit of their past experience. The contractor's position may be strengthened if it can show that the employer had actual prior knowledge of the subsurface condition but withheld that information at the time of tendering.

Remediation and risk of pollution and contamination in soil

One type of differing site conditions arises when a contractor encounters unexpected contamination/pollution in soil or groundwater. The contract may anticipate some level of contamination, but the indicated levels may be exceeded, or pollution may be encountered across more of the site than expected. Contract documents may also fail to properly describe the nature of the contaminants, which may add more cost and time to the work than a contractor would reasonably anticipate. Unfortunately, such risks are often not fully, or unambiguously, addressed in the contract documents.

These conditions usually do not imperil the stability of a building being erected on the site. There may be room to argue about whether they render a construction project unsuitable for its purpose. In many countries it was not until the late 1970s that soil and groundwater contamination/pollution were considered to be problems that required attention. In the past 50 years, knowledge of hazardous substances has grown, as has the knowledge of their impact on the environment.

Whether a site is considered to be contaminated/polluted depends mainly on the regulatory framework applying to the site of construction. The site conditions are not only important for projects that involve

excavation or foundation work. In many jurisdictions, a regulatory framework limits construction work when the underlying ground is not in its 'natural' state. For example, essential permits may be withheld by the authorities until a remediation plan is in place and carried out. In some circumstances, even the 'natural' state may be considered to be contaminated/polluted and thus cause problems.

An analysis of possible risks for the contractor begins with understanding the regulatory framework of the jurisdiction of the site. No matter how international the project is, knowledge of the local regulatory framework governing the project site is crucial. Contamination/pollution from historic uses or pollution spills can migrate off-site or on-site for various reasons, and this can make the presence of these substances unexpected and sometimes difficult to remediate. Many types of contaminants/pollutants can migrate significant distances in groundwater and surface water. Construction work, remediation, intrusive investigations, mining or other disturbance of the ground can mobilise existing contamination/pollution or create pathways for the contamination/pollution to escape. Flooding can mobilise residual contamination.

An analysis of possible risks for the contractor begins with understanding the regulatory framework of the jurisdiction of the site.

The construction contract may give clear criteria for determining contamination/pollution in – for example – 'soil and water target values' for a very wide range of contaminants/pollutants or by referring to relevant regulations, but may also be silent on the topic. The contract may be clear on the consequences and require removal of all material that is contaminated/polluted above the 'target values'. Some polluted materials may be removed to a landfill or be treated off-site, while others can be treated 'in situ'. The contract may also include provisions defining target values for materials to be reused on site. If contractual provisions are less strict than the regulatory framework, the regulatory framework (and the local authorities) will be decisive regarding what is required.

Criteria for (re)use of materials on site may be different from the criteria for

determining contamination/pollution of the site. Ground water contamination/pollution may cause drainage problems and this risk needs to be allocated. Certain works may make an existing contamination/pollution worse by spreading the contaminants/pollutants within or beyond the site and lead to liability issues within or beyond the site and which may or may not be addressed in the contract.

The experiences gained in using various models resulted in the Emerald Book, which allows the parties to agree on favourable terms and conditions and to better control the final result of the works.

Using the FIDIC Emerald Book for Underground Works

The contractual models traditionally used for both public and private works – DBB (Design Bid Build), EPC (Engineering Procurement Construction), EPCM (Engineering Procurement Construction Management) and Alliancing have all been criticised for failing to include balanced risk allocation mechanisms aimed specifically at underground works. The criticism is that they tend to allocate risk in a way that causes parties to pay for risks that they could not reasonably foresee and for which they have no adequate budget.

Underground works typically involve excavation and ground support, which will often involve working in conditions that are unknown or at least incompletely known. Physical access to the work site is often limited, which can place severe constraints on both pre-bid investigations and performance of construction works. The underlying ground often belongs to third parties, that has been recently acquired by the project employer. Even if the employer has conducted an extensive geotechnical investigation of the site, it may want the contractor to implement further tests before commencing expensive and risky underground works.

The pressure from governments, multilateral financing organisations, insurance companies, government entities and the parties' quest for compliance with deadlines and cost controls have intensified. These developments have increased the

incentives to adopt contracting practices better suited to underground works. In response to this demand, FIDIC and the International Underground Works Association (ITA) reviewed the FIDIC Yellow Book (Design-Build) and introduced the Conditions of Contract for Underground Works (the Emerald Book).¹⁷ These Conditions are specially tailored for use in underground works. Their use may also be appropriate in other types of works that include a significant geotechnical uncertainty.

The Emerald Book allocates risks based upon the reference design by the employer and the Geotechnical Baseline Report (GBR). The Conditions include extensive guidance for preparing tender documents and provide example forms for a Schedule of Baselines, Completion Schedule and a Schedule of Contractor's Key Equipment. Also, the Emerald Book defines the GBR as the single contractual source of risk allocation related to the subsurface physical conditions.

The GBR addresses not only the identification of subsurface conditions but also their reaction to planned excavation and support activities under the contractually agreed construction methodology. All subsurface physical conditions not disclosed in the GBR shall be considered unforeseeable. The risks arising out of foreseeable properties of the disclosed ground conditions, including obstacles and adverse reaction to the excavation and ground support processes, are assigned to the contractor, as well as the production rates and cost of performing the Works under those conditions. Conversely, the risks arising from unforeseen physical conditions of the ground, obstacles, and adverse reactions to the excavation and ground support processes are allocated to the employer, warranting extension of time and/or reimbursement of cost to the contractor.

Projects with heavy and complex underground works need a contractual tool to balance the capabilities of those involved so that projects can develop as planned and finish on time and on budget. Indeed, there are still no perfect contract models. However, the experiences gained in using various models resulted in the Emerald Book, which allows the parties to agree on favourable terms and conditions and to better control the final result of the works.

Conclusion

In jurisdictions that tend to uphold contractor liability for unforeseen subsurface conditions, contractors are likely to face a dilemma at the time of tender. Unforeseen conditions may by their nature be impossible to quantify and price. It is therefore difficult for a contractor to include a price contingency adequate to cover unknown problems, and a tender price with a large contingency may well be too high to succeed. An employer's thorough pre-contract site investigation can help minimise the risk of unforeseen conditions, but contracts assigning risk of unknown conditions to the contractor must be approached with caution.

Notes

- 1 Ellis Baker, Ben Mellors, Scott Chalmers and Anthony Lovers, *FIDIC Contracts: Law and Practice* (Informa Law from Routledge, 1st edn, 2009), 96.
- 2 Denis Binder, 'Criminal Law – The increasing application of criminal law in disasters and tragedies: a global phenomenon', in: *Western New England Law Review*, Volume 38 (2016), Issue 3, 326.
- 3 *Thorn v London County Council* [1876] 1 App Cas 120.
- 4 *The King v Paradis & Farley Inc* [1942] SCR 10.
- 5 See, eg, *Foster Construction CA and Williams Bros Co v United States*, 435 F2d 873 (Ct Cl 1970).
- 6 See, eg, *Appeals of Tetra Tech Facilities Construction LLC*, 16-1 BCA 36562 (ASBCA 2016).
- 7 *Obrascon Huarte Lainé SA v Her Majesty's Attorney General for Gibraltar* [2015] EWCA Civ 712.
- 8 *Van Oord UK Ltd and Others v Allseas UK Ltd* [2015] EWHC 3074 (TCC).
- 9 *Opron Construction Co v Alberta* (1994) 151 AR 241 (QB).
- 10 *Golden Hill Ventures Ltd v Kemess Mines Inc* 2002 BCSC 1460.
- 11 See note 8 above, at paras 337 and 338.
- 12 *Ibid*, at 589.
- 13 *Ibid*, at 572.
- 14 See note 7 above, at para 495.
- 15 *Ibid*, at para 517.
- 16 *Ibid*.
- 17 Based on the ITA-AITES Report 006 'The ITA Contractual Framework Checklist for Subsurface Construction Contracts' (April 2011).

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The Salesforce Tower, which recently became the tallest office building in Sydney, at 263m. Credit: Ben & Gab, CC BY-SA 2.0, via Wikimedia Commons

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Joined at the hip (and at the heart) – managing the inherent risks of joint ventures in the Australian construction industry

Introduction

The majority of infrastructure projects both globally and in Australia are delivered using a joint venture structure.¹ Joint ventures (JVs) are the predominant model for delivering major projects because the scale and complexity of such endeavours requires a combined approach to expertise and resources.

A major benefit of JVs are the opportunities they create. JVs allow contractors in the industry to broaden their horizons, learn better practices and grow by taking on projects they may have never dreamed possible on their own. However, despite the benefits, the legal risk for a contractor looms large. Firstly, simply

forming a JV with another party provides no additional risk protection from that party. It is important for contractors in the construction industry to recognise that the relationship between participants in a JV will be governed by the particular JV agreement (and often with reference to the head contract) rather than any extrinsic principles of law. Secondly, there is an inherent risk within the traditional JV structure itself. The very nature of JVs is the union of two (or more) businesses to achieve a common goal. The businesses expect to benefit from each other's expertise and talents. However, they have different backgrounds and skillsets which, when not managed properly, will lead to conflicts and disputes.

A major risk in JVs is the difference between the members. That is why JV agreements require a strategic and robust approach to risk allocation in order to avoid disaster for the parties involved. To be most effective, these processes must occur at the outset of the project, in the pre-tender stage. In order to manage the risk of difference between the parties, JV members must engage in detailed strategy development to uncover where their interests and abilities are not aligned and how to overcome this. The result of this is clarity as to the scope of each parties' obligations. This essay argues with examples from recent decisions that an integrated scope model is the less risky option for most contractor JVs operating in the construction industry. It further argues that parties must define and manage their economic independencies, including their respective liabilities if (and when) the need arises.²

A JV will be successful if the parties take a balanced and considered approach to risk allocation. JVs will remain a favourable method for two or more contractors to deliver major projects, as long as the risk that lies between the JV partners can be effectively managed.

The non-existent law of JVs

The term 'joint venture' has no settled meaning in Australian law. In determining whether a relationship was a partnership or joint venture, the High Court of Australia noted that key features of a JV include

working towards a common aim, where the parties each contribute money, property or skill.³ The most basic definition of a JV is two or more entities co-operating for a common purpose.⁴ For the purposes of this essay, the common purpose is the delivery of a major construction project.

In *Brian Pty Ltd v United Dominion Corporation Ltd*, the High Court confirmed that the 'term "joint venture" is not a technical one with a settled common law meaning'.⁵ This was also made clear in *White City Tennis Club Ltd v John Alexander's Clubs Pty Ltd*, where Macfarlane JA noted: 'Describing the arrangements as a "joint venture" does not however have any particular legal consequences. The rights and obligations of the parties remain to be determined by examination of the detail of what they have agreed and done'.⁶

JVs have proliferated in recent decades in the Australian construction landscape because they encourage the growth of companies and allow companies to work on projects which they otherwise would not be able to.

As such, there is no 'law' of JVs. Instead, the benefits and disadvantages of a JV will depend on the structure of the JV agreement and the terms and conditions included in it.

JVs – a match made in heaven

Within the construction industry, the JV structure is considered to have the best capacity to deliver complex projects because parties can share significant capital and operational costs and have access to greater financial resources than a party might have access to on its own. For contractors, JVs provide for commercial opportunities such as sharing the risk of taking on a project and increasing buying capacity. It is essential for certain projects, where contractors with particular experience seek partners with a different skill set or where local law requirements specify that contracting entities must have a certain amount of local representation. Principals, on the other hand, find JVs attractive because there is typically joint and several liability between the contractors, leading to less exposure to risk in event of contractor insolvency.⁷

JVs have proliferated in recent decades in the Australian construction landscape because they encourage the growth of companies and allow companies to work on projects which they otherwise would not be able to. According to the Grattan Institute, mid-tier contracting firms won 31 per cent of the contracts on Australian megaproject work over the past 15 years without the involvement of a tier one firm.⁸ JVs enable this. Tier one firms won 27 per cent in joint ventures with mid-tier firms and 41 per cent without them.⁹ Internationally, of the 31 project finance schemes valued at US\$500m or above that reached financial close during 2020, more than two thirds were to be delivered by JVs.¹⁰ JVs create opportunities and they broaden horizons and networks which strengthens the construction industry overall.

JVs are increasingly popular, but their success rate is patchy, at best.

Many of these projects are being delivered with significant private sector financial support by way of a variety of public-private-partnerships (PPPs) which include JVs within them. These are complex logistically and legally, and as demonstrated by the West Gate Tunnel Project in Melbourne, are fraught with substantial risk.¹¹ In the past few years in Australia, several international firms have entered partnerships and joint ventures with domestic firms. For example, UK-based Laing O'Rourke partnered with Australasian firm Fulton Hogan on Victoria's Level Crossing Removal Project.¹² JVs are a particularly attractive structure for players seeking to participate in large projects, but at the same time, these projects are incredibly complex and fraught with risk.

Claims and disputes – not so happily ever after

JVs are increasingly popular, but their success rate is patchy, at best. A 2001 study into JVs found that 53 per cent were 'successful' in the sense that each partner had achieved returns greater than the cost of capital.¹³ What is even more sobering, is the statistics suggest that JVs overwhelmingly give rise to disputes. A 2019 arbitration study found that 27 per cent of international construction disputes arose

from disputes between JV or consortium members.¹⁴ A worldwide report by Arcadis in 2018 found that where a dispute involved a JV, the dispute was between the JV partners or driven by a JV-related difference 35.7 per cent of the time.¹⁵ Not even the immensely successful construction of the London Olympics Park has come out unscathed. Of the Tier 1 contractors that formed joint ventures for the project, 69 per cent said that they would not take the relationship forward to future projects.¹⁶ These results force us to consider what it is about JVs that cause losses, disputes and broken relationships?

The answer to this is that not enough work is done during the 'launch' or tender stage to resolve the inherent strategic conflicts and differences between two or more commercial enterprises. James Bamford argues there are well known reasons for JV failure, being 'wrong strategies, incompatible partners, inequitable or unrealistic deals, and weak management'.¹⁷ However, these failures occur when parties fail to give sufficient attention to strategic issues relevant to the JV during the tender period of a project. Instead, parties are busy analysing pre-tender documentation and assessing the overall risks of the project. JVs create the need for an additional layer of risk assessment which is often overlooked, despite it being essential. Potential JV partners must assess the risk of the differences posed by each other.

JVs generate the need for a unique risk assessment because they involve multiple parties dealing with disparate interests and this leads to unique challenges.¹⁸ Therefore, the major risk in JVs is in the difference between the parties.

The all-encompassing JV agreement

The relationship between JV members is contractual and the scope is determined by the joint venture agreement (JVA). A JVA allocates the roles, responsibilities, rights, obligations and liabilities of the JV parties (often under a head contract). For unincorporated JVs, the subject of this essay, the JVA will typically set out that the JV has no legal identity separate from its members and the relationship between the participants is contractual.

The drafting of a JVA is an element in the risk management process, because it will allocate risk between the parties. Parties who

consider how risks ought to be allocated, as opposed to how risks will be allocated, should bear the fruits of a more successful partnership. This is advocated by the Abrahamson principles for risk allocation, the first being that it is best practice that the party who is best able to ‘manage’ or ‘control’ the risk should bear it.¹⁹

The JV members have come together to pool skills and resources. Understanding what each party is bringing, as well as the differences between them, helps to strategically align the JV. This requires consideration of how the works will be allocated between the parties such as whether there is an integrated or a clear delineated split. Parties must also define what the economic interdependencies are between them, in terms of what is being contributed and what is being taken at the end of the JV agreement. Most importantly, this requires clarity on how liability will be apportioned between the JV members in the event of a claim by a third party.

Ultimately, successful JVs come from a balanced and transparent contribution from both parties, not just risk allocation.

Strategic alignment

One way of managing risk in JVs is to ensure the parties are strategically aligned. Upon entering a JV, each party has its own goals, market pressures and shareholders.²⁰ If these disparate interests are not addressed and aligned, conflicts will develop.

Ideally, a JV will be fully integrated with participation based on a percentage split rather than a specified scope split. This is because disputes can arise easily when a scope split is not clearly defined. Even if one party is bringing a particular skill to the JV that the other party lacks, an integrated model is preferred. Furthermore, JVs partners should have clearly defined obligations, but also act as ‘one business’ as much as possible throughout the project. This can be achieved by clearly defining the objectives and purpose of the JV and recording it into the JVA.

Early involvement in strategic alignment, including an analysis of where their interests are not aligned in the performance of delivering the work agreed to under the head contract, is an essential element of risk management for parties to a JV.

Integrated models lessen scope risk

Ed Merrow says ‘joint venture partners can be a blessing or a curse’.²¹ These are wise words, but the structure of a JV can also encourage cooperation between partners. At the outset of a JV, parties will typically negotiate the division of responsibility for different activities to reach completion of the project. As a consequence of this arrangement, they will be liable to towards each other for the proper execution of only their individual parts of the total scope of work. While this makes sense due to differing skills sets that the parties bring to the table, a less risky option is an integrated work scope.

When parties’ work scopes are separate and discrete, the risk of disputes between JV partners is actually greater. In this scenario, for example, one JV member provides the design and the other provides the construction services. When things go wrong, arguments as to which party was responsible for the loss occurred and the parties will seek to recover from each other. Disputes between JV members can also occur earlier in the project, where one party believes the activities that another party expects them to undertake are unreasonable or not what was agreed under the contract. One example of the issues faced by partners to a large, complex project is the Sydney Light Rail PPP project. There, the consortium, ALTRAC agreed to take on site and interface conditions risk. Acciona, a party to the consortium, was responsible for designing and building the light rail tracks that run through Sydney’s central business district (CBD). It claimed that after the deal closed, it received a set of completely different and more stringent requirements from electricity distributor Ausgrid, including extensive work on 106 utility pits, extra relocations of services and more.²² Acciona said if it had known of this extra work, it would not have pursued the contract.²³ While that dispute with the NSW Government was ultimately settled, Acciona was also awarded 90 per cent of an AUD37m claim against its ALTRAC partners under the state’s Security of Payment legislation.²⁴ From this it is clear that an additional risk in the form of disputes can occur when JV partners’ work scopes are separate.

One way to avoid issues like the above is a completely integrated work scope between JV partners. Integration brings the two

organisations working together from the start of the project. In this model, the JV members share all risks, liabilities, rights, benefits and profits in proportion to their participation in the joint venture.²⁵ This is usually expressed as a percentage share, such share normally being determined based on the resources that each party will supply to the joint venture for the execution of the total scope of work under the contract with the principal.

This is particularly useful to JV members who are both contractors and are generally similar companies in their field of business because they understand each other's businesses and the risks. A recent example of this is John Holland and Lendlease Engineering (along with Bouygues Construction Australia), two of Australia's largest contracting entities, who very much understand each other's businesses, forming an unincorporated JV to design and construct the tunnel and stations of the Melbourne Metro Project.²⁶

Doosan v Interserve serves as a warning as to the scope risk that can occur in non-integrated JVs, even when the contract allows for a shared risk payment mechanism.

Fully integrated work scopes do not happen in practice as much as they should. One reason for this is parties fear that liability will be difficult to work out in the event of a claim from the principle of the project. However, joint several liability can effectively manage this risk as discussed below.

Split scope – no pain, no gain?

Split scope JV agreements require upfront discussions between parties about what will occur when, as inevitably happens on large projects, JV members' interests diverge. The UK case of *Doosan Enpure Ltd v Interserve Construction Ltd* ('Doosan') serves as an illustrative warning as to the types of disputes that can arise between members of a construction JV.²⁷ The parties were the two members of a JV who had contracted with the principal, a water authority, to upgrade a water treatment works. The head contract was an NEC3 Option C form, which is a target cost contract with an activity schedule to allow the financial risks to be shared between the principal and contractors in agreed

proportions.²⁸ This is known as a pain/gain share mechanism.

The procedure adopted for payment under the JVA was that Doosan and Interserve would each produce a monthly spreadsheet and payment certificate showing the payments to which each of them was entitled from the JV account.²⁹ Payments were then certified by a Project Manager, as stipulated in the head contract. When Doosan asked Interserve to sign the Allocation Spreadsheet in respect of a payment certificate, Interserve declined to do so. Interserve argued that that there was a risk that the amount certified on an interim basis in respect to the work done would exceed the amount it could expect to recover as a result of the pain/gain share provisions of the head contract.

Before turning to the JVA, the court first reviewed the head contract provisions, whereby the NEC3 sets out that the parties agree a target cost or price to include the contractor's best estimate of its cost to carry out the works, as well as a fee for costs, overheads and profit. Upon completion, an assessment is made of the 'price for work done to date' and any overrun or cost saving is allocated according to a formula under the 'pain/gain share' mechanism.³⁰ Justice Jefford ruled that it is clear from clause 53.3 of NEC3 that the comparison of the price for work done to date to the total of the prices, had to be carried out at *completion* of the whole of the works and once the price for the work done had finally been established.³¹ This highlights the importance of ensuring, to the extent possible, that the terms of the JVA are consistent with the relevant construction contract and that the JVA sets out which agreement (the JVA or the Contract) takes precedence where there is an inconsistency.

Further, Interserve's basis for declining to sign the payment certificate reveals the split scope of works contributed to the dispute, because Interserve alleged that Doosan's works were causing delay.³² In the JVA, both parties bore all commercial, technical and other risks in respect of the parts of the works it had undertaken to complete. That is, it was not an integrated scope of works. Difficulties and disputes in this regard can arise where both parties are carrying out elements of the same item of work. *Doosan v Interserve* serves as a warning as to the scope risk that can occur in non-integrated JVs,

even when the contract allows for a shared risk payment mechanism. Where there are scope splits, JVs partners should discuss how their interests may not be aligned in the event of a disagreement and have clearly defined obligations based on this.

Overall, early planning is required to achieve strategic alignment between JV members. Split scope JVs are riskier than an integrated model. In order to avoid disaster, parties must undertake an early analysis of where their interests diverge, so that any differences can be strategically aligned and obligations can be clearly defined. Effective strategic alignment such as this allows the parties to understand their obligations within the structure of the JV as they undertake the delivery of the project.

Economic interdependencies

Parties must also define the nature of financial risks that attach to each other by virtue of being involved in the JV. The purpose of a JV is for its members to provide capital, people, intellectual property, equipment and more. These contributions will, as set out in the JV agreement, determine their return on investment. However, damage will occur if those contributions are not discussed and clarified during the pre-tender stage of a project.

Of specific interest to this article is how liability will be apportioned in the event of a dispute between the JV and the principal. Risk sharing arrangements between joint venture parties can be affected if joint and several liability is not sufficiently specified, as well as by the operation of proportionate liability regimes.

Joint and several liability is where multiple parties can be held liable for the same event or act. As mentioned above, one attractive feature of JVs from a principal's perspective is that joint and several liability allows it to recover the whole of its loss from the JV, notwithstanding that one JV member's responsibility may have been less or nil compared to another's responsibility. This is particularly helpful to the principal where one JV party becomes insolvent. On the other hand, legislated proportionate liability regimes share fault among concurrent wrongdoers according to their respective levels of responsibility. While this in theory sounds fairer, JVs formed for the purpose of delivering projects should, where possible,

avoid proportionate liability regimes as they undermine the parties' intended risk allocation and are unsuitable for parties who plan to escalate any disputes that may arise to arbitration.

Joint and several liability – less mess

Joint and several liability allows a principal to take action against any one of the JV members and receive full compensation for the loss suffered. The onus is then put on the liable party to seek contributions from its JV partner(s), usually under the JV agreement. This can seem unfair, particularly in circumstances where the solvent or well-insured JV contractor, who may be less responsible than others, is made liable for the entirety of the loss.³³ While offering certainty to principals, joint and several liability can be less attractive to JV member contractors, particularly those of lesser financial strength but whose contribution is essential to the success of major infrastructure, such as technology providers.³⁴ However, JV partners can and should protect themselves from this through careful drafting of the JV agreement.

Proportionate liability regimes were brought in across Australia to force those found liable to pay damages according to their level of responsibility for the loss arising from a breach of contract.

Proportionate liability regimes were brought in across Australia to force those found liable to pay damages according to their level of responsibility for the loss arising from a breach of contract.³⁵ It replaces the common law principle of joint and several liability. The legislation expressly allows parties to contract out of the proportionate liability regime in New South Wales, Tasmania and Western Australia.³⁶ Queensland expressly prohibits contracting out, while in Victoria, the statute is silent, and arguments are available either way.³⁷ The regime's application is uncertain for parties contracting across multiple states. The effect of the legislation is that parties are not able to rely upon the risk allocation agreed in the contract.

It also undermines the effective financing and delivery of projects. Joint and several liability is particularly important in large

infrastructure projects, because it allows debt, equity and government parties to be satisfied that the JV partners have (when their balance sheets are considered together) the capacity to deliver on the promises made or to pay damages in the event that they fail to so deliver.³⁸ Even if one of the joint venturers was to become insolvent (perhaps due to losses on other projects), the owner will still be entitled to fully enforce the contract against the others.³⁹

Under the regime, where two JV parties are wrongdoers, their liability may be determined by their responsibility, rather than their contractual arrangement which may provide for liability in accordance with their proportional interest in the JV. The main problem with this is that it prevents parties of equal bargaining power to choose how to allocate their risk. If parties do not, or are not able, to contract out of proportionate liability schemes, and where all joint venture contractors are actively involved in construction activities and all fail to exercise reasonable care, the maximum liability of each will be that proportion of the total loss which the court considers fair having regard to the extent of each contractor's responsibility.⁴⁰

Apart from being unsuitable from a risk allocation perspective, there is also doubt over whether proportionate liability regimes can be applied in arbitration proceedings. Doug Jones suggests it is unlikely.⁴¹ The Victorian Supreme Court has recently held that where proportionate liability is to apply between parties to an arbitration, it must do so through an express or implied term to that effect.⁴²

This makes good commercial sense. Arbitration is the preferred dispute resolution mechanism between all parties in construction disputes.⁴³ Courts are willing to have the disputes which the parties agreed to be referred to arbitration determined at arbitration. This agreement should not be interfered with by proportionate liability regimes.

It is worth noting that it may be possible to avoid a proportionate liability regime by using a carefully drafted indemnity clause where the JV members agree to indemnify each other to the extent of their respective investments, regardless of the outcome of any litigation.⁴⁴ This could be, for example, a 40-60 per cent split. This is, of course, dependent on both JV parties staying

solvent. If one party becomes insolvent, the other will likely be saddled with a bigger liability than contemplated in the JVA agreement.⁴⁵ However, it is unclear whether or not an agreement such as this would supersede a court order or be considered by the court when making its determination on proportionate liability.⁴⁶

The proportionate liability legislation should not apply in construction contracts, because it should not interfere with JV parties who agree to allocate their joint liability in a particular way. It also is inconsistent with arbitration, the most commonly used dispute resolution method in the construction industry. Successful JVs will be transparent as to the provision of resources from the parties. In order to clearly understand their risks, parties must define their economic independencies, including liability.

Conclusion

The delivery of major projects already involves substantial risk to all parties involved. While JVs can create opportunities, they also add a layer of complexity to these projects.

There is no 'law of JVs', so the JV agreement must provide for a balanced allocation of risk. There is also an inherent danger in the very structure of JVs. Parties, with different strategic ambitions, cultures and balance sheets come together to achieve a common, yet risky goal of delivering a project. This can lead to large conflicts which undermine the benefit of the parties joining the JV in the first place.

JV members should place a high importance on the structure of the JV and should strongly consider an integrated model to mitigate the risk of dispute against the other JV members. In the early phase of the project, the parties must also work together to clarify not only the purpose and remit of the JV, but what the parties are co-operating in relation to and the scope of their obligations. This will allow the parties to think as 'one' as much as possible during the project. Once the structure of a JV is settled, a clear approach to economic interdependencies, including joint and severable liability, is essential. Proportionate liability regimes undermine effective risk sharing agreements by parties to a JV and should be avoided if possible.

JVs will continue to be a popular structure for companies to deliver major projects.

However, parties must work together at the outset of the project to clarify, define and understand the allocation of risk. This requires an acknowledgement that risk in JVs lies with the differences between the parties to a JV.

Notes

- 1 This is a shortened version of an essay submitted for a Melbourne University Master of Construction Law subject.
- 2 The terms ‘Strategic Alignment’, ‘Governance’ and ‘Economic Interdependencies’ are described in Bamford, James, Ernst, David and Fubini, David G ‘Launching a World-Class Joint Venture’, *Harvard Business Review*, February 2004, 92–93.
- 3 *United Dominions Corporations Ltd v Brian Pty Ltd* (1984-1985) 157 CLR 1, 10 (Mason, Brennan and Deane JJ).
- 4 Williamson, Douglas, ‘Trade Practices Law – Its Implications for Mining and Petroleum Joint Ventures’ (1977) 1 *Australian Mining and Petroleum Law Journal* 59, 85.
- 5 See note 3.
- 6 *White City Tennis Club Ltd v John Alexander’s Clubs Pty Ltd* (2009) 2 ASTLR 116, [2009] NSWCA 114, [27] (Macfarlane JA). This passage was noted with approval by the High Court on appeal: *John Alexander’s Clubs Pty Ltd v White City Tennis Club Ltd* (2010) 241 CLR 1, 84 ALJR 446, [2010] HCA 19, [44].
- 7 O’Reilly, M, ‘Risk, Construction Contracts and Construction disputes’ *Construction* (1995) *Construction Law Journal* 11(5), 344, 347.
- 8 Tier one firms are capable of delivering a project worth AUD1bn solo. The tier one firms operating in Australia today are CPB Contractors, John Holland, and Acciona as per Terrill, M, Emslie, O, and Fox, L (2021) ‘Megabang for megabucks: Driving a harder bargain on megaprojects’, Grattan Institute, 20.
- 9 Based on analysis of all major construction work packages, on all government transport infrastructure projects valued at AUD1bn or more and begun since 2006, whether completed or still in progress, as per Terrill, M, Emslie, O, and Fox, L (2021) ‘Megabang for megabucks: Driving a harder bargain on megaprojects’, Grattan Institute 21.
- 10 Lewis, Dean and Connor, Vincent, Global joint ventures require consistent approach to liability ‘Pinset Masons Out-Law Analysis’ article, 4 December 2021: www.pinsentmasons.com/out-law/analysis/global-joint-ventures-require-consistent-approach-liability, accessed 26 January 2023.
- 11 Jones, Doug ‘Proportionate Liability Revisited’, 8th Pinset Masons Lecture, 17 November 2020, 18, Timna Jacks and Patrick Hatch, ‘West Gate Tunnel budget blows out by \$3.3 billion, Transurban reveals’, *The Age* (9 August 2021), available at: www.theage.com.au/national/victoria/west-gate-tunnel-budget-blows-out-by-3-3-billion-transurban-reveals-20210809-p58h0q.html, accessed 26 January 2023.
- 12 Terrill, M, Emslie, O, and Fox, L ‘Megabang for megabucks: Driving a harder bargain on megaprojects’ (2021) Grattan Institute, 18.
- 13 Bamford, James, Ernst, David and Fubini, David G, ‘Launching a World-Class Joint Venture’, *Harvard Business Review*, February 2004, 91.
- 14 ‘International Arbitration Survey – Driving Efficiency in International Construction Disputes’, Queen Mary University of London and Pinset Masons (November 2019), 7.
- 15 ‘Does the Construction Industry learn from its mistakes?’, Arcadis Global Construction Disputes Report (2018), 11.
- 16 Sir John Armit, ‘London 2012 – A Global Showcase for UK PLC’ (Department for Culture, Media and Sport, July 2012), 24.
- 17 Bamford, James, Ernst, David and Fubini, David G ‘Launching a World-Class Joint Venture’, *Harvard Business Review*, February 2004, 92
- 18 *Ibid*.
- 19 M Abrahamson, ‘Risk Management’ (1983) 1 *International Construction Law Review* 241, 244.
- 20 See note 17 above.
- 21 Merrow, Edward W, *Industrial Megaprojects: Concepts, Strategies, and Practices for Success* (John Wiley & Sons, Incorporated 2011), 183.
- 22 Daniel Kemp, ‘Sydney Light Rail legal disputes settled with revised PPP’ Infrastructure Investor (5 June 2019), available at: www.infrastructureinvestor.com/sydney-light-rail-legal-disputes-settled-revised-ppp, accessed 27 January 2023.
- 23 ‘Best-laid plans: Sydney’s light rail fiasco’, Railway Technology (28 November 2018), available at: www.railway-technology.com/features/sydney-light-rail-fiasco.
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- 25 David Kinlan, ‘Joint Ventures: Integrated or Vertical split? Linked In Pulse (16 June 2020), available at: www.linkedin.com/pulse/joint-ventures-integrated-vertical-split-david-kinlan, accessed 27 January 2023.
- 26 Melbourne Metro Rail Authority and Victoria State Government, Tunnel and Stations Public Private Partnership (Project Summary, February 2018) 20.
- 27 *Doosan Enpure Ltd v Interserve Construction Ltd* [2019] EWHC 2497 (TCC).
- 28 *Ibid*, para 1.
- 29 *Ibid*, para 2.
- 30 *Ibid*, para 11, 50.2.

- 31 Clause 53.3 provided: ‘The Project Manager makes a preliminary assessment of the Contractor’s share at completion of the whole of the *works* using his forecasts of the final price for work done to date and the final total of the prices. This share is included in the amount due following completion of the whole of the *works*.’ *Ibid*, para 11, 39.
- 32 *Ibid*, para 2.
- 33 ‘Why should the whole of the burden of possibly insolvent wrongdoers, fall entirely on a well insured, or deep pocket defendant?’: *AWA v Daniels* (1992) 10 ACLC 993, 1022 (per Rogers CJ).
- 34 Lewis, Dean and Connor, Vincent, ‘Global joint ventures require consistent approach to liability’, Pinset Masons Out-Law Analysis article (4 December 2021) at: www.pinsentmasons.com/out-law/analysis/global-joint-ventures-require-consistent-approach-liability, accessed 27 January 2023.
- 35 For example, as a means of apportioning loss between concurrent wrongdoers for claims involving, as an element of the cause of action, a failure to take reasonable care (per *Tanah Merah Vic Pty Ltd and Others v Owners Corporation No 1 of PS613436T and Others* [2021] VSCA 72).
- 36 See, for example, Civil Liability Act 2002 (NSW), Part 4.
- 37 Stephenson, Andrew, Lee Carroll and Nandacumaran, Jey, ‘GAR Know How Construction Arbitration’ (*Global Arbitration Review* – July 2021) 14.
- 38 Stephenson, Andrew, ‘Proportional Liability In Australia – The Death Of Certainty In Risk Allocation In Contract’ (2005) *The International Construction Law Review*, 1, 65.
- 39 Hayford, Owen, ‘Proportionate Liability and its impact on Contractual Risk Allocation’ (2010) 26 *Building and Construction Law Journal* 11, 21.
- 40 *Ibid*.
- 41 Prof D Jones, ‘Proportionate Liability Revisited’, 8th Pinset Mason Lecture, 17 November 2020, 9, citing *Curtin University of Technology v Woods Bagot Pty Ltd* [2012] WASC 449 (Beech J). This is because the legislation in all jurisdictions refers to the court being required to apportion liability in proceedings as explained in *Transurban WGT Co Pty Ltd v CPB Contractors Pty Ltd* [2020] VSC 476, [10] (Lyons J).
- 42 *Transurban WGT Co Pty Ltd v CPB Contractors Pty Ltd* [2020] VSC 476, 10 (Lyons J).
- 43 ‘International Arbitration Survey – Driving Efficiency in International Construction Disputes’, Queen Mary University of London and Pinset Masons (November 2019) 6.
- 44 Prof D Jones, ‘Proportionate Liability’ (2004) 98 (September/October) *Australian Construction Law Newsletter* 20, 36.
- 45 Stephenson, Andrew, ‘Proportional Liability in Australia – The Death of Certainty in Risk Allocation In Contract’ (2005) *The International Construction Law Review*, 1, 78.
- 46 Hayford, Owen, ‘Proportionate Liability and its Impact on Contractual Risk Allocation’ (2010) 26 *Building and Construction Law Journal* 11, 21.

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The enforceability of knock-for-knock indemnity clauses in offshore wind construction contracts

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Introduction¹

The United States is on the cusp of an explosion of offshore wind development. Government backing of developing is growing. President Biden has announced ambitious installation goals and reinstated tax incentives. Individual states have followed with strong state-level procurement targets and incentives, with immediate focus on development of fixed wind in the Northeast.² Two major events have brought expectations

soaring. Vineyard Wind I, the first commercial scale US project at 800 MW, achieved a major financial close in September 2021 and moves closer to reality. More recently, in February 2022, six new leases were auctioned off the coast of New York for \$4.37bn, signalling investor faith in US offshore wind.³

Project development in the US will follow the practices from the North Sea, where the bulk of expertise with offshore wind has been developed. European Union-based developers,

alone or in concert with local utilities, are involved in all 39 projects currently in the pipeline and they will rely on many key suppliers based in the EU, using practices from the North Sea.⁴ One practice that will be imported into the US are knock-for-knock indemnity clauses, which are commonly included in North Sea offshore wind contracts. Knock-for-knock clauses, however, have never been fully accepted in the American environment. This article looks to understand the knock-for-knock regime and its enforceability in offshore wind projects in the US.

How does knock-for-knock indemnification work?

Knock-for-knock indemnification is a standard clause in vessel charters and offshore oil and gas contract forms used in the North Sea.⁵ They have been adapted for use in offshore wind development and are commonly included in offshore wind contracts. The knock-for-knock clause is designed to limit each contractor's liability for damages incurred by other contractors during the construction of large offshore projects.

Conceptually, knock-for-knock is very simple: the damage stays where it falls, regardless of fault. The knock-for-knock clause starts with a reciprocal waiver of liability for property or personal injury damages suffered by either party, even if caused by the other's negligence. Afterwards, an indemnification provision whereby each party agrees to compensate the other party for any loss from personal injury or property damage suffered by the party or anyone in the contractual chain, including subcontractors and employees. The contractor also obtains similar indemnification obligation from its subcontractors so that individual losses are kept at the place where they occur.

The parties cannot prevent their injured employees or third parties from bringing

tort claims. Therefore, each party undertakes to indemnify and defend any claims brought by their employees or subcontractors against the other party (or the other parties' subcontractors). In this way, contractors in each major area of offshore wind construction (turbines supply, foundations, array cables, export cables, offshore works, and onshore works) become a contained group, responsible for damages to its property and employees/subcontractors.⁶

Each party obtains insurance without the right of subrogation, meaning that claims are quickly paid by insurers who cannot bring negligence claims against the party that caused the injury. Generally, the developer takes out a construction all-risk insurance policy that insures the works (but not the vessels or other contractor equipment) and harm to third parties. The lead contractor and the subcontractors take out personal injury insurance on their own employees and insurance for their vessels and equipment and any potential third-party liability not covered by the construction all-risk or knock-for-knock agreement.⁷

What are the benefits and use of knock-for-knock in the offshore oil and gas industry?

The justification for knock-for-knock in the oil and gas industry is that the parties are involved in complex contractual relationships such that the resulting losses from harm may not be commensurate to the value of each individual work scope and this justifies altering the inherently fair system of liability based on fault given the complexity of resolving claims and assigning blame.⁸ The main benefit of the knock-for-knock system is, where effective, improved efficiency and reduction of the overall costs of a project. Knock-for-knock clauses are aimed at acknowledging and insuring all risks, while limiting the litigation costs as far as possible.

Are the justifications for the regime applicable to the offshore wind industry?

Around half of offshore wind projects include knock-for-knock clauses, arguably justified by the conditions similar to offshore oil and gas, for instance, many contractors doing complicated work together in a

One practice that will be imported into the US are knock-for-knock indemnity clauses, which are commonly included in North Sea offshore wind contracts. Knock-for-knock clauses, however, have never been fully accepted in the American environment.

complex contractual web. However, the risks in offshore wind are simply not as large as in oil and gas. The biggest risks from major oil and gas disasters include losses from pollution for oil discharges and explosions on offshore rigs. These risks are absent in the offshore wind industry and some question the appropriateness of using knock-for-knock indemnification.⁹

The major critique of the system is that it could create a moral hazard, as there exists the risk that individual contractors may perform negligently knowing full well that the liability for its negligence would be passed on to other parties.¹⁰ There are both legal and commercial factors that mitigate this critique in the offshore wind industry. First, the industry is highly regulated.¹¹ These regulations define the background standard of care for offshore projects and are subject to regulation and enforcement separate from any contract. Second, commercial forces encourage safe practices. The industry is small, safety focused, and commercially competitive, including on issues of safety; hazardous behaviour could quickly lead to a bad reputation and exclusion from future projects.¹² The industry has an impressive safety record. In a 2020 study in the US, 1.6 million working hours resulted in only two incidents of medical treatment from injury and only one lost working day.¹³

Regardless of its merits, the clause may nonetheless be introduced into a contract web by a particular important contractor or come from the vision or past practices of a particular developer. Once introduced, the knock-for-knock concept is very hard to contain to just one part of a contracting quilt. For coherence and insurability, the knock-for-knock provision should be included across the project.¹⁴

Where adopted, the major risk to a project is enforceability of the indemnification.¹⁵ The system is designed to leave loss where it lies and insure loss at that level. Where losses are large, insurers may file lawsuits challenging the validity of the indemnification clause, seeking to avoid payment. If successful, the regime fails and an uninsured loss, which could have been insured in other ways, can fall directly on a party – the worst outcome from a liability risk management perspective.

In the North Sea, the system used in the oil and gas industry has largely been upheld.

English courts have upheld the clause, even to grossly negligent conduct, where sufficiently definite and clear.¹⁶ In Norway, the clause has been generally upheld, but cases suggest it cannot be extended to gross negligence.¹⁷ A similar landscape prevails in other regimes in the North Sea. The system, however, has some challenges when used in the US.

Enforceability in the US

Knock-for-knock indemnities have never been fully accepted or integrated into the US system. In offshore wind, courts may apply federal maritime law or the law of the shore state, depending on an individualised analysis of the circumstances which can be hard to predict in advance.¹⁸ If the indemnity is invalidated under either regime, it can have disastrous effects for the project.

Forty-three US states have enacted some form of anti-indemnity statute in the construction or oil and gas industries.¹⁹ All eight of the most promising development states for offshore wind (based on political motivation and potential offshore wind resource) have enacted such legislation.²⁰ For example, the New York Law declares that knock-for-knock construction indemnities are ‘*against public policy [...] void and unenforceable*’.²¹

Does New York’s anti-indemnity law invalidate knock-for-knock clauses?

The New York statute’s language is broad. It seems a likely risk that a court applying the New York statute would strike down a knock-for-knock clause in offshore wind construction.

The simplest solution to avoid this, if effective, would be a choice of law clause pointing to maritime law. Courts will generally honour choice of law clauses, unless application of the forum law instead is required by ‘public policy’. Liability limitations are a sensitive area for public policy analysis and are sometimes struck down as contrary to public policy.

An early New York case, penned by the esteemed jurist Benjamin Cardozo established a high bar for public policy refusal to apply chosen law, saying that the chosen standard must ‘violate some fundamental principle of justice, some prevalent

conception of good morals, some deep-rooted tradition of the common weal'. Judge Cardozo applied that standard and allowed a Massachusetts law's cap on wrongful death damages to limit damages in the New York case.²² Cardozo's high standard remains the law and it is routinely cited by courts, both in and outside New York.²³ However, later New York cases, applying that standard, have refused to allow the use of some out-of-state provisions capping damages.²⁴

In 1999, New York's anti-indemnity Act was tested as 'public policy'. A New York office building was undergoing renovation by an Oklahoma contractor. The contract included an indemnification and choice of law clause pointing to Oklahoma law. When one of the building's employees fell over some wires and was injured, she sued the Oklahoma company for negligence, who then sought indemnification from the contractor. The New York court was forced to determine if the anti-indemnity Act was in line with public policy in New York or whether it could apply Oklahoma law. The Act's inclusion of specific language that such indemnities were 'against public policy' was strong evidence in favour. However, citing Judge Cardozo, the court found that the new law was not sufficiently 'deeply rooted' in tradition and did not meet the 'heavy burden' needed to be found as public policy.²⁵

In New York, it is now clear that parties can use a choice of law provisions to avoid the anti-indemnity law. However, this is not a certain conclusion in all courts and other courts that have grappled with the issue have reached the opposite conclusion.²⁶ Parties to offshore wind contracts will need to scrutinise the law of the shore state to assess the risk of non-enforcement in particular projects under state law.

Are the indemnity clauses enforceable under maritime law?

There is no general public policy in maritime law that prevents enforcement of indemnities for the negligence of the indemnified party.²⁷ Courts are split, however, on whether indemnification can include gross negligence.²⁸ An enforceable knock-for-knock negligence indemnity must be: (1) 'expressed freely', clearly stating the indemnity includes the other party's negligence; and

(2) 'entered into freely by parties of equal bargaining power'.²⁹

EXPRESSED FREELY

To validly indemnify for the other party's negligence, the intent of the parties to do so must be clear.³⁰ It is not enough to state that the indemnity covers all claims in tort and contract. Rather, the indemnity should explicitly state that it includes any act of negligence of the indemnified party. Clear drafting can easily satisfy this requirement of the law.

ENTERED FREELY

The freely entered principle comes from background common law relating to unconscionability and contracts of adhesion. The principle is generally used to provide relief to unsophisticated parties who sign take-it-or-leave-it waivers against parties with superior sophistication and bargaining power, where the waiver and circumstances are found fundamentally unfair.³¹ They are often thought of in the realm of consumer protection.³² Courts look at the sophistication and bargaining power of the parties and will even look at things like the size or boldface of the print, as a factor in determining whether the party actually consented to the terms.³³

Generally, offshore construction contracts are between highly sophisticated parties. At first glance, it would seem that the freely entered principles would have little or no import in the area.³⁴ However, as discussed, once knock-for-knock is introduced to the deal, the project's viability and insurability requires that all subcontractors include the clause and, in this way, contracts are offered to sub-contractors on a take-it-or-leave-it basis and they are not subject to negotiation. The main contractor would likely sign contracts requiring it to obtain similar indemnities from subcontractors.³⁵ Of course, the parties can negotiate other conditions as trade-offs, such as additional financial remuneration in light of the necessary insurance.

The freely entered principle for knock-for-knock contracts became a major concern in the offshore oil and gas industry after a federal court in *Griffin* surprisingly struck down an indemnity between two commercial contracting parties. In that case, a vessel needed a contract for a tow, relating to some

work offshore. A broker arranged and signed the contract, which included the indemnity. When a seaman was injured during the tow and sued, the tow company sought indemnification. At trial, the broker testified that, when he received the charter form, he was ‘confused and did not understand the meaning’ of the indemnity and related insurance provisions. He called the manager of the tow company, who said it was take-it-or-leave-it. The broker sought no legal advice and just signed the contract. The court, relying on the broker’s confusion, struck down the indemnity, finding it was not freely entered.³⁶ *Griffin* is problematic as it throws the knock-for-knock regime in doubt, when courts stand ready to excuse performance in a contract between two commercial parties, one of whom even testified that he actually reviewed the clause in question.

Although one commentator describes *Griffin* as ‘not particularly well reasoned’ and notes that other judges might reach a different conclusion, the case highlights the need for parties to demonstrate in drafting that the indemnity was actually negotiated.³⁷ Housing the indemnity in a separate agreement and highlighting the negligence waiver in bold terms is the best practice and a practical method to show that the contract is freely entered.³⁸

Conclusion

As offshore wind projects are developed in the US, the indemnification regime common to projects in the North Sea may face challenges. Knock-for-knock indemnities have never been fully integrated into the US market and many state anti-indemnity laws are a real threat to enforceability. Advisers to developers and contractors must understand this risk and the devastating effect a finding of invalidity of such a clause could have on a project.

Developers and their legal counsel must first consider whether knock-for-knock indemnities are necessary and appropriate to any given project and pay special attention to specific state law provisions that could impact enforceability. Counsel should review the law of the coastal state and make an independent evaluation if any anti-indemnity laws will be considered public policy and become unavoidable. In those situations, it may be best to abandon knock-for-knock and rely on the negligence regime.

Where a knock-for-knock clause is deemed necessary and appropriate, for commercial or legal risk reasons, the clause must be insulated from attack. Wise drafters will place the clauses in a separate indemnities and waivers agreement and subject that agreement to a choice of law clause to federal maritime law.

Notes

- 1 This work is based on research originally included in the author’s master thesis at the University of Copenhagen, ‘North Sea know-how in the New World: Building offshore windfarms in America’ (2022) (available online from the Royal Danish Library). The author would like to acknowledge the contributions of thesis adviser Sylvie Cécile Cavaleri (University of Copenhagen) and interview subjects Lars Nagstrup Conradsen (PEAK Wind), Don Jakins (Copenhagen Offshore Partners), Anders Hørlyck Jensen (Accura Law Firm), and Joan Bondareff (Virginia Offshore Wind Development Authority) to the author’s research.
- 2 Consolidated Appropriations Act, Pub L 116-260 (27 December 2020) (federal tax incentives); Walter Musial and others, ‘Offshore Wind Market Report’, Office of Energy Efficiency and Renewable Energy, US Department of Energy (2021), 7, 25, 83; Joseph B Nelson and David P Yaffe, ‘The Emergence of Commercial Scale Offshore Wind: Progress Made and Challenges Ahead’, 10 San Diego J Climate & Energy L 25, 47–52 (2019).
- 3 Lisa Friedman, ‘Sale of Leases for Wind Farms Off New York Raises More Than \$4 Billion’, *New York Times* (25 February 2022); Vineyard Wind, Press Release: Vineyard Wind 1 Becomes the First Commercial Scale Offshore Wind Farm in the US to Achieve Financial Close, Vineyard Wind (15 September 2021); Coral Davenport and Lisa Friedman, Biden Administration Approves Nation’s First Major Offshore Wind Farm: The Vineyard Wind project, off the coast of Massachusetts, would generate enough electricity to power 400,000 homes, *New York Times* (11 May 2021); Musial and others, ‘Offshore Wind Market Report’, 7.
- 4 Musial and others, ‘Offshore Wind Market Report’, 13, 16–17.
- 5 Baltic and International Maritime Council (BIMCO), SUPPLYTIME 2017 (2017), s 14(a); Norsk Industri and Norsk Olje og Gass, Norsk Totalkontrakt 2015 (NTK 15) (2015), s 30 and 31; ‘Leading Oil and Gas Industry Competitiveness’, *Construction Edition 3* (LOGIC Constr 3) (2018), s 22.
- 6 For conceptual overview, see Cavaleri, ‘The Validity of Knock-for-Knock Clauses in Comparative Perspective’, 26 ERPL, 3, 7 (2018); Knut Kaasen, Tilvirkningskontrakter: Med kommentarer til NTK

- 15 og NF 15 (2018), 799–802; Richard W Williams, ‘Knock-for-Knock Clauses in Offshore Contracts: The Fundamental Principles’ in Barış Soyer and Andrew Tettenborn (eds), *Offshore Contracts and Liabilities* (2015), 53–58; Simon Rainey, ‘The Construction of Mutual Indemnities and Knock-for-Knock Clauses’ in Barış Soyer and Andrew Tettenborn (eds), *Offshore Contracts and Liabilities* (2015), 68–70.
- 7 Kaasen, Tilvirkningskontrakter: Med kommentarer til NTK 15 og NF 15, 800-801.
- 8 Williams, ‘Knock-for-Knock Clauses in Offshore Contracts: The Fundamental Principles’, 53.
- 9 See Kurt Thomsen, *Offshore wind – a comprehensive guide to a successful offshore wind farm installation* (2nd edn, 2014), 127–128.
- 10 Cavaleri, ‘The Validity of Knock-for-Knock Clauses in Comparative Perspective’ 26 ERPL at 8 (2018).
- 11 See, eg, James C Card and others, ‘Worker Health and Safety on Offshore Wind Farms: Special Report’ 310, Committee on Offshore Wind Farm Worker Safety, Transportation Research Board of National Academy of Sciences (2013), 47–59, 108–115.
- 12 Dewan Ahsan and others, ‘Why does the offshore wind industry need standardized HSE management systems? An evidence from Denmark’ 136 *Renewable Energy* 691, 691 (2019).
- 13 Tove Lunde, 2020 incident data report, G+ Global Offshore Wind Health & Safety Organisation in partnership with Energy Institute (June 2021), 17.
- 14 Fabien Lerede, ‘Knock-for-Knock: The P&I Insurance Perspective’ in Barış Soyer and Andrew Tettenborn (eds), *Offshore Contracts and Liabilities* (2015), 201 (the insurer often requires the insured party to further contract on knock-for-knock terms).
- 15 See note 10 above.
- 16 *Canada Steamship Lines v The King* [1952] UKPC 1 (PC) (approving waivers based on own negligence); *A Turtle Offshore SA v Superior Trading Inc* [2008] EWHC 3034 (Admlty) (approving knock-for-knock clause contained in BIMCO contract). See also, Cavaleri, ‘The Validity of Knock-for-Knock Clauses in Comparative Perspective’ 26 ERPL at 8-11; Tim Taylor, ‘Offshore Energy Construction Insurance: Allocation of Risk Issues’ 87 TUL L REV 1165, 1175–1177 (2013).
- 17 Lagmannsrett Gulating LG-2012-77280 (25 May 2013) (approving knock-for-knock, but finding gross negligence can invalidate the indemnity); Hammerfest tingrett THAFE-2006-108795 (31 January 2007) (approving generally knock-for-knock in passing). See Cavaleri, ‘The Validity of Knock-for-Knock Clauses in Comparative Perspective’ 26 ERPL at 24–25; Erik Røsæg, ‘The Norwegian Perspective with regard to Liability Regimes Concerning Oil Rigs and Installations’ in Barış Soyer and Andrew Tettenborn (eds), *Offshore Contracts and Liabilities* (2015), 285–286.
- 18 See discussion in David W Robertson, ‘The Outer Continental Shelf Lands Act’s Provisions on Jurisdiction, Remedies, and Choice of Law: Correcting the Fifth Circuit’s Mistakes’ 38 J MAR L & COM 487 (2007), 542–543.
- 19 Mahoney, ‘Making Sense of the Texas Oilfield Anti-Indemnity Act (TOAIA): It’s About Recovery’ 16 *Texas Journal of Oil, Gas, and Energy Law*, 95, 99 (2021).
- 20 Mass Gen Laws 149, s 29C; RI Gen Laws 6-34-1; NJ Stat s 2A:40A-1; Md Code Ann, Cts & Jud Proc 5-401; NY Gen Oblig Laws s 5-322.1; Conn Gen Stat s 52–572k; Va Code s 11–4.1; NC Gen Stat s 22B-1.
- 21 NY Gen Oblig Laws s 5-322.1 (emphasis added).
- 22 *Loucks v Standard Oil* 224 NY 99, 111 (NY 1918).
- 23 *United States v Moseley* 980 F3d 9, 20 (2d Cir 2020) cert denied, 141 S Ct 1442 (2021); *Willis Re Inc v Herriott* 550 F Supp 3d 68, 94 (SDNY 2021); *Metro Creditors Serv v Sadri*, 15 Cal App 4th 1821, 1824 (Ca Ct App 1993); *Corbett v Stergios* 257 Iowa 1387, 1393 (Ia 1965); *Brown & Brown, Inc v Johnson*, 25 NY3d 364, 368 (NY 2015).
- 24 *Kilberg v Northeast Airlines, Inc* 9 NY 2d 34, 41–42 (NY 1961) (striking down use of the same Massachusetts wrongful death cap previously approved in *Loucks*).
- 25 *Finucane v Interior Constr Corp* 264 AD 2d 618, 620–621 (NY Sup Ct App Div 1999).
- 26 Compare *Champagne v WE O’Neill Constr Co* 77 Ill App. 3d 136, 143 (Ill Ct App 1979) (finding Illinois construction anti-indemnity law not public policy and allowing choice of law clause to avoid effects) with *Cannon Oil & Gas Well Servs Inc v K LX Energy Servs LLC*, 20 F4th 184, 194 (5th Cir 2021) (finding Wyoming oilfield anti-indemnity law to be public policy and refusing to allow choice of law clause to avoid effects, focusing on language in statute that such indemnification was ‘against public policy’).
- 27 *Olsen v Shell Oil Co* 595 F2d 1099, 1104 (5th Cir 1979) (‘no underlying public policy, no statute, and no case law prevents’ such indemnification).
- 28 Compare *Energy XXI, GoM, LLC v New Tech Eng’g LP* 787 F Supp 2d 590, 609 (SD Tex 2011) (striking down gross negligence indemnity) with *In re Oil Spill by the Oil Rig ‘Deepwater Horizon’ in the Gulf of Mexico* on 20 April 2010, 841 F Supp 2d 988, 998–1001 (ED La 2012) (upholding gross negligence indemnity).
- 29 See note 19 at 101–102; *Dann Marine Towing LC v Gen. Ship Repair Corp* 31 F Supp 3d 743, 746 (D Md 2014) (stating general standard under maritime law); *Cont’l Res Inc v Rink Constr Inc* 352 F Supp 3d 928, 935 (DND 2018).
- 30 *United States v Seckinger* 397 US 203, 211–213 (1970). The US law is in accord with the English law, where courts have upheld the provision. See Cavaleri (note 10 above) at 3, 9–11.
- 31 See Restatement (Second) of Contracts (1981) s 208 (Unconscionable Contract or Term).
- 32 *Zuniga v Major League Baseball* 2021 IL App (1st) 201264, 7 (Ill Ct App 2021).

- 33 Michael A Golemi and William W Pugh, 'Hoping for the Best, Preparing for the Worst: Don't Worry, We Have Indemnity' 78 *The Advocate (Texas)* 47, 48 (2017).
- 34 Rainey, 'The Construction of Mutual Indemnities and Knock-for-Knock Clauses' in Soyer and Tettenborn (eds), *Offshore Contracts and Liabilities* (2015), 75–77 (discussing English cases acknowledging the commercial nature of the exemption and the parties as sophisticated commercial entities).
- 35 For example, the NTK s 30.1 requires 'Contractor shall, as far as practicable, ensure that other companies in Contractor Group waive their right to make any claim against Company Group when

such claims are covered by Contractor's obligation to indemnify'.

- 36 *Griffin v OPI Int'l Inc* 878 F Supp 996, 1008–1009 (SD Tex 1995) affirmed by 79 F3d 1144 (5th Cir 1996).
- 37 See note 33, at 48–49.
- 38 *Ibid.*

About the author

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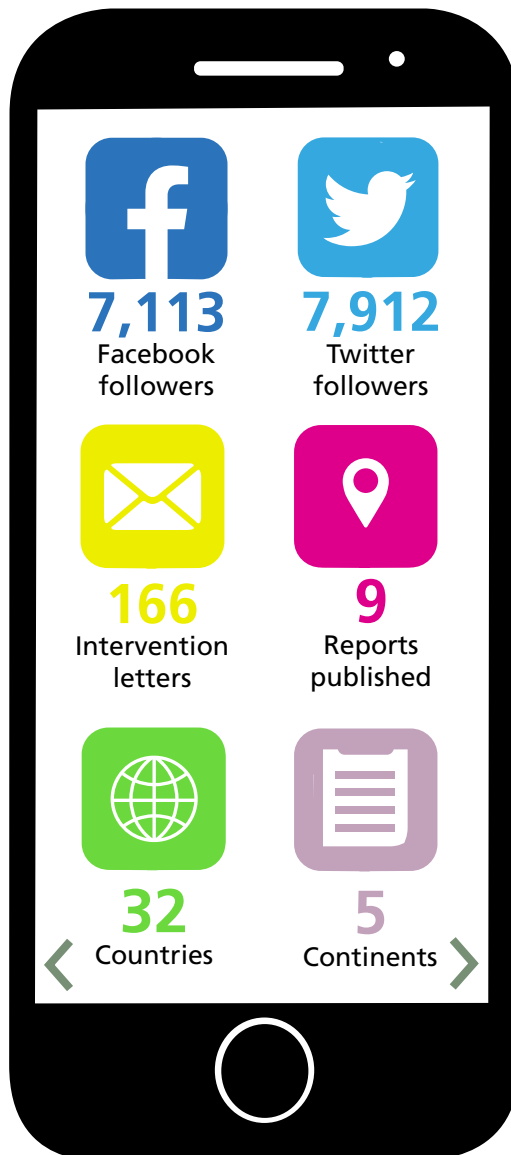
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