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1. Editorial: Stuart Ross, Director, Arup

Welcome to the final edition of *Construction Law Quarterly* for 2024. We have had a bumper year of content and this edition is no different.

Our first paper is from Mike Stewart *et al*. who describe the challenges and issues associated with claims for time under the 1999/2017 FIDIC Red Book. The general provisions for extensions of time are described as well as the general ‘early warning’ duty to minimise and mitigate against claims and disputes. The authors assess how the notice provisions may be seen to be onerous and the steps a contractor would typically have to follow. The challenges associated with time bars, including how to “defeat” these, are also assessed. The paper concludes that it is in the interest of the parties to be acutely aware of the notice procedures and any condition precedents that must be satisfied regarding claims for time and money.

Our second paper is an excellent piece from Andrew Croft *et al.* who discuss the importance of contractors and sub-contractors with design responsibilities ensuring their contracts include appropriate and insurable design obligations. It highlights that professional indemnity insurance (PII) typically covers claims where the insured has breached the standard of performing professional services with “*reasonable skill and care*”. PII policies often exclude coverage for claims related to strict obligations and fitness-for-purpose obligations. The article examines specific clauses in the NEC4 ECC and JCT D&B 2024 contracts, focusing on the need for careful drafting to avoid uninsured losses due to conflicting or parallel obligations. It also references case law to illustrate the importance of addressing strict and FFP obligations in design contracts.

Our third paper, also from Andrew Croft *et al*., covers the highly topical issues of Artificial Intelligence (AI) in construction. The paper provides an overview of AI, its impact on various industries and in particular construction, and the importance of regulating its use. It highlights the EU AI Act and the UK’s proposed Artificial Intelligence (Regulation) Bill, which aims to establish regulatory principles for AI. The construction industry is a key focus, with AI being used to enhance design, safety, and productivity. The paper also discusses the potential pitfalls of AI, such as over-reliance, data protection issues, and copyright concerns. Despite these challenges, AI offers significant opportunities for innovation and efficiency in the construction sector. As summarised by the authors, the future of AI in this industry depends on continued investment, experimentation, and proper governance.

The further paper discusses the Supreme Court’s recent decision in relation to collateral warranties. The key issue was whether a collateral warranty qualifies as a building contract. The court concluded that a collateral warranty does not constitute a building contract, as its obligations derive from the original building contract rather than creating new ones. This ruling clarifies the legal standing of collateral warranties, impacting how they are enforced in construction disputes.

Our final paper relates to a case that focusses on a Part 8 claim by Providence seeking a declaration on the interpretation of clause 8.9 in their 2016 JCT Design and Build Contract. The dispute highlights the complexities in contract interpretation, particularly regarding the obligations and rights under specific clauses. It underscores the importance of clear contractual terms to avoid litigation and ensure smooth project execution.

As we head into the winter in the northern hemisphere, the CLQ team hope that these papers and case briefings provide an interesting read as the nights draw in but also one that helps keep you all up to date on the latest construction law issues.

As ever, should you have a short article or legal update that you would be interested in submitting for inclusion in a future issue please contact the journal editor at journals@icepublishing.com.

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2. FIDIC: Claims for time under the 1999/2017 Red Book

Mike Stewart, Partner, Gowling WLG, Mary Lindsay, Legal Director, Gowling WLG, Adain Bailey, Associate, Gowling WLG

Construction projects are almost always time-critical, and delays to the completion of a project have the potential to result in significant financial losses for the parties. As such, construction contracts generally require contractors to: (i) complete "the Works" by a specified date in accordance with an agreed schedule, (ii) at an appropriate level of quality and (iii) for an agreed price. However, a contractor's ability to achieve those three objectives can be impacted by factors outside its control.

In this article, we consider the circumstances in which a claim for an extension to the time for completion might arise and the procedure to be followed by the parties when making such claims, by reference to the International Federation of Consulting Engineers (FIDIC) Red Book 1999/2017 editions (Red Book 1999/Red Book 2017)[1]. Pursuant to these standard forms, the type of events that can give rise to a claim for an extension of time are:

- any delay, impediment or prevention caused by or attributable to the Employer or one of its representatives;
- exceptionally adverse climatic conditions [1];
- unforeseeable shortages in the availability of personnel or goods caused by epidemic or governmental actions;
- variations to the scope of the works; and
- particular causes of delay agreed by the parties and listed in the contract conditions (e.g. delayed drawings or instructions pursuant to Sub-Clause 1.9 in Red Book 1999/2017).

2.1 Extensions of time: Sub-Clause 8.4 Red Book 1999/8.5 Red Book 2017

Where a contractor fails to complete the Works by the specified Time for Completion, it will be in breach of contract and will be liable to the employer for liquidated damages. Sub-Clause 8.4 Red Book 1999/Sub-Clause 8.5 Red Book 2017[1] provides a mechanism by which a contractor can claim an extension of time where it is able to prove that it has been delayed by reasons which entitles it to an extension. Such claims are usually highly complex, and the contractor bears the burden of proving, by way of contemporaneous documentation, its entitlement and associated relief from the employer's claim for liquidated damages (i.e. the cause of the delay is specified in the contract as being the employer's responsibility and the delay event is on the critical path of the contractor's programme).

If the contractor is unable to prove that an event caused actual delay to the progress of its works, the engineer will be unable to grant an extension of time and the contractor will be liable for liquidated damages for the delay. Further, where the contract is governed by English law and the cause of delay is attributable to the employer, the employer is prohibited by virtue of the 'prevention principle' from depriving the contractor of its entitlement to an extension of time and holding the contractor to the contractually agreed time for completion.

Granting an extension of time does not automatically lead to an award of costs and/or damages. However, where a contractor is granted an extension of time, it may seek to recover its time-related costs of remaining on site longer, its prolongation costs, in accordance with the relevant sub-clauses [2]. Nevertheless, there are two conditions precedent that a contractor must comply with prior to making a claim for an extension of time to the engineer, namely:

1. demonstrating that one of the events listed in the contract has resulted in actual delay to the Time for Completion; and
2. giving notice of its claim to the engineer in accordance with Sub-Clause 20.1 Red Book 1999/2017[1].

Sub-Clause 8.5 Red Book 2017 considers claims relating to periods of concurrent delay, but makes no express provision as to the contractor's entitlement to an extension of time in the event of concurrent delay. In such circumstances, Sub-Clause 8.5 Red Book 2017 provides that a contractor's entitlement to an extension of time is to be assessed in accordance with the rules and procedures stated in the Special Provisions to the contract or, if they are not agreed, '*as appropriate taking due regard to all relevant circumstances*'. The FIDIC guidance to Sub-Clause 8.5 explains that this provision has been drafted in this manner, that is inviting parties to agree their own arrangements, because there is no internationally accepted standard rule in place. However, the FIDIC guidance does specifically refer to the Society of Construction Law's Delay and Disruption Protocol (2nd edition) (the SCL Protocol)[2] as 'increasingly being adopted internationally'.

Concurrent delay is a notoriously difficult area and has long been a topic of substantial debate in the English courts[3].

2.2 Early warning: Sub-clause 8.3 Red Book 1999/sub-clause 8.4 Red Book 2017

To minimise and mitigate against claims and disputes arising during a project, there is a general 'early warning' duty under the 1999 and 2017 Red Books. Sub-Clause 8.4 Red Book 2017 requires the parties to provide advance notification of any known or probable future events or circumstances that may delay execution of the works or a section; whereas this obligation lies solely with the contractor in the 1999 Red Book, pursuant to Sub-Clause 8.3.

Although there are no specified consequences for failing to adhere to the early warning duty in the contract, in some jurisdictions – and particularly where there is a duty of good faith in law – the contractor or engineer may have a duty to warn the other of an adverse event.

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2.3 Notice of a claim: Sub-Clause 20.1 Red Book 1999/2017

Contractors sometimes find notice provisions to be onerous, but they provide great assistance in managing claims for time and money. When parties properly adhere to notice requirements, the contract management becomes more efficient and the parties are provided with the opportunity to investigate and consider claims when they arise; as opposed to waiting until the Works are complete or a dispute has arisen. By that time, the evidence might be lost, perhaps built over or rectified, or memories might simply be fading. As recollections of what happened on site begin to differ, it becomes increasingly difficult to reconcile parties' positions and, naturally, more time consuming.

Sub-Clause 20.1 Red Book 1999 details the procedure for claiming extra time and/or additional payment in the following manner:

1. The contractor must give notice to the engineer as soon as practicable and no later than 28 days after the date on which the contractor became aware, or should have become aware, of the relevant event or circumstance (this is referred to as the Notice of Claim). The Notice of Claim does not need to state the amount of time claimed or the contractual basis for the claim, and the engineer is not required to respond to the Notice of Claim.
2. Each Notice of Claim under Sub-Clause 20.1 must be in writing and served in accordance with Sub-Clause 1.3 (i.e. by hand, mail, or courier or any of the agreed systems of electronic transmissions as set out in the Appendix to Tender).
3. Where a contractor issues a notice under Sub-Clause 20.1, it must keep contemporary records (e.g. monthly progress reports) as may be necessary to substantiate the claim. The engineer can monitor the record keeping and/or instruct the contractor to keep further contemporary records.
4. The contractor must then submit a fully particularised claim within 42 days after becoming aware of the relevant event or circumstance giving rise to the claim.
5. Within 42 days of receiving a fully detailed claim, the engineer must respond with approval or with disapproval and detailed comments. The engineer may also request any necessary particulars, but shall provide a response on the principles of the claim within that time.
6. The contractor must comply with the claims procedure provided for in Sub-Clause 20.1 in addition to any contractual requirements relevant to the matter giving rise to the contractor's substantive right to claim. For example, where there has been delay or disruption caused by delayed drawings or instructions, the contractor must comply with the notice requirements of Sub-Clause 1.9, which deals with delay or disruption caused by a drawing or instruction not being issued in time.

By contrast, the 2017 Red Book includes a more enhanced procedure for dealing with the notification of and substantiation of claims for time and money. The main changes are as follows:

1. Sub-Clause 20.1 Red Book 2017 refers to the 'claiming Party' meaning either an employer or contractor is able to give notice of the event or circumstance giving rise to the cost, loss, delay or need to extend the Defects Notification Period within 28 days of becoming aware.
2. The engineer has a greater degree of responsibility under the Red Book 2017 to serve additional notices. Should the engineer fail to issue such notices, the claiming party's Notice of Claim is deemed valid even in circumstances where the engineer may consider that the notice was issued late. If the engineer serves a notice stating that the Notice of Claim was issued late, the claiming party is entitled to disagree with and/or explain why the late submission was justified.
3. There are three different types of claims, including:
   a. a claim from an employer for additional payment from the contractor or a reduction in the Contract Price and/or an extension of the Defects Notification Period;
   b. a claim for an extension of time by the contractor and/or additional payment; and
   c. if either party considers it is entitled to relief by any kind whatsoever (e.g. in connection with an instruction, determination or certificate).
4. An initial Notice of Claim must be issued within 28 days. However, the time limit for issuing a fully detailed claim as set out in Sub-Clause 20.2.4 is extended to 84 days (or such other time as might be agreed). The fully detailed claim must include:
   a. a detailed description of the event or circumstances giving rise to the Claim (as defined);
   b. a statement of the contractual and/or other legal basis for the Claim [3];
   c. all contemporary records on which the claiming party relies; and
   d. detailed supporting particulars of the adjustment sought to the Contract Price and/or the extension of time claimed and/or any extension claimed to the Defects Notification Period.

The 2022 reprints of the Red Book provide clarity as to the distinction between "matter[s] to be agreed by the Parties or determined by the Engineer" and a "Claim" [4]. Under the Red Book 2017, FIDIC introduced the concept of "matter[s] to be agreed or determined", which did not require a party to comply with the extensive claims procedure in Sub-Clause 20.1. However, there was no guidance as to what might constitute a "*matter to be agreed or determined*" and how this differs to a "*Claim*". The 2022 reprints now confirm the clauses to which the concept "*matter[s] to be agreed or determined*" apply, excluding such matters from the definition of a "Claim".

2.4 Sub-Clause 20.1 time bars

The time bar to issue a Notice of Claim in accordance with Sub-Clause 20.1 is a condition precedent, such that if a contractor fails to issue a Notice of Claim within 28 days, the time for completion

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will not be extended and the contractor will not be entitled to additional payment.

The issue of when the 28-day time period starts to run for the purpose of issuing a Notice of Claim was considered in detail by Akenhead J in *Obrascon Huarte Lain SA v HM AG for Gibraltar*[4]. Following Akenhead J's decision in *Obrascon*, the generally accepted position is that time starts to run on the specific "is or will be delayed" language in Sub-Clause 8.4. Therefore, a contractor can give a Sub-Clause 20.1 notice for an extension to the time for completion either when there will be a delay (prospective delay) or when the delay has at least started to be incurred (retrospective delay).

2.5 Defeating time bars

Whether a party can defeat application of the time bars in Sub-Clause 20.1 is heavily reliant upon the governing law of the contract. In England and Wales, arguments around estoppel and waiver and based on the prevention principle are often raised in seeking to avoid or overcome a time bar. However, these arguments can be difficult as the courts are more likely to uphold the parties' contractual obligation to issue timely notices of their intention to claim additional time and/or money. Similarly, arguments relating to estoppel may give rise to further disputes as to whether there was a clear and unequivocal promise on which reliance was placed. In circumstances where the prevention principle applies, it is arguable that while the contractor may not be entitled to an extension of time, the employer is also not entitled to recover liquidated damages by virtue of its own breach of contract – to allow otherwise would allow the employer, in this example, to benefit from its breach.

By contrast, good faith obligations or provisions in a civil code may provide a defence to the enforcement of time bars in civil law jurisdictions. For example, Article 246 (1) of the UAE Civil Code[5] and Article 148 (1) the Egyptian Civil Code[6] provide that a contract must be performed in a manner that is consistent with "*the requirements of good faith*". Similarly, Article 150 of the Iraqi Civil Code[7] requires contracts to "*be performed according to its contents and in a manner which conforms to the norms (requirements) of good faith*". Therefore, where a contractor is a few days late in submitting its Sub-Clause 20.1 notice, it may be contrary to good faith to allow an employer to rely on the time bars in Sub-Clause 20.1 where the employer had actual knowledge of the event(s) or circumstance(s) giving rise to the claim and has suffered no substantial harm in receiving the notice late.

2.6 Key considerations in managing potential claims for time under the FIDIC red book

Parties should be acutely aware of the notice procedures and any condition precedents that must be satisfied regarding claims for time and money. A failure to adhere to these requirements can result in a claim failing, regardless of its merits. Where this is the case, parties might turn to principles (such as the prevention principle or a duty of good faith) under the governing law of the contract. However, the likelihood of success in raising such arguments varies, and it can be particularly difficult to convince a dispute board, tribunal, or court not to give effect to the parties' agreement. Therefore, it is always best to err on the side-of caution and adhere to the terms of the contract and ensure that the required notices are served on time and in accordance with the relevant sub-clauses. Doing so is rarely detrimental to the claiming party and, almost always, is beneficial in resolving a difference between the parties.

3. Designed to succeed? – a focus on contractors' liability for design'

Andrew Croft, Partner, Ben Couldrey, Associate and Kathryn Eva, Associate, Beale & Co

According to HKA's Sixth Annual CRUX Insight Report 'Forewarned is Forearmed'[8], which analysed the underlying causes of disputes on 1,801 projects across 106 countries with a cumulative capital expenditure value of over $2.2 trillion, design matters occupied 3 of the top 5 ranked causes of disputes globally:

Global top causes of claim or dispute[1]		
Cause	% of projects	Rank
Change in scope	38.8%	1
Design was incorrect	23.0%	2
Contract interpretation issues	19.8%	3
Design information was issued late	22.5%	4
Design was incomplete	21.7%	5
Contract management and/or administration failure	19.5%	6
Poor management of subcontractor / supplier and/or their interfaces	19.4%	7
Access to site/workface was restricted and/or late	17.9%	8
Physical conditions were unforeseen	17.8%	9
Workmanship deficiencies	17.5%	10

If you are a contractor or sub-contractor with design responsibility, ensuring that contracts both up and down your supply chain contain appropriate and insurable design obligations is therefore of tremendous importance.

3.1 Insurance cover: why design obligations matter?

Contractors/sub-contractors with design responsibility will invariably be obliged to procure professional indemnity insurance cover in respect of their design and specification contractual obligations.

Generally speaking, most professional indemnity insurance (**"PII"**) policies will respond to and provide cover for claims where the insured has breached the common law standard of performing professional services with "*reasonable skill and care [and diligence]*" (or similar). In other words, PII policies provide cover against the insured being negligent in the performance of its professional duties and/or services.

However, PII policies usually exclude coverage for claims relating to alleged breaches of obligations that go beyond the common law

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standard of care (e.g. strict obligations) and for fitness-for-purpose (**"FFP"**) obligations. For example:

> Insurers shall not be liable to indemnify the Insured in respect of: Any Claim emanating from any performance warranty, guarantee, penalty clause or liquidated damages agreement unless the liability of the Insured would have existed in the absence of such warranty, guarantee, penalty clause or similar provision. [no ref]

For consistency with PII, strict obligations and FFP obligations in respect of design should be avoided to the extent possible!

3.2 Design obligations: the NEC4 ECC[9] and JCT D&B 2024[10]

NEC4 ECC[9] Option X15

Option X15 of the NEC4 ECC provides drafting dealing with the contractor's design.

Clause X15.1 states that the contractor "*is not liable for a Defect which arose from its design unless it failed to carry out that design using the skill and care normally used by professional designing works similar to the works*". This is a very helpful starting point.

Caution should be taken when relying on Option X15 in isolation, however. As this is an optional clause and is not drafted so as to be an express overriding duty of care, there is a risk of parallel obligations arising. It would therefore seem that Option X15 on its own is not sufficient in addressing both strict obligations *and* FFP obligation in respect of design.

Of course, for those NEC4 ECC contracts whereby Option X15 is not selected to apply, the starting point should of course be to agree the incorporation of Option X15 (or an equivalent Z Clause) with the appropriate amendments to address the above.

JCT D&B 2024[10] Clause 2.17

Like the NEC4 ECC, the JCT D&B provides that the contractor is required to exercise reasonable skill and care in carrying out the design. Under the new JCT D&B 2024, this is drafted largely in an overriding manner (clause 2.17.1). However, it is important to note that the overriding duty wording is caveated "*to the extent permitted by the Statutory Requirements* . . ." and therefore this drafting does not operate as a complete 'release' for contractors. The effectiveness of this wording in protecting the contractor's position will also largely depend on any amendments that are introduced (e.g. through a Schedule of Amendments, as we frequently see) to the definition of Statutory Requirements or core contractual provisions.

In relation to FFP, positively, the 2024 edition of the JCT D&B includes a new clarification at clause 2.17, which provides that under no circumstances will the contractor be subject to any duty, obligation, or liability which requires the contractor's design to be FFP. This is a helpful addition.

However, the FFP exclusion (and suggested limit of liability clause in the corresponding guidance note) has not been drafted in an overriding manner, meaning that the risk of parallel obligations remains and so the contractor should still proceed with caution.

3.3 The risk: strict obligations (including parallel obligations) that cover design duties

If your contract or appointment contains strict or FFP obligations in respect of your design and specification duties, there is a significant risk that PII cover will, in respect of strict obligations, provide cover only to the extent the contractor was exercising reasonable skill and care, and provide no cover in respect of FFP. This exposes your business to the prospect of uninsured losses.

For contractors and sub-contractors who are given design responsibility, the dividing line between 'design and specification' duties on the one hand, and 'works' duties on the other, will often be blurred and/or difficult to clearly draw.

This poses a challenge because 'works' duties (which PII policies will not in any event cover) are understandably expressed as strict obligations where the contractor is expected to warrant a particular outcome or achieve specific criteria. However, there is a need (so PII cover will respond) to ensure that any 'design and specification' duties are not subject to those same strict or FFP obligations to which the 'works' duties are.

Strict or FFP obligations that directly or indirectly apply to 'design and specification' duties may not always be easy to spot. For example:

- Provisions to: (i) "*ensure compliance with/adherence to*" employer obligations in auxiliary documents (like Third Party or Project Agreements); or (ii) not to put the contractor in breach of the main contract are often expressed strictly, notwithstanding that these documents and/or main contracts contain requirements that relate to design and specification.
- Design and specification duties are often hidden in the contract documents in relation to which the contract may require strict compliance – for example, the NEC4 Engineering and Construction Contract[9] at clause 20.1 states: "*The Contractor Provides the Works in accordance with the Scope*".
- Even where the design provisions in standard form contracts are engaged (e.g. clause 2.17 in the JCT Design and Build Contract[10] 2016 and Secondary Option X15 in the NEC4 Engineering and Construction Contract), amendments to these clauses (and/or the defined terms they utilise) are very frequently made and so undermine the protection they could afford a contractor.

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Even if there is a clause in the contract which states design shall be exercised using "*reasonable skill and care*" (or similar), there may therefore be parallel obligations in the contract which nevertheless apply strictly or onerously and cover design duties which, if breached and are the subject of a claim, may fall uninsured.

3.4 Lessons from case law: food for thought!

There is a raft of case law that supports the importance addressing both strict obligations and FFP obligations, while ensuring that conflicting standards are not included in the various contract documents on a project.

Most will be familiar with the case of *MT Højgaard A/S v E.ON Climate and Renewables UK Robin Rigg East Ltd*[11]. Among other things, this case demonstrates that parties, when conflicting/different standards are included in contract documents, will be required to meet the more rigorous of the different standards in the contract. This is a helpful reminder of the need to carefully review *all* contract documents at the outset of a project and prior to execution of the contract.

The principles established in the case of *Højgaard v E.ON* have subsequently been applied and tested in a number of cases.

Of note is the case of *LDC (Portfolio One) Ltd v George Downing Construction Ltd*[12]. In this case, the contract included a requirement for the sub-contractor to complete the works in a manner that meant the Contractor was not in breach of the Main Contract. In addition, a separate duty of care clause was included. The Judge in this case held that clause 5.3.1 of the sub-contract, which imposed an obligation on the sub-contractor to exercise reasonable care, could not be relied on to supersede the obligation to ensure that the contractor was not placed in breach of its obligations under the main contract and so the former was merely a minimum requirement.

More recently, we saw the above principles tested in the case of *Lendlease Construction (Europe) Ltd v AECOM Limited*[13]. As we previously reported[14], we were delighted to act for AECOM in successfully defending a claim brought by Lendlease in relation to a settlement it had to make to the ultimate client in relation to a claim of defects in the plantroom of a newly constructed oncology centre at St James's University Hospital, Leeds. Of the several issues[15] which arose in the case, duty of care for design[16] was among them.

AECOM's appointment (as MEP/fire engineering services consultant) with Lendlease (the main design and build contractor) contained a strict obligation in relation to not putting Lendlease in breach of its contract with the ultimate client. However, the appointment also contained an overriding duty of care clause in relation to design liability.

In this case, Mr Justice Eyre in the TCC decided that the natural meaning of the latter clause (which was an overriding reasonable skill and care clause) was to impose a qualification on the strict duties which would otherwise have been owed by AECOM under the former 'flow-down' clause. Despite Lendlease's arguments that the case should produce the same result as in *Højgaard v E.ON* (with the strict obligation prevailing), Mr Justice Eyre stated that none of the clauses in AECOM's appointment could be seen as laying down competing requirements for specified performance criteria of the kind in *Højgaard v E.ON*, nor could they readily be seen as setting out inconsistent design obligations. The overriding nature of the clause was quite clear. However, this did not overrule *Højgaard v E.ON,* so contracts which are not so clearly drafted and/or include inconsistent design obligations (which is perhaps an increased risk in design and build contracts) may still give rise to design obligations more onerous than reasonable skill and care.

3.5 Conclusion

The need for an overarching appropriate design liability limitation and an FFP exclusion in respect of design and specification should therefore be strongly considered as part of the close review of design provisions in all appointments and contracts. Such clauses need to be carefully drafted to ensure that they 'stand the test' should a dispute arise, and the matter be determined by the Court.

In addition, it is important for project teams to obtain and review contract documents, particularly if the contract requires the Contractor to comply with those contract documents. Onerous obligations contained in those agreements increase the risk of parallel obligations arising.

Beale & Co can assist you to ensure that design obligations in contracts up and down your supply chain are appropriately worded to avoid the prospect of inconsistencies and/or uninsured losses in the event that things go wrong, or a claim is made. Please reach out to the authors of this article for further detail on how we can help.

4. The impact of artificial intelligence on the construction industry

Andrew Croft, Partner, Kayleigh Rhodes, Ellie Eastwood, Solicitor and Rhia Gould, Solicitor, Beale & Co

4.1 What is artificial intelligence?

Artificial Intelligence ("AI") is a field of science concerned with building computers and machines that can reason, learn and act in such a way that would normally require human intelligence. It also encompasses data of a scale that far exceeds what humans can analyse.

The impact of AI on the way we work and learn is considerable and has not gone unnoticed by those in the industry. This can be

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seen through the increase of articles, practical guidance, reports and importantly, the introduction of new legislation and regulation to legislate the use of AI. By way of example, the Chartered Institute of Building has published the Artificial Intelligence Playbook[17] which provides insights into the use of AI and its practical application in the workplace. RIBA has also published an AI report[18] which details their findings on the use of AI and what it means for society and the architectural profession in particular.

4.2 Regulating AI

Beale & Co have previously written about the EU AI Act[19]. More widely, the Artificial Intelligence (Regulation) Bill[20] was proposed and sought to introduce various functions designed to help address AI regulation in the UK and put regulatory principles into law for the first time. This Bill did not receive Royal Assent as part of the 2023-24 Parliamentary session before it was prorogued and so will not progress further unless reintroduced. We may also see additional information from the UK Government around digital and AI aspects. The Background Briefing to the 2024 King's Speech referenced the Government's plans to "… *harness the power of [AI] as we look to strengthen safety frameworks*"[21]. Further, there was mention of establishing appropriate legislative requirements on those developing powerful AI models from an employment rights perspective[22].

4.3 Use of AI in the construction industry

AI has existed within the construction industry for many years, for example with the use of CAD and BIM. However, its use has increased and expanded dramatically in recent times, particularly with the introduction of Generative AI (e.g. ChatGPT which was introduced in November 2022) and innovative products such as Dall-E, XKool, Midjourney, Staple Diffusion, PromeAI, Sketch up Diffusion and LookX.

In March 2024, following a speech on the Government's commitment to use AI to revolutionise public services, boost productivity and save taxpayers money, the Infrastructure and Projects Authority ("IPA") launched a new framework to encourage the use of AI on projects. This framework contains helpful guidance on how to utilise AI to solve challenges, increase efficiency in public project delivery and upskill professionals. The IPA plans to develop this work through a number of innovative pilots which, if successful, will be rolled out more widely. Although this is focused on public project delivery, it will hopefully set a useful precedent around the use and potential of AI in the industry.

Many organisations in the industry are increasingly supporting the use of AI and recognising the potential benefits that it brings, particularly in improving design and construction processes which have historically been very traditional and lacking in innovation. It seems from the RIBA report[18] that architects, interior designers, and landscape designers in particular are beginning to embrace AI. The RIBA report suggests that at least 41% of architecture practices are currently using AI (albeit only 2% of practices are currently using it on every project). It is inevitable that others in the industry will follow suit (and many are already doing so).

Clients are also posing more questions during the tender process on how practices are using AI and we envisage the subject appearing in contracts in the not-too-distant future. Those using AI must therefore consider the extent to which they want to include any contractual provisions to reflect the risks of doing so, and whether they wish to include any carveouts from their liability for reliance on AI.

4.4 Opportunities AI brings

The use of AI in the construction industry comes with many opportunities, for example improved safety, enhanced productivity, quality control and design optimisation. In fact, many see AI as having the potential to revolutionise construction projects and the industry more generally.

Practically speaking, it appears that AI is now being used to facilitate the creation of multiple design options (e.g. it can help to show the implications of moving structures and walls), generate images and masterplan layouts, and prepare models and specifications. Using AI in this way can help to give clients more options, while also allowing designers more time to focus on refining the detailed design.

It is important to note that, for the time being at least, AI is mostly being used at the very initial stages and for high-level exercises, rather than assisting with detailed tasks. This is supported by the RIBA report[18] which suggests that the most common use is for early stage visualisations (with 22% of practices using it often and 60% using it sometimes). However, it is hoped that the use of AI will allow those in the industry to be more creative and efficient, particularly by allowing for faster iterations and changes.

AI can also be used in risk management, project monitoring, project management, safety tracking, productivity tracking and analysis of site documentation. The RIBA report suggests that uptake in these areas has been slower than its use in the actual design process. As the report suggests, this could be an area of focus for improving efficiency in the field, enabling AI to take over more administrative or repetitive tasks and allowing designers and contractors to focus on the more abstract concepts and ideas relating to particular projects.

4.5 What are the pitfalls?

Despite the clear potential opportunities, it is important to be mindful of the potential dangers or risks associated with the use of AI. This should not act as a deterrent to using AI but rather a reminder to ensure that you carefully manage its use in your workplace and on your projects.

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4.6 Over-reliability of AI products

There is a real danger of over-reliance on AI without properly assessing the quality and reliability of the results that it produces. It is important to use the AI creations with caution and not to place full reliance on its outputs. It is widely suggested that AI should be used as a tool to assist those in the construction industry (e.g. to speed up their work), rather than replace them.

AI technology is trained on data which is input into the model (whether that model is a public or private model). This means that if poor quality, inaccurate or incomplete information is used to train the model then the output will likely be the same. There have also been instances where AI has created completely fictitious information so users must take care to scrutinize and verify the output. This is particularly important when using public models which have been trained based on data collected from various sources. To avoid relying on poor quality or inaccurate data, practices could eventually create their own internal programmes of languages, objects, and so on which the model will then feed on for future projects.

It will not be enough for practices to simply rely on what is created by AI technology — this would be a breach of the obligation to perform their services with reasonable skill and care. It will be up to the practise to interpret the technology and build on its foundational ideas and drawings.

4.7 Confidentiality and data protection

As well as the pitfalls that come with models being trained on poor quality and inaccurate data, there are potential implications for confidentiality and data protection.

Most contracts contain confidentiality provisions which place restrictions on the use of project data. If models have been trained based on project data, then this could lead to a breach of the confidentiality or information security provisions. This is particularly the case for public models as the information would essentially be disseminated to the public without restriction. Although some contracts will allow sharing of confidential information or project data in specified circumstances, there will be limits under most contracts.

The same applies with data protection. The UK laws on data protection contain strict obligations on the handling of personal data. Users will need to carefully consider if the data being used contains any personal data and if so, whether it is compliant with UK GDPR (e.g. if it is being lawfully processed). There may also be clear contractual requirements over the storage and transfer of personal or company data. It is worth noting that inputting personal data into public models (such as ChatGPT) is most likely going to be in breach of GDPR. The financial penalties and reputational impact of failing to comply with data protection laws should not be underestimated.

4.8 Copyright

There is also a risk of copyright issues, both in respect of the information that is being used to train the models and the ownership of the results that are created by AI.

In terms of the information that is being used to train the models, it could contain copyright that the inputter doesn't own or is not permitted to share. This could lead to users breaching copyright by relying on the AI model. In addition, there are likely to be blurred lines as to where the intellectual property rights vest, and who will own any new content created if the data has come from multiple sources. That being said, recent US case law suggests that copyright cannot be attached to works generated entirely by an AI model due to lack of human authorship (Thaler v Perlmutter, *et al*. 2023[23]). It will be interesting to see how the English courts approach this issue as the use of AI becomes more commonplace.

Anyone relying on AI will likely need to grapple with all of the issues raised above, given that this is such a new and unexplored area. As a result, we do expect to see an increase in the number of potential disputes.

4.9 What is the future of AI?

Although there may be concerns that AI will take over the need for those in the construction industry because it can help efficiency and boost creativity at the outset and throughout the lifecycle of a project, designers and contractors will still be needed for the more detailed and complex elements. It is more about harnessing and working with AI to improve what contractors and designers can do and how quickly they can do it, rather than replacing these roles altogether.

AI will hopefully allow those in the construction industry to focus on the big decisions and challenges of today (e.g. how to remove operational carbon), rather than the small and administrative ones which AI can deal with.

For AI to continue to take off (and bring the additional benefits which we have highlighted above), there must be continued investment. Companies will also need to experiment with and train the AI tools, in addition to educating their staff on the utilisation of AI.

Those employing AI in the construction industry will need to keep in mind the associated legal issues and take responsibility if things go wrong. This will require internal governance as to the limits of AI and training in its application and complexities.

5. When is a collateral warranty not a building contract?

Vivek Kapoor, 39 Essex Chambers

The decision in Abbey Healthcare (Mill Hill) Ltd v Augusta 2008 LLP (formerly Simply Construct (UK) LLP)[24]

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5.1 Background

In this case Simply Construct (UK) LLP (Simply) was a contractor under a JCT Design and Build Contract 2011 to Sapphire Building Services Ltd to design and build a care home (the Property and the Building Contract). The Property was ultimately leased to Abbey Healthcare (Mill Hill) Ltd (Abbey). Simply gave a collateral warranty to Abbey which is the focus of this appeal. Upon an adjudication claim being brought by Abbey and ultimately decided against Simply, the question became whether Abbey's adjudication decision in its favour could be enforced. This turned on whether, as Simply had disputed in the adjudication, the collateral warranty was a 'construction contract' for s.104 (1) of the Housing Grants, Construction and Regeneration Act 1996 (the Act)[25].

So far as is relevant, s.104 (1) of the Act provides as follows:

> (1) In this Part a 'construction contract' means an agreement with a person for any of the following –
>
> (a) the carrying out of construction operations;
>
> (b) arranging for the carrying out of construction operations by others, whether under sub-contract to him or otherwise; and
>
> (c) providing his own labour, or the labour of others, for the carrying out of construction operations.

It is common practise in the construction industry for collateral warranties to be provided to third parties. The collateral warranty in this case included at clause 4.1(a) the following: '[t]he Contractor warrants that: the Contractor has performed and will continue to perform diligently its obligations under the [Building] Contract'.

Abbey brought proceedings to enforce the adjudication decision in its favour by way of summary judgment. At first instance the High Court (Martin Bowdery QC, sitting as a Deputy High Court Judge) held that a collateral warranty was not a building contract and refused summary judgment. By a majority (Peter Jackson and Coulson LJJ; Stuart-Smith LJ dissenting) the Court of Appeal allowed the appeal and held the collateral warranty was a building contract. The matter was appealed to the Supreme Court.

5.2 Supreme court

The Supreme Court unanimously allowed the appeal and refused summary judgment. Lord Hamblen gave the judgment for the Court.

Lord Hamblen began by noting that 'for' was a function word to indicate purpose, or to indicate the object of an activity. The question, then, was whether the object or purpose of the agreement is the carrying out of construction operations. Typically, this is identified as the primary obligation being undertaken under the agreement.

Lord Hamblen considered it difficult to see how the object or purpose of a collateral warranty is the carrying out of construction operations. The main purpose, instead, is to afford a right of action in respect of defectively carried out construction work. It is not the carrying out of that work. It could not be said a collateral warranty gives rise to the operations; they instead arise as a result of a building contract. Any obligation undertaken to a beneficiary of a warranty derives from and mirrors the obligations already undertaken under the building contract. Thus, everything is referable to the building contract and there is no distinct or separate obligation undertaken to the beneficiary.

Indeed, this disconnect is illustrated by the fact that the beneficiary under a collateral warranty has no control over how operations are performed. The beneficiary cannot instruct how work be carried out, order variations, or suspend or terminate works. They must follow the fortunes of the employer but are not the employer.

As to the facts of this case, Lord Hamblen rejected the contention that clause 4.1(a) resulted in a direct obligation to conduct construction operations. Here 'warrants' simply meant promise. Whether or not there was included within clause 4.1(a) obligations to perform under the Building Contract, these were entirely derivative. The width of the words in clause 4.1(a) was, rather, simply to capture all of the contractor's obligations under the Building Contract.

Lord Hamblen concluded that, were the Court of Appeal right, whether a collateral warranty was a building contract would turn on the language of that contract. He considered this undesirable, and thought it preferable to have a clear dividing line between the two types of contract. This is a distinction which can be easily understood and applied. Considering the past case law, the Supreme Court finally resolved to overrule the decision in *Parkwood Leisure Ltd v Laing O'Rourke Wales and West Ltd*[26].

5.3 Comment

It is helpful that there is now clarity in identifying what is a construction contract for the purposes of the Act. In circumstances where adjudication is intended to make the decision making process expeditious, arguments over jurisdiction spilling into the High Court was not a desirable outcome. The decision of the Supreme Court produces a more intelligible position which minimises delays and satellite litigation.

6. Providence building services ltd v hexagon housing association Ltd[27]

Jeremy Glover, Fenwick Elliott

Providence had brought a Part 8 claim seeking a declaration against Hexagon as to the proper construction of clause 8.9 of the 2016 JCT Design and Build Contract[28] between the parties. On appeal, Stuart-Smith LJ said that the dispute raised in an issue about the proper construction of the contract that was: *"simpler to*

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state than . . . resolve: can the Contractor terminate its employment under clause 8.9.4 of the JCT Form in a case where a right to give the further notice referred to in clause 8.9.3 has never previously accrued?". In the TCC, the judge, finding in favour of the employer, Hexagon, had held that the answer to this question was "*no*". The CA disagreed.

Clause 8.9 of the Contract set out the circumstances in which Hexagon could terminate its employment under the Contract:

> "8.9.1 If the Employer:
>
> 1. does not pay by the final date for payment the amount due to the Contractor in accordance with clause 4.9 and/or any VAT properly chargeable on the that amount . . .
>
> the Contractor may give to the Employer a notice specifying the default or defaults (a 'specified' default or defaults).
>
> 8.9.3 If a specified default or a specified suspension event continues for 28 days from the receipt of the notice under clause 8.9.1 or 8.9.2, the Contractor may on, or within 21 days from, the expiry of that 28 day period by a further notice to the Employer, terminate the Contractor's employment under this Contract.
>
> 8.9.4 If the Contractor for any reason does not give the further notice referred to in clause 8.9.3, but (whether previously repeated or not):
>
> .1 the Employer repeats a specified default; . . .
>
> then, upon or within 28 days after such repetition, the Contractor may by notice to the Employer terminate the Contractor's employment under this Contract".

Under Payment Notice 27, issued by the employer's agent, Hexagon was obliged to pay the sum of £260,000 on or before 15 December 2022, but it did not do so. Providence served a Notice of Specified Default under clause 8.9.1 of the Contract. The agent issued a further relevant Payment Notice, number 32, in the sum of £360,000. Hexagon did not pay by the final date of payment.

Providence, therefore, issued a Notice of Termination under clause 8.9.4, relying on the Notice of Specified Default of December 2022, and the repetition of that specified default. There was also, without prejudice to the contractual termination, an acceptance, or purported acceptance, of Hexagon's repudiatory breach. Providence did not give a notice under clause 8.9.3.

Hexagon subsequently paid the sum claimed but challenged the validity of the Notice of Termination. They then accepted, or purported to accept, Providence's repudiatory breach on 31 May 2023.

Clause 8.9 set out to define the circumstances in which the contractor can terminate its employment as a consequence of the employer's default. The clause set out a sequence of events that may properly lead to termination. The question to be addressed is, simply and only, whether the contractor has given further notice, not whether the giving (or not) of the notice can be given the (non-contractual) description of being the result of a decision or the taking of an active step.

For the judge, although he accepted that the drafting could have been of better quality, the natural and probable meaning of clause 8.9.4 was that it applied to a case where no right accrued to give a further notice under clause 8.9.3. The words "*for any reason*" in clause 8.9.4 were wide enough to cover cases where the reason that a notice had not been given under clause 8.9.3 was because the right to give that notice had never arisen. Accordingly, Providence was entitled to give notice under clause 8.9.4 of the Contract and terminate its employment.

The intention of the clauses was to encourage and cause the party concerned to comply with their contractual obligations (in this case, the obligation to pay by the final date), and a repetition of a previous specified default was the trigger entitling the wronged party to terminate.

The CA recognised that this would potentially allow a contractor to terminate for repeated default even where either the underpayment was very small or the delay was very short. However, this was a commercially acceptable allocation of risk, especially given the potential for a serial defaulter to escape significant consequences if they managed to end their defaults within the 28-day period.

In reaching his decision, Stuart-Smith LJ cautioned against relying on the development of standard form wording from previous versions as an aid to interpretation unless a change has been made to respond to the effect of a particular decision of the courts, a change in legislation or a widely publicised event, referring to the words of Aikens LJ in *The Rewa*[29]:

"While there may be occasions when this has to be done in order to assist in solving a problem of an ambiguous wording, I would generally discourage such exercises in 'the archaeology of the forms'. In most cases, it makes the task of interpretation of contractual wording unnecessarily over-elaborate and it can add to the expense and time taken in litigating what should be short points of construction".

Notes

1. This is, by contrast to the Red Book 1999, more specifically defined in the Red Book 2017 edition as being limited to conditions at the Site that are Unforeseeable (as defined) having regard to climatic data made available by the Employer under Sub-Clause 2.5 and/or climatic data published in the Country for the geographical location of the Site. Relief is therefore likely to be limited to adverse climatic conditions affecting the Site, but not where adverse climatic conditions elsewhere have delayed the delivery of plant or materials.

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2. For example, a contractor may claim an extension of time and/ or 'Cost Plus Profit' (as defined in the Red Book 2017) or 'Cost plus reasonable profit' (Red Book 1999) if the engineer fails to issue a notified drawing or instruction within a reasonable time, in accordance with Sub-Clause 1.9 Red Book 1999/2017.
3. If the claiming party fails to issue this statement, the Notice of Claim shall be deemed to have expired and no longer be considered a valid notice, unless the engineer fails to give notice within 14 days after this time limit has expired.
4. A Claim is defined as "*a request or assertion by one Party to the other Party for an entitlement or relief under any Clause of these Conditions or otherwise in connection with, or arising out of, the Contract or the execution of the Works*".

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