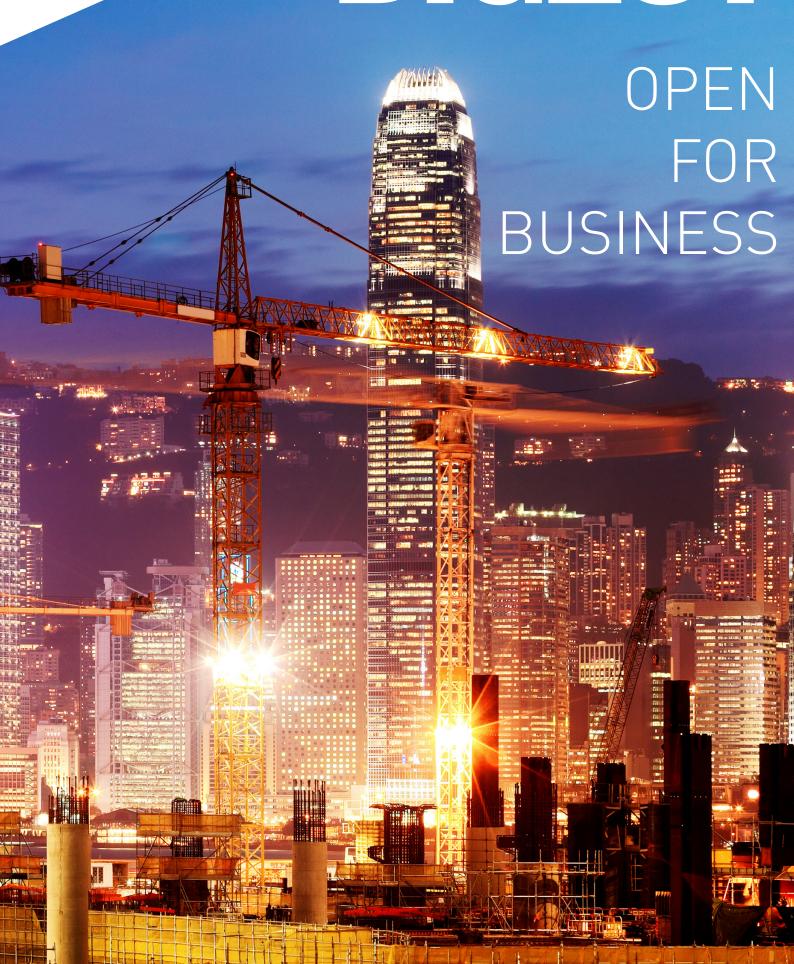


# DIGEST



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# driver trett



# Welcome

to the

# **Driver Trett Digest**

It is my great pleasure to welcome you to the Asia Pacific (APAC) focussed 21st edition of the Driver Trett Digest.

Asia Pacific has seen, and will continue to see, major commitments to the construction and engineering sectors. Angie Chai and Danang Projosujadi provide context on the magnitude of such developments with their articles on the infrastructure works of Hong Kong and Indonesia respectively.

Notwithstanding this, such developments will come with significant challenges; particularly given the global conditions we all now find ourselves in. I would therefore urge you to read the articles provided by my colleagues Liew King Wah, Ashlea Read, Garth McComb, Jung-guk Lee and John Mullen as they address some key issues that are likely to be considered, possibly reconsidered, by parties dealing with claims and disputes.

This bumper edition also features a wonderful article from one of our Technical Experts, Jeremy Ingham, who provides a helpful insight into what he considers when looking at the issue of 'durability'. Mukul Soul also provides a wonderful Q&A session on his background and key influences and drivers that have made him the success he is today.

I am very grateful to our friends from external companies, who provide helpful guidance on a variety of topics. Ben Bury, Partner of HFW, provides a useful understanding on Hong Kong as a, or even the, place to resolve a dispute. Joe Durkin, an Investment Manager at LCM Finance, explains the suitability and relevance of Third-Party Financing for construction disputes. Danna Er, Partner of Eldan Law, gives excellent insight into how Singapore has handled and will likely handle the challenges of 'a new norm'.

The Asia Pacific region is an exciting region and Driver Trett will continue to strengthen its team in Asia Pacific. This has been recently demonstrated with the appointments of David Merritt, David Satchell, Mark Murphy and Adrian Kong, who now form part of our regional APAC team. I really hope you enjoy this edition of the Digest. Please stay safe and well as we all move forward!







# The Quantification of Acceleration Claims

John Mullen, Principal and Quantum Expert

# This short article focusses on the retrospective quantification of acceleration claims.

Prospective valuation, where parties reach a prior acceleration agreement, is not covered, though these can cause their own problems. Potential legal and contractual bases for acceleration claims are also not considered.

By way of introduction to quantification (and also because the author was expert for the defendant who was awarded indemnity costs) it is worth considering these words from HHJ Hicks<sup>1</sup>:

"increasing speed... finishing earlier... increased expense..."

In practice, such increasing speed and finishing earlier might be achieved in several ways.

#### These can all lead to increased expense:

- Increasing levels of resource. Either on the same or additional work fronts.
- Changing resources. These might only be available at greater expense.
- Changing methods. Particularly sequencing, overlapping, hours of work, and procurement.
- Changing work scope or specification.

The use of words such as "increase" and "change" begs the question "compared to what?".

Contractors often base acceleration claims on tender allowances. However, these may have been insufficient.

An alternative baseline is levels before the acceleration, but these too may be misleading. The proper baseline will usually be the contractor's objectively reasonable 'but for' methods, resources and costs. These might be from a resourced programme, method statements, internal planning and budgeting, witness statements, expert evidence, or a mutually supportive combination of these.

Acceleration does not always only give rise to additional expense. Where work is carried out more quickly savings can arise particularly in relation to time-related costs. Where acceleration is achieved by changes to the works, savings can result from omission or reduced specification.

Another area that is often overlooked in contractors' submissions is duplication with other claims. Where the cause of the acceleration relates to instructed Variations.

their valuation may include the same costs. Claims for disruption can particularly overlap with acceleration claims. An often overlooked area of overlap is payments for cost escalation.

### The usual heads of acceleration costs include:

- People, including both staff and operatives;
- Preliminaries and general items (site overheads):
- Materials; and
- Plant and equipment.

#### Other potential heads are:

- Off-site overheads:
- Profit:
- Risk/contingency; and
- The costs of quantification.

People costs are usually the largest head of acceleration claims. particularly staff. For both staff and operatives, overtime payments often feature. Bonus payments can be additional bonuses paid in recognition of the working circumstance or unearned bonuses which still have to be paid to retain people. Where additional people are introduced, they may be at a premium cost, particularly where payroll employees supplemented by those from agencies, subcontractors or even imported into a country. Recruitment fees might be incurred, and bringing new people to a project can add costs of transport, visas, work permits, site inductions, health checks, accommodation, and other indirect costs.

"Staff thickening" claims often feature not only as an acceleration issue but also as a head of disruption or even prolongation claims. Where staff thickening claims compare actual and planned resources, the usual questions apply to the differences. Alleged 'but for' resources might be based on tender allowances or staff organograms, but these might have been wrong or set intentionally low or high respectively, to win a bid. Planning and budgeting by the project team often proves a much better basis, ideally through contemporaneous documents, or otherwise through statements. Objective evidence can be sought from experts or similar projects. Ideally, a mutually supportive combination of

these sources might establish this 'but for' baseline. Actual staff costs will be tested in terms of the reasonableness of their numbers, job descriptions and rates.

Once the 'but for' and actual staff are established, comparison should not be of total numbers alone. Job descriptions should be looked at line-by-line. Who was added, when and why, should be established from factual evidence. In practise, such comparisons often show some reductions and this will lead to debate, including: why there is a reduction; whether the 'but for' would ever have been required; and why there was no actual resource; and whether they should be off-set against the additions.

### Staff thickening particularly arises in claims based on:

- The extent of changes, queries, revisions and documents:
- Increases in work fronts; or
- Increased labour levels.

A useful analysis plots the levels of staff against time and numbers of documents or work fronts or operatives. Discussion may ensue as to whether correlation proves causation and whether the resulting claim is 'Global' in the pejorative sense.

Regarding operatives, a number of indirect effects can cause additional cost. Long hours, crowded workspaces and overlapping trades can reduce production. Less obvious are learning curves and the effect of changes in the ratio of operatives to such as supervision, management, plant, equipment, and materials. Quantifying labour productivity losses involves the usual difficulties with disruption claims.

#### Methods include:

- Comparing planned and actual;
- Measured mile analysis;
- Earned value analysis:
- Records of lost time;
- Comparisons with similar projects;
- Expert evidence; and
- Historical data.

Ideally a claim for lost productivity applies more than one of these methods to mutually support each other.

Materials costs can include: part load premiums; increased waste; double handling; costlier suppliers; and expedited delivery charges. Changes in specification for earlier availability or faster construction can also increase costs.

Plant and equipment costs can include some similar features to the operatives using them. In particular, owned plant might be supplemented by hired plant at a greater cost and lower outputs.

Additions to the above for risk/contingency, quantification costs, off-site overheads and profit tend to be more relevant to prospective acceleration agreements. Inclusion will depend on such factors as: the contractual or legal basis; whether they were incurred or lost; and the bargaining strengths of the parties.

Subcontractors can incur any of the cost headings identified above, and can add complexity. Related questions will include: whether a subcontractor's costs actually arose from 'domestic' issues; whether they were reasonable; how the subcontractor was procured and managed; and whether the contractor actually has an incurred cost or liability.

Dispute as to whose culpable delays led to the acceleration is likely to see a counterclaim from the Employer. In particular, for additional fees paid such as to a FIDIC Engineer for providing additional staff or overtime and night shift attendance. The relationship between such costs and contractual Delay Damages may have to be considered.

Evaluating Contract Claims<sup>2</sup> offers further discussion on this broad and complicated topic.

- Ascon Contracting Ltd v Alfred McAlpine Construction Isle of Man (1999) 66 ConLR 119
- 2. By JP Mullen and RP Davison, published by Wiley Blackwell.





# Get to know Diales with Garth McComb

Garth McComb, Regional Director and Regional Head of Diales APAC Driver Trett, Kuala Lumpur For those of you who may not yet be aware, Diales is the brand name under which the most qualified and experienced Experts in the Driver Group of companies operate.

Diales was the initiative of Driver Group CEO, Mark Wheeler. The brand was established to guarantee our clients a level of experience and qualification, when requiring expert witness services.

### When our clients engage a Diales expert, they are engaging someone who has:

- A minimum of 15 years' industry experience;
- Previously been cross examined or has successfully completed cross examination training;
- At least 50% of their workload as an expert;
- Been trained in what is required of an expert in litigation or arbitration.

I have personally been involved in two hearings where one of the first questions put to the opposing party's expert was: "How many times have you given evidence as an expert prior to today?" Their response, it was the first time. In both cases, nobody seemed more surprised than their own clients, who presumably had assumed they had engaged a battle-scarred expert with many victories under their belt.

Diales Experts hail from a wide variety of backgrounds, but can be generally grouped into one of three categories, namely: Quantum, Delay and Technical Experts.

Probably the best place to start, should you be looking for an expert in one of those fields, is the Diales App. The app can be downloaded from Google play / Apple iStore, and contains the background experience for each Diales expert, our services and contact details. For additional information, you can refer to our website: www.diales.com.

I was immensely proud to have been appointed as Regional Head of Diales for APAC (Asia Pacific) late last year, and I am ambitious to not only promote the high quality experts that we already have in the region, but also to promote the whole of the Diales team.

While much of a Diales Expert's role is acting in formal dispute resolution, I just wanted to take this chance to extol the benefits of hiring a Diales Expert in the early days of a project.

One thing I have noticed in many of the disputes that I have been involved with, is that parties, be it Claimant or Respondent, often both, are regularly put in a compromised position due to a lack of appropriate records detailing the matters that gave rise to the dispute.

With years of experience and first hand knowledge of how disputes are resolved, Diales experts can provide invaluable advice at the outset of a project - to explain what records should be kept, in order to comply with the particular contract conditions - so that in the event of a dispute, the party that was so advised is fully prepared, and able, to substantiate their position and / or justify their losses.

Another area where Diales experts can help to reduce the likelihood of a dispute, is the identification and notification of claim issues in a timely manner.

I have never been a proponent of notice requirements that deny a contractor the right to make a claim simply because they have not notified the employer of their intention to claim in time. I understand that there may be circumstances when an employer, if faced with a potential claim, may be able to consider alternative solutions and avoid additional costs; But for an employer to avoid incurring additional costs for

implementing a change simply because the contractor failed to submit a notice in time does not seem equitable. However, the Contract is the Contract and in our industry it is rare for a party to a contract to be able to say convincingly that it entered into a contract with its eyes closed.

Shortly after I moved from Singapore to Malaysia about 10 years ago, I was in a meeting discussing a report that we had prepared for a contractor. The report was a review of the Contract they had recently signed and was intended to give them guidance on compliance requirements and potential pitfalls within the Contract.

The Contract contained a clause in relation to claims for additional money and stated that if the contractor intended to claim additional money for any reason, including variations, it had to notify the engineer within 21 days of becoming aware of the issue giving rise to the claim.

Part of our advice to the contractor was to review all drawings issued by the engineer and submit a notice of intention to claim for any changes in the drawings within 21 days of receipt of the drawings.

The Project Director asked me if I was really saying that if he was issued a drawing which included changes to the work, and he did not submit a notice of his intention to claim for the change, then he could lose his right to claim anything. I told him that is what his Contract said. He told me I did not know how construction works in Malaysia.

We were not hired for claim services throughout the Contract, but I did hear later that most of the contractor's subsequent claims were rejected on the grounds of there being no notices.

As mentioned above, I am not a proponent of restrictive notice requirements that appear to be an attempt by the client/employer to avoid having to pay compensation for their own actions, or inactions. I was therefore heartened to read one recent case report from Malaysia where the Judge, in my opinion, made a fair and reasonable decision that compensated the Claimant for some, though not all, of its losses, despite the lack of any notice of its intention to seek compensation.

In the case of Sunissa Sdn Bhd v Government of Malaysia, there was no dispute that the Plaintiff had been awarded extensions of time for matters that could be compensable issues under the terms of the Contract. The Plaintiff was claiming loss and expense for the delay periods based on recurring preliminary items costs and head office overheads. The Defendant had rejected the claims on the grounds that the Plaintiff had not submitted any notice of their intention to claim compensation.

Clause 44.1 of the Contract in question provided inter alia that "if...[EOT was granted under certain clauses as it had been in this case] ...and the contractor has incurred direct loss and/or expense beyond that reasonably contemplated...



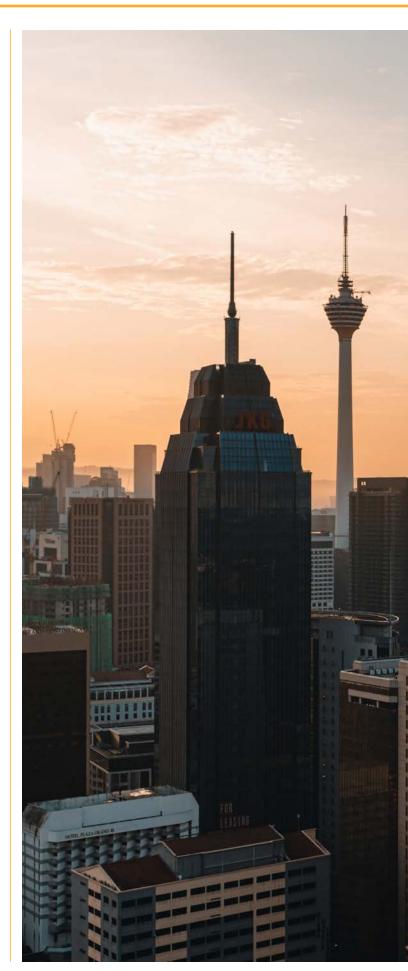
...then the contractor shall within thirty (30) days of the occurrence of such event or circumstances or instructions give notice in writing to the S.O. of his intention to claim...".

In short, the judge held that the portion of the Plaintiff's claim which was based on recurring Preliminary Items costs were "within that reasonably contemplated" and therefore clause 44.1 did not apply and hence no notice was required to claim for such costs. The other main portion of the claim for head office overheads was rejected as it was considered "beyond that reasonably contemplated" and therefore required the submission of a Notice.

While I am not totally convinced that head office overheads should be considered to be beyond that reasonably contemplated, I do feel that had this matter been in front of an Arbitrator, many would have simply held that the loss and expense claim should fail due to the lack of the required Notices. In my opinion, the judge should be applauded for this decision.

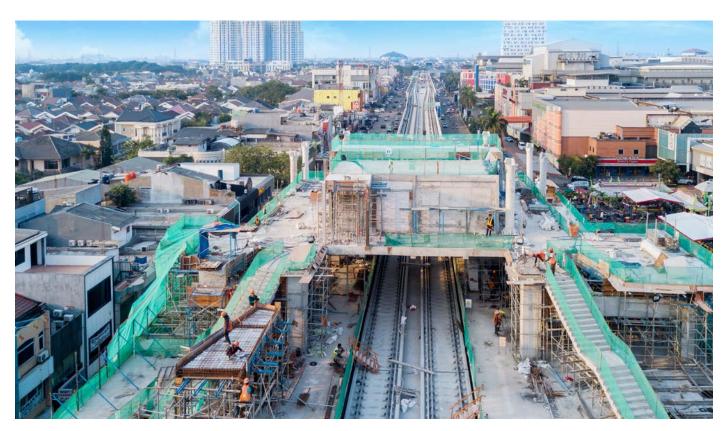
Garth McComb, Quantum and Delay Expert, Regional Head of Diales for Asia Pacific











# CLOSING THE INFRASTRUCTURE GAP INDONESIA

Danang Projosujadi, Operations Manager Driver Trett, Indonesia

Indonesia is the world's 16th-largest economy and as a large archipelago country, the infrastructure in Indonesia continues to play a key part in the growth of the Indonesian economy and its ability to compete on the global stage. Inadequacies in the country's infrastructure have for many years hindered its industrial growth but times are changing, and changing quickly.

Since President Joko Widodo was elected in 2014, Indonesia has witnessed significant growth in major infrastructure projects, and in particular the transport sector with the current transport systems failing to keep pace with Indonesia's growing economy. Development of the national railway network is the country's top priority, which will provide much needed and affordable public transport, as well as the ability to move goods and raw materials quickly around the country, and importantly, to and from the major ports.

# The Indonesian construction industry registered an annual growth rate of 5.8% in real terms in 2019.

The construction industry is expected to continue to grow substantially over the next 5-years notwithstanding any short-term disruption caused by Covid-19. President Joko Widodo, who was re-elected in the April 2019 elections, is expected to continue to drive forward with large-scale investment and development.

At the start of his second term in office, President Joko Widodo announced a new policy in the government development plan that is solely dedicated to infrastructure with plans to launch a \$412billion programme to boost investment.

### To achieve the country's aggressive infrastructure targets, 2019 alone saw the Government complete 91 nr strategic national projects from a total of 223.

One of the major projects to be completed in 2019 was the Palapa Ring<sup>1</sup> that connects 34 provinces through optical fibre with a broadband network.

Adding to the list, the government is also developing clean and potable water projects and water network systems, including: dams, flood control projects, smelters, fisheries, and marine projects.

Another major project on the horizon is the construction of a new capital city. In April 2019, the President approved plans to relocate the country's capital city to East Kalimantan, a province on the island of Borneo, due to overpopulation and traffic gridlock in Jakarta. The current Indonesian capital is sinking by 25cm annually, making it one of the fastest-sinking cities among the world's coastal cities. It is estimated that 95% of North Jakarta will be submerged by 2050. The cost of the project is officially estimated at US\$33 billion, and it is expected to take a decade to complete, jointly funded by the state and private sector.

Julian Smith, global transport and logistics leader at PwC, based in Indonesia, told OBG<sup>2</sup>, "The new capital city is an opportunity to show that Indonesia can design, build and operate a modern urban transport system, which includes maximum opportunities for walking."

## NOTABLE PROJECTS WHICH ARE CURRENTLY UNDERWAY INCLUDE THE FOLLOWING:

#### New Priok Port, Jakarta.

The project is to construct a new extension of the existing Tanjung Priok harbour in the northern part of Jakarta. The development was started in 2012 and is targeted to be completed by 2023.

#### Mass Rapid Transit (MRT), Jakarta.

This US\$ 1.7 billion project will provide a public transport solution to ease the traffic congestion in Jakarta. Currently the first phase of the South-North corridor is already complete and in operation, while the construction of the second phase is underway with a target completion date of 2022.

#### Trans Java Island Toll Road.

This US\$ 5.5 billion project will provide a 619 km toll road network on Java Island to connect main cities along the northern part of the Island from Merak Port in the West to Banyuwangi port in the East.

#### Trans Sumatra Toll Road.

This US\$ 36 billion project is to connect all the major cities in Sumatra from Banda Aceh in the North to Bandar Lampung in the South, covering a distance of approximately 2,000 km.

The Government also added that several toll road projects would commence in 2021, including a 14 km section of the Banda Aceh – Sigli toll road in Sumatra, a 33 km section of Balikpapan – Samarinda toll road in East Kalimantan, and a 131 km Pekanbaru – Dumai toll road in Sumatra.

## SO, WHAT ELSE DOES THE FUTURE HOLD FOR INDONESIA?

Under Presidential Decree number 109 of 2020, which is the third revision of the Presidential Decree number 3 of 2016, the Government announced, that 201 projects are to be included as part of the Strategic National Projects between 2020 – 2024, with 55 of them being new projects. The total value of the Strategic National Projects is an estimated \$340 billion.

The 55 new Strategic National Projects include 9 new major road and bridge projects, 9 dams, 6 energy projects, 6 new and expansions of airports, 5 clean water projects, 4 major seaports, 4 new railway projects, 4 new industrial zones, 4 irrigation projects and a major defence project.

Inadequate infrastructure has long been a challenge for this archipelagic state, which is possibly the most complicated country in the world in terms of its logistical challenges. However, after many years of infrastructure neglect and struggles with funding, the country's economic growth plans over the next five years are one to watch, and will certainly close the infrastructure gap.

# "Where we see challenges. I see opportunities. Indonesia's challenges are your opportunities"

President Joko Widodo

- http://investvine.com/indonesiabrings-high-speed-internetto-remote-eastern-provinces/ indonesian-national-palapa-ringproject-development-iskandar/ nggallery/slideshow
- 2. The Oxford Business Group Indonesia

## driver trett



# THE EMERGENCE OF THIRD PARTY FUNDING

Joe Durkin, an Investment Manager at third party funder, LCM Finance, gives insight into how contractors are increasingly turning to litigation funding across the Middle East and Asia Pacific. News in the legal press towards the end of last year, that a global construction firm had entered into a funding arrangement, supporting the funding of up to 20 arbitrations seated in jurisdictions ranging from London to Dubai, seeing the engagement of several international law firms, claims consultancies and expert service providers, has created a stir and caught the attention of contractors, experts and arbitrators across the GCC and APAC (Asia Pacific).

What grabbed the attention of CEOs of regional and international construction firms, from Turkey to Korea and further afield, was that there had been up until then, little insight of funders involvement in construction disputes in the Middle East.

Where third party funding has long been a resource to contractors involved in disputes in common law arbitration hubs such as London, New York and Sydney, what is really interesting now is the sea change in how third party funding is being used by contractors across the Middle East and Asia, which appears to be the tip of the iceberg.

There are several reasons for why this change has come about and how contractors are benefiting from it.

# WHY CONTRACTORS ARE TURNING TO THIRD PARTY FUNDING.

Construction disputes are on the rise. There has been the announcement across GCC jurisdictions of the insolvency of several high-profile contractors, which has had a domino effect on the supply chain.

Prior to the disruption caused by COVID-19, the numbers of disputes in the construction sector had been increasing. Pre-COVID there had been the insolvency of several high-profile contractors across the GCC, which has worsened in the past year, having had a domino effect on the supply chain.

The DIFC-LCIA recorded a 300% increase in cases registered in 2017 which had doubled by the first half of 2018. All other major arbitration institutions have shown increases in disputes registered.

The construction/engineering and energy sector often generates the most cases in leading arbitration institutions. It was the largest sector in the ICC accounting for 40% of the ICC caseload. It is also a significant sector in the LCIA, in SIAC and in regional centers such as ADCCAC and DIAC.

The construction industry has been further disrupted by the impact of COVID-19 with reduced profit margins, late payments and time overruns.

The construction industry is well suited to third party funding.

At its simplest, third party funding in the construction industry sees a funder, a party with no direct interest in a piece of litigation, who deploys capital to a contractor who is typically the claimant in a dispute. In return, the funder receives a return on its investment. In the most common form of litigation finance, the return received is conditional on the success of the case and is paid to the funder from the proceeds of it. It is usual for the return on the funder's investment to be a multiple of the amount advanced, or a percentage of the proceeds, or a combination of both.

# FUNDING MANAGES THE COST OF A CONTRACTOR'S LEGAL CLAIMS AND TURNS THE LEGAL DEPARTMENT INTO A PROFIT CENTRE.

There is also a growing understanding by CEOs and CFOs of Middle East construction and energy companies, about how dispute finance can be used as an effective and profitable financial solution.

There has been a shift in the mindset of leading contractors about how third party funding can help a company manage the cost of its legal claims, turn the legal department into a profit centre and even offer the potential for monetisation straight into the P&L.

Most contractors will have numerous disputes, which can be viewed as a portfolio by grouping together some, or all cases. By funding a portfolio of cases, financing is secured against

the book as a whole, not just the strongest case(s), which allows the funding of claims which may not be funded on an individual basis.

This portfolio approach considerably lowers the cost for the business as the risk is spread across multiple cases and has the additional benefit of potentially creating a financial provision for any defense cases.

When dispute finance is used in this manner, more commonly known as corporate portfolio financing, it results in a company being able to:

- Move the financial risk of disputes;
- Remove the costs associated with disputes from the company's balance sheet; and
- Release the financial upside of multiple claims where returns are generated at zero cost.

# WHAT TO KNOW ABOUT THE DRIVING FACTORS IN THE MIDDLE EAST AND FURTHER AFIELD

Several key factors have emerged in recent years. Regulators have addressed lingering uncertainty in many jurisdictions concerning the acceptance of funding.

Sydney, London and New York have permitted third party funding for years. In recent times Singapore and Hong Kong have adopted regulations to permit third party funding in international arbitrations. The DIFC and ADGM soon followed by separately recognising and regulating the use of third party funding for litigation in their courts.

This has coincided with the expansion of the arbitration infrastructure across the region and further afield. The DIFC-LCIA is strategically located in the Dubai International Financial Centre.

Recent legislative improvements are also a factor. The introduction of the UAE Federal Arbitration Law was introduced in the UAE in 2018. We now have over two years of implementation of the law which highlights how increasingly arbitration-friendly the jurisdiction has become. A set of new laws and the introduction of an international arbitration centre in Saudi Arabia in recent years also indicates improvements in the Kingdom.

The ICC announced just in December 2020 the opening of its case management office for the ICC Court Secretariat in the Abu Dhabi Global Markets. The regional arbitration centres of DIAC and ADCCAC are also very active and their rules appear in a significant number of construction and energy contracts.

Indian contractors operating in the Gulf are well used to the appearance of SIAC as the arbitral institution in their contracts, where SIAC has representative offices in Mumbai and Gujarat, which has seen a considerable increase in disputes involving contractors from the sub-continent. We are finding that awareness of litigation funding among Middle Eastern clients is high. CEOs and CFOs see funding as a tool



to unlock asset value. Law firms see how funding brings in more work from existing clients and how to attract more clients by offering an innovative, complete solution for corporate and law firm litigation portfolios. Insolvency practitioners see it as a means of financing the disputes of an insolvent business.

#### **LOOKING FORWARD**

Awareness and interest in third party funding continues to grow. The sheer number of high value construction disputes in the Middle East, which had difficulties before the pandemic, has led the industry to look at alternative ways to address its legal spend on disputes.

There always will be a place for single case funding where a contractor has a single high value dispute. The construction and energy sectors are also poised to benefit from the new and developing corporate portfolio approach to third-party funding.

We are already seeing a wave of COVID-19-related litigation and arbitrations. As in other regions, insolvencies and bankruptcies are likely to follow in the aftermath of the pandemic. Saudi Arabia and the UAE have modernised their insolvency legislation. Litigation funders are often essential in the insolvency context to assist insolvent, distressed or cash-poor contractors recover receivables.

Joint ventures are another specific feature of business in the Middle East. Many joint ventures are facing liquidity challenges. We are seeing an increase in disputes between joint venture partners.

There is an increase in the demand for third-party funding from all types of claimants.

Third party funding's effect on the legal landscape has been accelerated by the pandemic. The increasing awareness of funding by CEOs and lawyers, together with regional legal developments will see significant use of third-party funding across the Middle East and APAC.







# There is a well-known Chinese saying – "Wanna be rich? Build roads first!" 要想富 先修路 and Hong Kong is no stranger when it comes to investing in infrastructure.

Hong Kong, renowned as 'the Pearl of the East', is a beautiful and modern megapolis with a combination of skyscrapers, beaches, historical landmarks, and heritage buildings in a compact space.

As an ex-British colony, Hong Kong's culture has been deeply influenced by the West. As a result, a mixture of East meets West culture has emerged and made Hong Kong a unique and distinctive society that has an international perception, attracting people from all over the world for business, work, travel, and education.

Hong Kong is one of the world's most active financial centres having developed from a small fishing village in the 19th century. The fast-moving growth in population it has experienced since then has required Hong Kong to quickly adapt its infrastructure, and in July 2017 the governments of Guangdong, Hong Kong and Macau signed the 'Framework Agreement on Deepening Guangdong-Hong Kong-Macau Cooperation in the Development of the Greater Bay Area'.

#### There are seven areas of development<sup>1</sup>:

- 1. Developing an international innovation and technology hub.
- 2. Expediting infrastructural connectivity.
- 3. Building a globally competitive modern industrial system.
- 4. Taking forward ecological conservation.
- 5. Developing a quality living circle for living, working, and travelling.
- 6. Strengthen cooperation and jointly participating in the Belt and Road Initiative
- 7. Jointly developing Guangdong-Hong Kong-Macau cooperation platforms.

Two of the recent Greater Bay Area mega infrastructure projects in Hong Kong include the Hong Kong-Zhuhai-Macau Bridge (HZMB) and the Guangzhou-Shenzhen-Hong Kong Express Rail Link (XRL), both projects were completed in 2018.

#### HONG KONG-ZHUHAI-MACAU BRIDGE (HZMB)

The 55km bridge connects Hong Kong, Zhuhai and Macau comprising a 12km Hong Kong Link Road, 29.6km Main Bridge (with 22.9 km above the sea and 6.7 km undersea) and 13.4km Zhuhai Link Road (Fig. 1.):



Fig. 1., extracted from www.hzmb.gov.hk/en/info/sea%20crossing-EN.pdf



HZMB is the world's longest sea crossing bridge. It took nine years to complete the construction of the whole project and was originally set to finish by the end of 2016<sup>2</sup>. However, the HZMB officially opened to the public on 24 October 2018<sup>3</sup>.

HZMB is designed to have a 120-year life span and it cost a staggering RMB126.9 Billion (approximately US\$18.3 Billion).

It has a six-lane carriageway with three lanes each side.

#### HZMB significantly reduces the travel time between Hong Kong and Zhuhai:



Fig. 2., extracted from www.hzmb.gov.hk/en/info/sea%20crossing-EN.pdf

HZMB was an extremely complex project that faced numerous challenges and difficulties during construction. The steel bridge deck at the main bridge (Figure 3) used a total of 420,000 tons of steel (the equivalent of 60 Eiffel Towers) and the bridge deck area is 700,000-metres square (the equivalent of 98 football pitches)<sup>4</sup>. As the main bridge was constructed in open sea, most of the bridge structures were precast and prefabricated off-site and delivered to site for erection using an integral erection method<sup>5</sup>.

Another challenge was the construction of the tunnel works at the Hong Kong link road section as the box jacking operation was executed underneath the Airport Express Line (AEL). This involved excavation works and casting tunnel box segments in a deep and narrow shaft. The works were completed with a high degree of precision using a computerised system to synchronise the movements of the hydraulic jacks<sup>6</sup>.

The mega link has been described as a "blood and sweat project" by many people in the building sector.

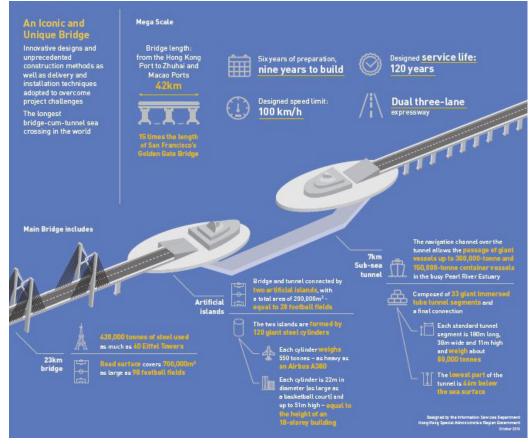


Fig. 3., extracted from www.hzmb.gov.hk/en/info/sea%20crossing-EN.pdf

#### GUANGZHOU - SHENZHEN -HONG KONG EXPRESS RAIL LINK (XRL)

Guangzhou - Shenzhen - Hong Kong Express Rail Link (XRL) is an express rail (total length of 140km) that connects Hong Kong (West Kowloon) to Guangzhou (Shibi) via Futian and Longhua in Shenzhen and Humen in Dongguan.

The Hong Kong section of the XRL is a 26km underground rail-run from the terminus in West Kowloon Station (WKT) to the boundary at Huanggang<sup>7</sup> (Figure 4). XRL is operated by the MTR Corporation<sup>8</sup> and train speeds can reach 200km/h in the Hong Kong section and up to a maximum of 350km/h in the Mainland section.

The construction works commenced in 2010 and were completed in 2018, a three-year delay from the original completion date (4 August 2015). The official opening of the XRL to the public was on 23 September 2018.

The construction work for the Hong Kong section was divided into 20 major civil contracts and awarded to 17 contractors<sup>9</sup> due to the complexity of the construction works.

However, this type of contract arrangement involved a high degree of interfacing and coordination between the parties.

One of the major setbacks on this project was the difficulty encountered at the WKT and the cross-boundary tunnelling works which were subject to unexpected construction conditions and a shortage of labour.

The completion of the XRL has significantly reduced the travel time between Hong Kong and major Chinese cities. For example, it takes 14 minutes from WKT to Futian (previously circa 100 minutes via numerous forms of transportation). As of today, people can easily travel to 58 Mainland Chinese stations from Hong Kong<sup>10</sup>. Overall, the Greater Bay Area development initiative will benefit the Chinese economy and boost internationalisation, both an important part of the next stage in China's economic growth.

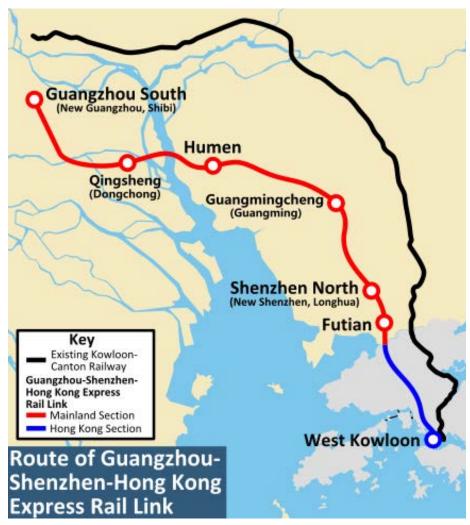


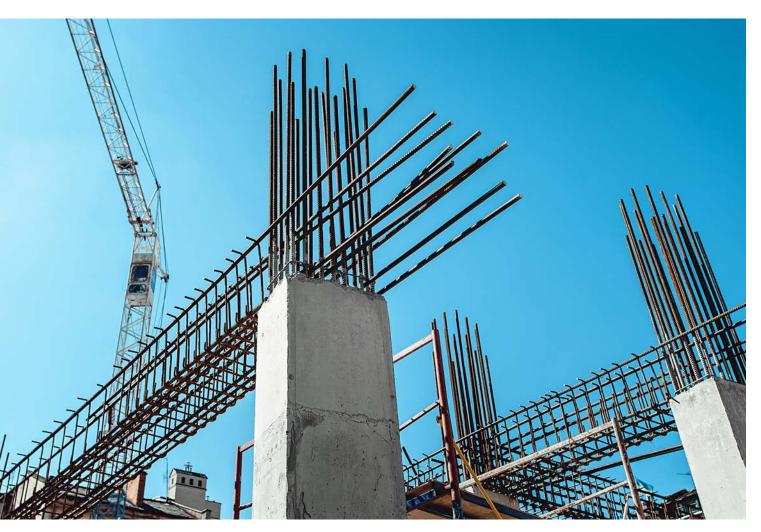
Fig. 4., extracted from www.wikipedia.org/wiki/Guangzhou-Shenzhen-Hong\_ Kong Express Rail Link

# So, to conclude with another well-known Chinese saying 一只蜂酿不成蜜 一颗米熬不成粥.

#### 'It requires a joint effort to achieve anything worthwhile'.

- 1. https://www.bayarea.gov.hk/en/outline/plan.html
- 2. https://www.thestandard.com.hk/section-news/section/11/173208/Bridge-to-open-in-one-go-despite-HK-delays
- 3. https://www.scmp.com/video/china/2169817/chinese-president-xi-jinping-declares-hong-kong-zhuhai-macau-bridge-open
- 4. https://www.hzmb.gov.hk/tc/project/main-bridge.html
- 5. https://www.hzmb.gov.hk/tc/project/main-bridge.html
- 6. https://www.hzmb.gov.hk/tc/project/hk-link-road.html
- 7. https://www.thb.gov.hk/eng/policy/transport/issues/cbt\_4.htm
- 8. MTR Corporation Limited is a majority state-owned Hong Kong company
- 9. https://www.info.gov.hk/gia/general/201405/28/P201405280337.htm
- 10. https://www.highspeed.mtr.com.hk/en/about/hsr-intro.html





# DESIGNING FOR DURABILITY

Jeremy Ingham, Diales Technical Expert, summarises the use and pitfalls of durability design for construction projects. Construction projects should be designed and specified to provide an appropriate level of durability for their intended service life and service environment. Failure to achieve durability requirements frequently becomes a factor in disputes as associated defects present themselves. Often, technical experts are called upon to determine causation and provide advice regarding remediation and future maintenance.

#### **DEFINING DURABILITY**

### Definitions of durability are found in the following standards:

- Section 2.4 of BS EN 1990:2001+A1:2005 Eurocode Basis of structural design (section 2.4).
- Section 4.1 of BS EN 1992-1-1:2004+A1:2014 Eurocode
   2: Design of concrete structures Part 1-1: General rules and rules for buildings.
- Section 3.10 of ISO 13823:2008 General principles on the design of structures for durability.
- Section 2.1.3 of fib Model Code for Service Life Design (2006).
- Section 2.3 of ACI 318-14 Building Code Requirements for Structural Concrete.

The definition of durability differs slightly between these standards, but there is commonality between them, in that they all require structural elements to exhibit the following qualities if they are to be classified as durable:

- They should be designed with their service environment in mind.
- They should last for their intended working life (i.e., design/service life).
- There should be no appreciable loss of utility during the intended working life.
- There should be no need for any unforeseen maintenance or repairs.

In essence, durability is the capability of a building, assembly, component, structure, or product, to maintain a required minimum performance over at least a specified time, while in its environment of operation.

Modern design codes are increasingly based on the durability performance of buildings and it must be ensured that adequate performance continues throughout the service life of the structure. A durability design approach offers considerable benefits for both asset owners and society. By understanding the deterioration processes affecting structures, design and maintenance can be optimised to ensure that service life aspirations of employers are met without unnecessary use of resources, both during construction and while the structure is operational. This offers improvements in sustainability, climate change resilience and potentially the whole life cost.

#### **DURABILITY DESIGN**

Standards provide guidance on how to design for durability in specific service environments and for certain minimum lengths of working life. However, employers will sometimes require a service life that is longer than allowed for in standards and/or that the construction materials should remain durable in harsher environments than allowed for by standards. In these situations, a technical specialist (usually a specialist materials engineer) can undertake a durability study to determine the type of materials and protective measures that are required. These durability studies often involve the use of deterministic or probabilistic modelling using predictive computer modelling tools.

It is now common on large projects for tender-stage and design-stage durability reviews and reports to be provided by materials engineers. These typically include:

- An overview of the applicable codes and standards.
- A description of the structures with breakdown into principal structural components.
- Details of the environmental and in-service exposure conditions.
- Details of the anticipated deterioration mechanisms.
- A detailed strategy for achieving durability.
- Specification and construction guidance for achieving durability.
- Maintenance and operational requirements for achieving durability.

A recent high-profile example is the New Safe Confinement built to cover and allow dismantling of the remains of the number 4 reactor at the Chernobyl Nuclear Power Plant. Completed in 2018 its shed-like structure comprising a steel arch with cladding was slid into position and is the largest moveable land-based structure ever built. Long design life requirements (100 year minimum) combined with harsh climatic conditions at a heavily contaminated site made careful consideration of the durability of the materials and structures imperative. A combination of durable materials and special corrosion protection measures were used. This includes treating the air around the steel arch on an on-going basis to maintain low humidity that will prevent corrosion of the structural steel members.

## PRACTICAL APPLICATION TO CONCRETE STRUCTURES

Concrete is the most widely used construction material in modern buildings and civil engineering structures. When appropriately designed and constructed, concrete structures bring considerable sustainable, societal, economic, and environmental benefits throughout their whole life.

Designing durability into new concrete structures is an effective means of minimising their whole-life cost and improving their sustainability.

For many structures this can be achieved through design using tabulated guidance in internationally recognised standards. However, special consideration is required for concrete structures, if:

- The service environment is particularly aggressive to concrete (e.g., marine conditions, arid climates, etc.).
- The service life is very long; greater than 100 years (up to 120 or even 150 years).
- The asset is regarded as critical infrastructure where the consequence of failure is great (e.g., bridges, tunnels, power facilities, etc.).

In such cases, a project-specific durability study that includes the use of predictive modelling tools, should be undertaken. These may be deterministic or probabilistic in nature. Durability studies that include modelling are now a fundamental part of the tender design and detailed design stages for major infrastructure projects.

Rusting of steel reinforcement bars that are embedded in reinforced concrete is the most important form of deterioration in concrete structures worldwide (see Fig.1, page 25).

The corrosion reaction is initiated by differences in electrical potential caused by variations in the environment along a reinforced concrete element. Such variations include exposure to moisture, oxygen and salts, differences in the depth of cover concrete, stray electrical currents or where two dissimilar metals are connected.



Chloride contamination is the most common cause of reinforcement corrosion. Chlorides can be cast into concrete with marine aggregates, saline mix water or chemical admixtures. More commonly, concrete is exposed to chlorides from external sources such as seawater (marine structures), de-icing salts (highway structures) or industrial processes (e.g., certain building structures such as abattoirs).

Consequently, the use of predictive tools for determining chloride ingress for reinforced concrete structures and estimating the time taken to reach critical levels have become an important part of the tender and/or detailed design stages of new build structures, as well as of the condition assessment of existing structures and of asset management planning for deteriorating concrete structures.

By using durability modelling tools, the service life of a structure is estimated by assessing the resistance capacity of the examined concrete (i.e. durability that is associated with a specific concrete type and specified concrete cover to reinforcement) against certain environmental and special exposure conditions or 'actions' (e.g. temperature, humidity, chloride-ion exposure, carbonation, freeze/thaw mechanisms, etc.) on the basis of a desired limit state, such as the initiation of attack or the partial or full deterioration of the structure or element under consideration. Specifically, a time-dependent load or action distribution (S) is compared to the corresponding time-dependent resistance distribution (R) of the structure.

As shown in Fig.2, the intersection of the S(t) and R(t) curves gives the deterministic solution for the mean service life, t, of the examined structure or element.

The deterministic modelling approach is based on the analysis of a defined set of input parameters (e.g. concrete cover depth, chloride penetration resistance of concrete mix, exposure conditions), which by being fed into a model, gives a unique, consistent output that is certain (occurrence risk: 100%), neglecting any risk that is associated with the variation of these parameters. Conversely, the probabilistic approach is a statistical way to analyse deterministic models and comprises the estimation of the probability that the predefined limit state will not be exceeded during the service life of a structure.

#### PITFALLS AND SOLUTIONS

The accuracy of durability modelling exercises is limited by the quality of data that is input to the model; this is based upon assumptions, laboratory or fieldwork data. The most significant parameters include surface chloride concentration, chloride migration coefficient, critical threshold for corrosion and age factor. Incorrect assumptions will result in inaccurate durability predictions. This can be mitigated to a degree by undertaking 'sensitivity analysis', whereby a range of input parameters are modelled to determine the durability significance of varying the values.

An essential part of any durability strategy is having a structural design that avoids non-durable features that are

vulnerable to deterioration. As an example, for concrete this involves eliminating or reducing details which are likely to make concrete placement and full compaction difficult to achieve, particularly overly congested reinforcement.

This should not be neglected, and key to this is liaison and cooperation between the structural engineer and the materials engineer, to ensure nothing is missed. The engineers should also consider the 'buildability' of their design to assist the constructer in reducing workmanship defects.

Whilst the primary durability strategy is the principal means of achieving durability (through quality of materials, detailing and additional protective measures), it is prudent in the case of critical infrastructure to have a secondary durability provision as an 'insurance policy'.

This can be used to achieve the required service life, or to provide the option of an extension of the service life beyond that originally envisaged. In the case of reinforced concrete structures this can be by means of making provision for future cathodic protection of the structure to be incorporated as a contingency measure in the event of unforeseen circumstances. This involves ensuring in the design that the reinforcement within each element is in electrical continuity, and installing connection points where a cathodic protection system can be retrofitted to stop corrosion, if the structure is found to be deteriorating while in service by routine asset condition inspections.

 Sfikas IP and Ingham J P. 2016. Service life design of concrete structures using probabilistic modelling tools: statistical analysis of input parameters. In: Grantham MG, Papayianni I and Sideris K (Eds), Concrete Solutions: Proceedings of the 6th International Conference on Concrete Repair. 20-23 June 2016, Thessaloniki, Greece-CRC Press, Taylor & Francis Group. London. pp. 437-446. ISBN: 978-1-138-03008-4, 2016.

# ACCOMPANYING FIGURES



Fig.1., Chloride-induced steel reinforcement corrosion in a highway structure

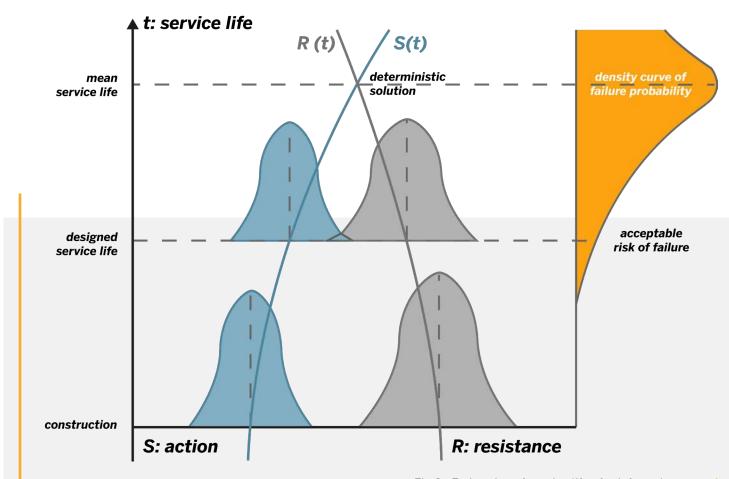


Fig.2., Estimation of service life of reinforced concrete<sup>1</sup>







Kingwah Liew Driver Trett Country Manager, Malaysia

# The COVID-19 pandemic has intruded everyone's lives, not just regionally, but globally.

Many countries including Malaysia have experienced a seemingly everincreasing number of virus infections; causing the implementation of national lockdowns and other restrictions on movement and proximity.

Since March 2020, the government of Malaysia implemented a series of measures including, Movement Control Order ("MCO")¹, Conditional Movement Control Order ("CMCO")², Enhanced Condition Movement Control Order ("EMCO")³ and Recovery Movement Control Order ("RMCO")⁴ in attempts to curb the spread of the virus.

# THE IMPACTS TO THE MALAYSIAN CONSTRUCTION INDUSTRY

Businesses and the economy in general were badly affected by the virus and the measures implemented to try to control it. For example, the crude oil price benchmark, West Texas Intermediate, dropped into negative territory, an historical low around a month after the WHO declared COVID-19 a pandemic.

Much like everything else, the construction industry in Malaysia was severely affected by the COVID-19 pandemic. Most construction work, except that classified as critical or essential services, were halted throughout the MCO. Even after the MCO was lifted, contractors have continued to encounter disruption, such as that arising from having to incorporate stringent standard procedures health operating on and safety measures ("SOPs") for construction sites. Such disruption has prevented them carrying out their works as originally and normally envisaged.

#### TYPICAL CHALLENGES FACED BY CONTRACTORS DURING THE COVID-19 PANDEMIC

#### **CASH FLOW**

Cash flow problems were an immediate impact of the COVID-19 pandemic experienced by most contractors. Project payments are generally evaluated based on the amount of work done. The suspension of almost all construction activity during the MCO meant no work being carried out and thus no payments being made, yet contractors continued to incur their recurring costs, e.g. rental charges, wages, and overheads, etc.

### EXPOSURE TO LIQUIDATED DAMAGES & TERMINATION

To regularly and diligently carry out and complete the construction works in accordance with the contract within the specified times is a fundamental contractual obligation for a contractor.

When a contractor has failed to complete the works within the prescribed time and in instances where no extension of time has been granted, an Employer or Client normally has the contractual right to impose liquidated damages and sometimes other related charges, or to terminate the contract in the worst-case scenario.

Many contractors have successfully claimed for extensions of time for the MCO period under the contract when their projects were suspended with all site activities ceased. However, in many cases we have observed that contractors have, and continue to, struggle to secure further extensions of time for events post MCO.

# TYPICAL CHALLENGES FACED BY CONTRACTORS POST MCO

Typical challenges in our experience that contractors have faced when their works were allowed to resume after the initial MCO period include having to implement new health and safety SOPs, shortage of workers, restricted working hours, delay in their supply chains, rework after the long suspension, disruption due to limits on the number of workers by having to comply with



social distancing requirements at the workplace, etc. Such delay and disruption have undoubtably led to reduction in productivity and caused further delay to project completion dates resulting in additional costs being incurred by contractors.

Productivity loss is not always easy to establish and evaluate, and the effects on a construction programme can often be overlooked until much later in time.

There are a number of established methodologies for measuring productivity loss, e.g. measured mile analysis, earned value analysis, programme analysis, to name a few.

However, in order to run a meaningful analysis, sufficient and accurate contemporaneous records and data are a necessity. In addition, such records are vital for establishing the causation between disrupting events and the resultant productivity losses.

## MALAYSIA GOVERNMENT INITIATIVES TO MITIGATE THE ECONOMIC, SOCIAL AND INDUSTRIAL IMPACT OF THE COVID-19 PANDEMIC

On 23 October 2020, the Government of Malaysia gazetted an act which will be in effect for two years, titled "Temporary Measures for Reducing the Impact of Coronavirus Diseases 2019 (COVID-19) Act 2020" ("COVID-19 Act").

Section 7 of the COVID-19 Act provides that, between 18 March 2020 and 31 December 2020 (the period was subsequently extended by the Minister for Works to 30 June 2021), if any party whose contract falls under the categories listed below, is unable to perform its contractual obligation due to the measures prescribed, made or taken under the Prevention and Control of Infectious Diseases Act 1988, the aggrieved party or parties to the contract cannot exercise their rights such as imposing liquidated damages under the contract.

#### LIST OF CATEGORIES OF CONTRACTS

- Construction work contracts or construction consultancy contracts and any other contract related to the supply of construction materials, equipment or workers in connection with a construction contract.
- 2. Performance bond or equivalent that is granted pursuant to a construction contract or supply contract.
- 3. Professional services contract.
- 4. Lease or tenancy of non-residential immovable property.
- 5. Events contracts for the provision of any venue, accommodation, amenity, transport, entertainment, catering or other goods or services including, for any business meeting, incentive travel, conference, exhibition, sales event, concert, show, wedding, party or other social gathering or sporting event, for the participants, attendees, guests, patrons or spectators of such gathering or event.
- 6. Contract by a tourism enterprise as defined under the Tourism Industry Act 1992 [Act 482] and a contract for the promotion of tourism in Malaysia.
- 7. Religious pilgrimage-related contract.

However, Section 10 of the COVID-19 Act also provides that Section 7 shall not invalidate any contract terminated, performance bond forfeited, damages received, any legal proceedings, arbitration or mediation commenced, judgment or award granted, and any execution carried out for the period from 18 March 2020 until the publication of the Act, i.e. 23 October 2020.

While the Act has attempted to allow relief for contractors in circumstances where the inability to perform their contractual obligations is through no fault of their own but by events arising from the pandemic, it remains unclear as to the method or amount of relief that contractors will be able to secure.

In view of the above, it therefore seems that if a contractor can prove that it was unable to perform its work due to the observance of the Prevention and Control of Infectious Diseases Act 1988 between 18 March 2020 and 31 March 2021, the Employer or Client may not be able to invoke its contractual rights even if the project has been delayed.

Notwithstanding this, it goes without saying that for a contractor to rely on the COVID-19 Act to avoid having imposed liquidated damages levied against it or being terminated due to project delay, the contractor will have to substantiate with evidence that the delay was due to events related to or to have close proximity to the observance of the Prevention and Control of Infectious Diseases Act 1988. In addition, the contractor will have to demonstrate that the related delay events have impacted their work programme and the contract completion date, despite their best efforts to reduce or mitigate the delays caused by COVID-19 related factors.

#### CONCLUSION

The Malaysian COVID-19 Act pertains to a wide range of different types of contracts including contracts executed only by a brief letter of award, purchase order, etc., even when such contractual documents contain insufficient provisions to deal with the unprecedented and complex COVID-19 pandemic situation.

Any party who is unable to perform their contractual obligations due to the impact of their observance of the Prevention and Control of Infectious Diseases Act 1988 can now seek relief under the COVID-19 Act. Notwithstanding this, the onus of proof of such claims still lies with the contractor. Good record keeping, e.g. detailed daily, weekly, monthly reports, updated working programme, notices, etc. will play a big role in contractors being able to substantiate such claims. Ultimately the success or otherwise of a claim is often in proportion to the quality and extent of the contemporaneous records that were kept.



- 1. On 16 March 2020, Malaysia Prime Minister announced the movement control order under the Prevention and Control of Infectious Diseases Act 1988 and the Police Act 1967. The MCO effective date was on 18 March 2020 and ended on 3 May 2020.
- 2. CMCO started from 4 May 2020 and ended on 9 June 2020. A relaxation of regulations to prepare for reopen of the national economy.

  3. EMCO or stricter order for 14-days duration would be implemented to specific locations where a large cluster of Covid-19 positive cases was detected.
- 4. RMCO was started after CMCO ended on 9 June 2020. Subsequently another stage of CMCO 2.0 was announced to take effect on 14 October 2020 due to spike of COVID-19 positive cases in the country.



# HONG KONG IS STILL 'OPEN FOR BUSINESS'

# FOR THE RESOLUTION OF CONSTRUCTION DISPUTES

Ben Bury Partner, HFW Hong Kong has been in the news a lot over the past 18 months. From mid-2019 to early 2020, Hong Kong was rocked by protests against a proposed amendment to the law relating to extradition of suspected criminals, including to Mainland China. The proposed amendment was withdrawn, but the protests continued until the outbreak of the COVID-19 pandemic was fully realised in early 2020. In June 2020, the Central Government enacted legislation prohibiting acts of secession, subversion, terrorism, and collusion with foreign or external forces in Hong Kong. The Central Government and the Hong Kong Government argued the legislation was necessary, but it was criticised by some foreign governments concerned about Hong Kong's autonomy and has led to Hong Kong losing some aspects of its special trading relationship with the United States.

Many people in the construction industry watching these events from overseas might have questioned whether Hong Kong is still an appropriate jurisdiction for the resolution of their disputes, particularly with State Owned Contractors from Mainland China. State Owned Contractors may themselves have questioned whether Hong Kong is a safe and secure place for the resolution of disputes.

In this regard, it is important to understand the recent events in their context. Whilst significant and newsworthy for a variety of reasons, these events have had surprisingly little, if any, impact on the way in which construction disputes are resolved in Hong Kong. That includes the resolution of disputes against State Owned Enterprises from Mainland China and, indeed, the Hong Kong Government itself. As Peter Burnett. the Managing Director of Standard Chartered Bank, and Chairman of the British Chamber of Commerce, recently remarked, "Hong Kong is one of the few jurisdictions across Asia-Pacific where you can sue the Government and win, if the merits of the case are in your favour."1

As any Hong Kong student of constitutional law will tell you, Hong Kong is an inalienable part of Mainland China, and in this regard the Central Government is responsible for foreign affairs relating to Hong Kong<sup>2</sup> and the defence of Hong Kong. However, Hong Kong has been granted a high degree of autonomy in all other respects<sup>3</sup>.

# Whilst Mainland China is a civil law jurisdiction, in Hong Kong the law is based on the English common law.

The courts enjoy judicial independence and the right of final adjudication<sup>4</sup>, meaning that there is no recourse to the courts in the Mainland for you or your opponent if you have exhausted all lines of appeal before the Hong Kong courts. Judges from other common law jurisdictions sit on the Court of Final Appeal in Hong Kong, including the current President of the UK Supreme Court, Lord Reed, and three former Presidents<sup>5</sup>.

In any event, most construction disputes in Hong Kong are resolved by confidential arbitration, whether the disputes are between Hong Kong parties, Mainland Chinese parties, or foreign parties.

Contrary to popular opinion, the number of arbitrations in Hong Kong increased in 2020 and a significant number of these arbitrations included foreign parties in dispute with Mainland Chinese entities<sup>6</sup>. In addition, during the past 18 months, there have been a number of steps taken by the Governments in Hong Kong and Mainland China towards mutual recognition of arbitrations and arbitral awards in the two jurisdictions. This includes legislation to allow parties to have recourse to the courts in Mainland China for interim measures, including preservation orders, in support of Hong Kong arbitrations<sup>7</sup>.

These measures have made it considerably harder for arbitral parties with assets in the Mainland to avoid complying with awards made against them in Hong Kong. It is important to note that Hong Kong is the only jurisdiction outside the Mainland that enjoys the benefit of these measures.

# When selecting a seat of arbitration for dispute resolution clauses in construction contracts, it is important that parties make informed decisions based on all the relevant concerns.

If you haven't ever previously asked yourself: 'What is the national security legislation in this jurisdiction?' or 'Does this jurisdiction enjoy a special trading status with the US?'; you may want to consider whether it is necessary to do so now, when selecting a jurisdiction as the seat of arbitration for your construction disputes.

You might also ask yourself questions such as: 'Are the courts in this jurisdiction pro-arbitration?'; 'Is there an established legal structure?'; 'Can I instruct well renowned lawyers?'; 'Do arbitral awards rendered by tribunals in this jurisdiction have a good track record of enforcement in the country of origin of my opponent?'

If you ask yourself these questions, we suspect Hong Kong would present itself as a real alternative to some other seats which have not received so much publicity in recent months.

- 1. Andrew Kemp, "Hong Kong Arbitration Remains Resilient Despite Detractors", 20 October 2020, https://www.lexology. com/library/detail.aspx?g=c676482b-40dc-46e5-9e1e-74d7c617a079
- 2. Article 1, 13 and 14 of the Basic Law of the Hong Kong Special Administrative Region of the People's Republic of China ("Basic Law").
- 3. Articles 2 and 12 of the Basic Law.
- 4. Article 19 of the Basic Law.
- 5. For further information and a list of all Permanent and Non-Permanent Judges of the Court of Final Appeal visit: https://www.hkcfa.hk/en/about/who/judges/introduction/index.html
- 6. Statistics on arbitrations submitted to the Hong Kong International Arbitration Centre can be found here: https://www.hkiac.org/about-us/statistics
- 7. The Arrangement Concerning Mutual Assistance in Court-ordered Interim Measures in Aid of Arbitral Proceedings by the Courts of the Mainland and the Hong Kong Special Administrative Region, which came into force on 1 October 2019.





#### WHAT IS YOUR ROLE?

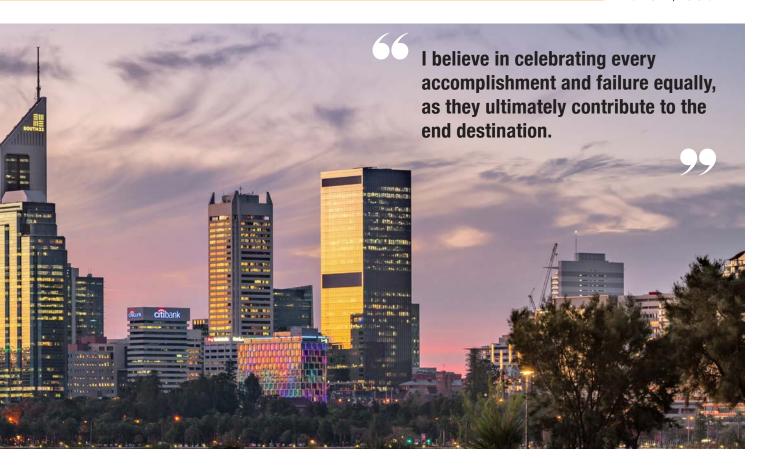
As Country
Director of
Australia,
I oversee
Driver Trett's
Australian
Business.

# HOW DID YOU GET INTO THE INDUSTRY AND HOW DID YOU GET TO WHERE YOU ARE TODAY?

Initially, I didn't have my mind set on a specific career, so I enrolled in one of the most diverse courses: a double bachelors in Engineering & Commerce. During my time at university I became more inclined towards engineering, however maintained a strong interest in commerce. On graduation, I ultimately accepted a graduate Planning & Project Controls role as the associated workload, responsibility, and career direction appealed to me the most.

Due to the passion that subsequently grew in planning, genuine interest in the projects I worked on, hard work with an outcomes-based focus, and exceptional support from well-wishing family, mentors and peers, I've been able to rapidly progress my career. I was managing the planning of minor projects (<A\$100m) within my first year in industry. By the latter stages of my second year, I was appointed as Lead Planner on a major construction project (>A\$500m) where I was able to get my first taste of large team management and site/international rotations. Following the successful completion of this project, which was delivered in recordbreaking time, I got the opportunity to become Lead Planner on a A\$10billion project which involved overseeing 64 integrated programmes of work on behalf of the Owner. This diversity allowed me to rapidly excel my expertise in the discipline and gave me a formal introduction to forensic delay analysis. The project was a success, receiving 14 awards including Project of the Year, and excellence in Project Management. Following this project, I went on to become Planning Manager for a major construction contractor, however as I grew a desire to become a Delay Expert and wanted to further diversify myself by adding value to multiple projects, for multiple companies across industry; I joined Driver Trett as a Senior Consultant.

Within the three years that I have been with Driver Trett, I have been promoted to Associate Director, Director, and most recently Country Director. Again, I attribute this to the items mentioned earlier (passion, interest, hard work, focus and support). Solving clients' problems has brought me repeat work. This repeat work has brought recognition and respect in industry which has resulted in reward.



# WHO HAS BEEN THE GREATEST INFLUENCE ON YOUR CAREER?

I cannot specify a single individual as there have been many great influences in my career. I can summarise them into three distinct groups:

- Family: I have a very supportive family that have always motivated me to achieve my best, and given me that little over-confidence that is at times needed to break barriers.
- Management: I have been fortunate to have some incredible managers (leaders) who have guided my growth, taught me the skills I have today, and directed me towards how to succeed further.
- Industry: I actively seek predecessors in my field who have 'done it'. With entire respect to their accomplishments, I set them as benchmarks and aim to better what they've already proven to be achievable.

# WHAT HAS BEEN THE BEST MOMENT OF YOUR CAREER?

I believe in celebrating every accomplishment and failure equally, as they ultimately contribute to the end destination. My most recent accomplishment, however, of being considered and subsequently appointed as the new Australian Country Director for Driver Trett, was a very special moment in my career.

# HOW HAVE YOU FOUND TAKING ON A NEW ROLE DURING LOCKDOWN?

Not too bad to be honest. COVID-19 and the associated lockdowns were unprecedented times for all. However, the best thing about humanity is that we find ways to turn constraints into opportunities. Through the use of technology, I found that not only have I been able to maintain communication with those near, but I've actually increased how much I communicate with colleagues and prospective clients across the nation and globe.

#### WHAT MAKES YOU TICK?

Achieving results makes me tick. Other than that, I've always drawn inspiration from race car driver Mario Andretti's quote, "If everything seems under control, you're not going fast enough."

#### TELL US A LITTLE-KNOWN FACT ABOUT YOU.

I'm of Indian descent, was born in Kenya, and moved to Australia when I was 6. I'm highly passionate about travelling and experiencing all the differing cultures and experiences the world has to offer – travel is the only thing you buy that makes you richer. Otherwise I have an unexplainable obsession with lions and support the best football club in the world, Liverpool FC – YNWA.



Singapore is no stranger to adversity. It has risen from colonisation, warfare and expulsion from the Federation of Malaysia to become an impressive city-state, considered by many as the benchmark on how a modern economy should operate.

It should therefore be no surprise to know that Singapore reacted decisively against the global pandemic. After entering a lockdown on 7 April 2020, which ended on 1 June 2020, this has been followed up with progressive measures that have allowed the level of COVID-19 found in the community to reduce to nearly zero and only 29 deaths being linked to COVID-19 at the end of 2020.

Compared with other countries, this is a remarkable feat. However, it has come at a cost. None more so than to the construction industry Singapore. From Singapore's construction sector being at a five-year peak in 2019 and contributing around S\$17.8 billion to Singapore's Gross Domestic Product ("GDP")1, there was a subsequent 46.6% contraction<sup>2</sup>. This has been exacerbated by global travel restrictions which affected the inflow of foreign labour that Singapore's construction industry is heavily reliant on<sup>3</sup>. Migrant workers were also the most badly affected by the COVID-19 pandemic, forming the largest share of infections in the country4.

In normal circumstances, such a situation could destroy a sector and the businesses found within it. So, the obvious question to ask is - how is Singapore managing to handle this drastic shift to its construction sector?

The answer is quickly gathered from an overview of the legal framework in Singapore.

#### PROTECTION THROUGH LAW

Singapore introduced the COVID-19 (Temporary Measures) Act (the "COVID-19 Act") which functioned as a legal moratorium to prevent amongst others, a huge increase in lawsuits and insolvencies arising from the inability to meet contractual obligations under construction contracts, supply contracts and performance bonds.

#### PART 2 OF THE COVID-19 ACT

On 20 April 2020, Part 2 of the COVID-19 Act which dealt with temporary reliefs for construction contracts, supply contracts and performance bonds came into force.

Under Part 2 of the COVID-19 Act, a non-performing party is generally eligible for relief where it is able to show that:

- (i) The contract is one which is entered into or renewed before 25 March 2020<sup>5</sup> or renewed automatically on or after 25 March 2020
- (ii) The contractual obligation which it is unable to perform or will be unable to perform is one which is to be performed on or after 1 February 2020<sup>6</sup> and
- (iii) The inability to perform the contractual obligation is one which is materially caused by a COVID-19 event<sup>7</sup>.

The reliefs under the COVID-19 Act<sup>8</sup> are not automatic and parties will need to issue a notification for relief under the COVID-19 Act. The period of temporary relief for construction and supply contracts and performance bonds was initially for a period of 6 months from 20 April 2020 but was further extended to 31 March 2021<sup>9</sup>. The types of reliefs under Part 2 of the COVID-19 Act can be categorised into two broad categories:

- (i) A legal moratorium on dispute resolution proceedings, and
- (ii) Additional reliefs from breach of contract.

Under the first category of reliefs, a party is prohibited from amongst others, commencing court and arbitration proceedings (except for international arbitration proceedings)<sup>10</sup>, seeking

enforcement on a judgment, award and adjudication determination (although there is no prohibition on commencing adjudication proceedings)11, seeking enforcement of security commencing insolvency proceedings<sup>12</sup>. Under the second category of additional reliefs, a party is prohibited from making a call on a performance bond in the seven days before the expiry of a performance bond<sup>13</sup>, the period of subject inability is disregarded for purposes of calculating any liquidated damages<sup>14</sup> and where the inability to supply goods or services in accordance with the terms of the contract is materially caused by COVID-19, it is a defence to a claim for breach of contract<sup>15</sup>

#### PART 8 OF THE COVID-19 ACT

By 30 September 2020, Part 8 of the COVID-19 Act which deals with contracts affected by delay in the performance or breach of a construction contract, supply contract or related contract came into effect.

Part 8 of the COVID-19 Act only applies in three scenarios, of which one is of interest to the construction sector.

This deals with a situation where a person who has rented goods used for construction work, is, or will be liable, for rental expenses due to a delay or breach in a separate construction or supply (or related) contract, and that delay or breach is due to COVID-19<sup>16</sup>.

Once an application for relief is submitted under Part 8 of the COVID-19 Act, an assessor may arrive at a just and equitable outcome, adjust the date by which a party is required to return the rented goods or the rental rate for the duration that the party holds possession of the rented goods<sup>17</sup>.

#### BUILDING AND CONSTRUCTION AUTHORITY ("BCA") CIRCULARS, PART 8A AND 8B OF THE COVID-19 ACT

A set of BCA circulars 18 were issued for public sector projects to expeditiously grant a default 4-month extension of time to contractors for the common period of delay from the start of the



circuit breaker on 7 April 2020 until the date when all dormitories are announced to be cleared on 6 August 2020. The government agencies would also co-share on an ex-gratia basis 50% of the prolongation costs for project delays due to the circuit breaker, capped at 1.8% of the awarded sum for a period of nine months.

The above scheme was soon extended to include private sector projects through Part 8A and Part 8B of the COVID-19 Act which came into effect on 30 November 2020. Under Part 8A of the COVID-19 Act, a universal extension of time of 122 days was granted to address delays that arose for the period between 7 April 2020 to 6 August 2020 (both dates inclusive)<sup>19</sup>. Under Part 8B of the COVID-19 Act, contracting parties are to co-share 50% of the qualifying costs<sup>20</sup> subject to a monthly cap of 0.2% of the contract sum per month, and a total 1.8% of the contract sum where such costs are due to delays caused by COVID-19 during the period between 7 April 2020 and 31 March 2021 (both dates inclusive)<sup>21</sup>.

#### **EFFECTS PRACTICALLY**

Although the law has sought to calm drastic measures being taken and/or imposed by companies operating in the construction sector, the reality, from a practical perspective, is that many issues remain uncertain and have yet to be addressed.

### CLAIMS FOR DELAY AND DISRUPTION

Without doubt, the COVID-19 Act and legal assistance provided has meant most businesses have protection from being imposed with liquidated damages from their employer to a certain extent; particularly for the lockdown periods encountered within Singapore. However, what must be remembered is that the number of workers and conditions upon how work can be completed has fundamentally changed for many, from what could have ever been contemplated when the works were tendered.

By way of simple illustration, workers will spend half a day for a bi-weekly and mandatory swab test, which in itself is a loss of productivity of 4% per month. Alongside this, many projects simply cannot get to the level of resource needed to maintain the original progress allowed for and anticipated.

We have been working on projects where labour levels are at half the level originally allowed. This is because many projects relied upon daily commuters from neighbouring Malaysia coming to Singapore, which remains suspended due to the COVID-19 levels found in Malaysia.

Such restrictions in other countries continue to affect delivery of necessary materials. For example, suspension of manufacturing in China and Malaysia means projects in Singapore are unable to obtain the necessary materials on time and are either having to wait or source materials, often at a premium, from other places.

Therefore, it is essential that careful attention is given to the contemporaneous documents being maintained for a project, and that avenues are still being reviewed to ensure:

- 1. Delays and reduced productivity can be identified and assessed; and
- Claims for both time and cost against delay disruption are addressing the wider issues.

How this occurs is not universal and will be specific to each case.

#### **CLAIMS FOR INCREASED COSTS**

The effects of the pandemic have meant, essentially, it is now more expensive to build in Singapore. Simply put, the cost per m<sup>2</sup> or m<sup>3</sup> has increased, and in many instances, increased significantly.

Both labour and material shortages are, naturally, causing a supply and demand issue whereby the average cost will, and has, increased. Similarly, significant extended periods of time are being required to build, which causes the time related costs to become much higher.

Even though some recovery of the increased costs is allowed under the new COVID-19 Act, it is, without doubt, leaving a significant hole in the construction sector as the original revenue anticipated will not cover the actual costs being incurred. As such, the obvious question being asked and needing to be answered is - who should pay?

Needless to say, all parties are, or should be, looking to consolidate what these additional losses are and the extent to which they can be recovered.

#### WHAT NEXT FOR THE CONSTRUCTION INDUSTRY IN SINGAPORE?

While the COVID-19 Act has temporarily staved off a multitude of lawsuits, with the impending deadline of 31 March 2021 looming over the construction industry, it cannot be ignored that parties must consider their positions very carefully; particularly when so many practical issues which remain unresolved will inevitably be commercially significant.

It is important to pay attention to the variation, recovery of loss and expense and extension of time provisions in the construction contract to determine if these provisions are sufficiently broad to accommodate the COVID-19 event and any consequential effects of the COVID-19 event. Generally, under the major standard form contracts in Singapore<sup>22</sup>, parties would likely be entitled to more time but not loss and expense for delays arising from a COVID-19 event. However, the nuances of the particular case must be considered along with the specific conditions and requirements placed upon the parties under the Contract. Alternative options such as, parties considering force majeure provisions or the possibility of raising frustration as a defense to a COVID-19 event cannot necessarily be ignored and may have to be addressed as disputes look to be resolved.

Notwithstanding this, these immediate challenges will emphasise the need to continue to push forward the construction industry in a positive way. With a strain being placed on traditional forms of building, such as the use of foreign labour, the need to re-think or accelerate new ways of construction should become paramount. For example, Singapore made Design for Manufacturing and Assembly (DfMA) a key pillar of the Singapore Construction Industry Transformation Map. It is a method of construction that involves a much more controlled form of construction, off site in manufacturing type conditions, which in turn reduces reliance on labour intensive methods of construction. There is no doubt that if anywhere can push these progressive measures forward, it is Singapore!



- Statista, https://www.statista.com/statistics/625473/gdp-of-the-construction-industry-in-singapore/
- Ministry of Trade And Industry https://www.singstat.gov.sg/-/media/files/news/ gdp3g2020.pdf.
- 3. See footnote 1.
- 4. See footnote 1.
- 5. Section 4, COVID-19 Act.
- Section 5A(1)(a), COVID-19 Act.
- 7. Section 5A(1)(b), COVID-19 Act.
- 8. Section 5A(1)(c), COVID-19 Act.
- 9. Regulation 3(3), COVID 19 (Temporary Measures) (Extension of Prescribed Period) (No. 2) Order 2020.
- 10. Section 5(3)(a) and Section 5(3)(b), COVID-19 Act.
- 11. Section 5(3)(n), COVID-19 Act.
- 12. Section 5(3)(c), (d), (e), (f), (g), (h), (i) COVID-19 Act.
- 13. Section 6(2), COVID-19 Act.
- 14. Section 6(5), COVID-19 Act.
- 15. Section 6(6), COVID-19 Act.
- 16. Regulation 3(3)(c) COVID 19 (Temporary Measures) (Part 8 Relief) Regulations 2020.
- 17. Section 37, COVID-19 Act.
- 18. Circular on Treatment of Claims Arising from COVID-19 in Public Sector Construction Contracts dated 25 September 2020 and Circular on Ex-Gratia Co-Sharing of Prolongation Costs due to COVID-19 dated 29 June 2020.
- 19. Section 39B(1) and (2) of the COVID-19 Act.
- 20. Qualifying costs include rent, hire purchase agreement, costs for maintaining construction site, costs to extend the validity period of any insurance obtained and performance bond issued, any rent / fee to store construction materials or equipment etc.
- 21. Section 39D(1), (2) and (9) of the COVID-19 Act.
- 22. For e.g. SIA Building Contract and PSSCOC 2020.



# GAME OF DRONES

Ashlea Read, Regional Director for Asia Pacific, Driver Trett Hong Kong

"Drones overall will be more impactful than I think people recognise, in positive ways to help society."

Bill Gates

# Eight trillion US dollars a year — that is the amount the construction industry is currently valued at.

However, as we are all aware, it is not the most efficient industry and a 2020 report on worldwide construction claims stated that the global average value of a construction delay dispute is a staggering US\$30.7 million<sup>1</sup>.

The use of commercial drones on construction sites is readily becoming common practice with usage rising by 239 percent year<sup>2</sup> over year from day-to-day use, to use in dispute resolution.

Drones are currently being used on construction sites to track equipment, mapping and surveys, security surveillance, site safety measures, structure inspections and to track project progress to name just a few.

Their efficiency and ever adapting capabilities allow them to reduce construction costs, improve workflow and accuracy and maintain real-time control based on real-time data, all of which reduce risks and can lead to higher certainty when working on construction projects. The data captured can also be integrated with BIM technology and therefore assist in the development of BIM models and increase efficiency levels throughout the entire life cycle of buildings.

Although drones are being successfully used on projects daily, how can they be positively utilised within dispute resolution?

We are all familiar with the phrase 'records, records', and yet a lot of the time, projects find themselves making the same mistakes time and time again. Why is it that we do not always learn from our mistakes?

Collecting data on a daily basis, especially on large mega projects, is certainly a timely and labour intensive activity and does not always allow contractors or employers the opportunity to react quicky to changes on the ground or for that matter be made aware of them in a timely manner. This inefficiency creates a huge opportunity for the use of commercial drones.

Delays are unfortunately common on construction projects and are often mismanaged as sourcing accurate data and records and establishing the progress of the works post event can be problematic. If a potential delay event on site is missed, or even missed for a few days, it can essentially result in significant setbacks, pushing projects over budget. Even if this happens a handful of times, it can sometimes result in millions of dollars of additional cost which could have easily been avoided.

How could this risk be mitigated using a drone? A 30-minute drone flight could potentially collect the same data that it may take a surveyor up to a day to collect and ultimately achieve a higher grade of accuracy.

However, one important consideration when seeking to utilise drones on site, is for any relevant regulatory restrictions that may apply. In many countries, there are restrictions relating to the use of drones, especially in sensitive areas such as the aviation sector.

The use of daily drone flights monitoring and tracking the progress of a project could be invaluable in the event of a dispute. More often than not the necessary records are incomplete, missing, or simply do not exist, leading to conflicting conclusions between the parties, and often, assumptions being made which can subsequently lead to disputes becoming lengthy and costly to all.

Alternatively, the collection of data could be used jointly between the parties to assist with extensions of time being agreed and a dispute being avoided altogether, when both parties have clear access to the same facts. These fundamental factual records may reduce the scope for conflicting delay events and subsequently reduce dispute costs.

For the parties, the experts, and importantly the tribunal, being able to view accurate progress weekly or daily is a huge advantage.

Expert evidence and particularly that of a delay expert, can often be criticised for being too theoretical, or for using an approach too complicated for a 'non-delay' person to easily understand.

# WHAT DOES THE FUTURE HOLD FOR DRONES IN DISPUTE RESOLUTION?

It is yet to be actively seen how drones can be used in construction disputes. However, in my opinion, it is just a matter of time before their use becomes common practice.

The speed and ease that a drone can accurately collect data has revolutionised the construction industry and drones will only be used more and more, especially as technology continues to advance which will only aid the dispute resolution process.

Although there is not much data generated yet as to the successful use of drones in the dispute resolution process, I have no doubt that the use of drones will 'take off', so until then I guess all we can do is watch this 'air' space.

- . Global Construction Disputes Report 2020 Arcadis
- UAVs are changing the world, one industry at a time. MARCO MARGARITOFF JULY 9, 2018





# HOW TO CLAIM COMPENSATION FOR IDLING OWNED PLANT

# DEPRECIATION COSTS OR RENTAL VALUE?

Jungguk Lee Operations Manager Driver Trett In order for a delay cost claim to be compensated, the costs should be justified, reasonable and provable. Idling power-driven mechanical plant<sup>1</sup> ("Plant") is one of the categories of cost that most often appears in construction delay claims.

The costs of idling plant owned by a contractor ("Idling Owned-Plant") are generally assessed based on the costs of ownership. As such, most claims for Idling Owned-Plant are likely to be limited to interest, maintenance and depreciation associated with that plant. Depreciation is often the largest portion of such costs and is an annual accounting cost, which is calculated based on purchase value, anticipated life-span and salvage/re-sale value of the Plant.

The concept of separate standby rates in a schedule of plant rates is normally based on the premise that during periods

when the plant is not able to work, the contractor incurs reduced costs because of the reduced wear and tear and cost of operation. It also reflects that a large part of the 'actual' depreciation (as opposed to any 'fiscal' depreciation rules) of items of major plant and equipment directly owned by the contractor arise from the consumption of hours of the 'working life' of the plant and equipment.

Challenges frequently arise with respect to the quantification of claims for such costs, when the Plant has already reached the end its anticipated life-span such that the cost of depreciation no longer exists. In such situations, contractors often try claiming the hire value of such Plant to eliminate the limitations of claiming depreciation costs in the case of older Idling Owned-Plant.

This article explores:

- 1. Claims under Contract;
- 2. Claims for Damages; and
- How to advance hire value claims for plant in event of delay.

# **CLAIMS UNDER CONTRACT**

# The compensation to which a contractor is entitled, arising from delays for which the Employer is responsible, may be prescribed by the terms of the underlying contract.

For example, FIDIC contains provisions that allow a contractor to be compensated for additional costs incurred due to delay or disruption and the word "Cost" is defined<sup>2</sup> as being "...all expenditure reasonably incurred (or to be incurred) by the Contractor, whether on- or off-site, including overhead and similar charges, but does not include profit...".

Julian Bailey states<sup>3</sup> that such entitlement does not usually extend to permit a contractor to recover loss or damage ("Damages") that do not represent costs directly incurred, for example loss of profit opportunity ("Lost Profit").

The specific contractual provisions regarding Idling Owned-Plant are illustrated in the leading case of Alfred McAlpine Homes<sup>4</sup>. It was held that a contractor's entitlement under the JCT standard form<sup>5</sup> of contract to recover direct loss and/or expense ("Direct Loss/Expense") for delay did not entitle it to recover a notional hire value in respect of Idling Owned-Plant.

The contractual compensation under a contract is generally the actual cost incurred by the contractor for Idling Owned-Plant, where that cost is often measured as the depreciation in the value of the plant. This is because construction contracts such as the JCT standard form often have clauses excluding liability for consequential loss.

# **CLAIMS FOR DAMAGES**

Where a contractor suffers damages as a consequence of an Employer's breach of contract, and the recovery of costs is not addressed in the contract, entitlement to damages might nevertheless exist.

Loss of profit seldom qualifies as an additional cost item. However, take for example, a situation where a particular item of Plant is kept on a particular site longer than anticipated and this results in the need to hire an equivalent item of plant on another contract to which the Idling Plant was originally planned to be moved to.

For Owned Idling-Plant Costs, it could be argued that delays due to an Employer's breach, which has the effect of the Owned-Plant being required on site longer than originally planned, may result in loss of profit or loss of opportunity costs. However, without clear evidence of lost profit or opportunity, any claim for Idling Owned-Plant is likely to be limited to interest, maintenance and depreciation. This is because lost profit often depends on whether there is strong demand for hire in the construction market for the particular plant at that time.

# HOW TO ADVANCE HIRE VALUE CLAIMS FOR A PLANT IN THE EVENT OF DELAY

In the case of Sunley<sup>6</sup>, it was held that the costs recoverable in the event of a prolongation claim being successfully pursued were limited to the depreciation costs of the Idling Owned-Plant. There was no clear evidence as to disturbance of the contract or loss of profit. It was held that in the absence of evidence of loss of profit, the damage claimable was limited to depreciation, interest and maintenance.

In the Converse<sup>7</sup> case however, the contractor was deemed entitled to recover the fair and reasonable hire value of a dredger on the basis of evidence, which was considered sufficient to establish that, but for the delay, the Idling Owned-Plant would actually have been used on other work and that such other work was available and awaiting the use of this Plant. Similarly, in the Cotton<sup>8</sup> case, the plaintiff successfully proved that it had other work available in connection with which the claimed Plant would have been used but-for the delay.

In the Bahen Wright? case, the claimed hire value of the certain Plant was denied on the grounds that the Plaintiff had submitted inadequate evidence of availability of other use, and no material evidence of the availability of a hire market for the Plant in question.

### **ADJUSTMENT**

In Laburnum<sup>10</sup>, it was held that the fair hire value of Idling Owned-Plant was a proper basis for Claims for Damages but also that the hire value should be multiplied by a percentage (50 per cent) to account for the lack of wear and tear on the Idling Owned-Plant.



# **MITIGATION**

It should also be noted that a contractor has a duty to mitigate its damages and hence find alternative uses for Idling Plant where available. In the Phoenix Bridge<sup>11</sup> case it was highlighted that if a contractor can hire or use Idling Plant during a delay period and elects not to do so, it would then be difficult to recover damages based on a hire value.

# **EQUIPMENT RATE MANUALS**

There are popular equipment rate manuals available for reference such as the RICS Schedule and AGC<sup>12</sup> Equipment Cost Guide. Anyone using such manuals should thoroughly read and understand the manuals when using them to assist in calculating the components relating to Plant ownership rate and/or a hire rate and determining Plant operating costs. However, the application of published guides is limited to a pricing exercise and is not always appropriate for a damages assessment for costs of delay.

# CONCLUSION

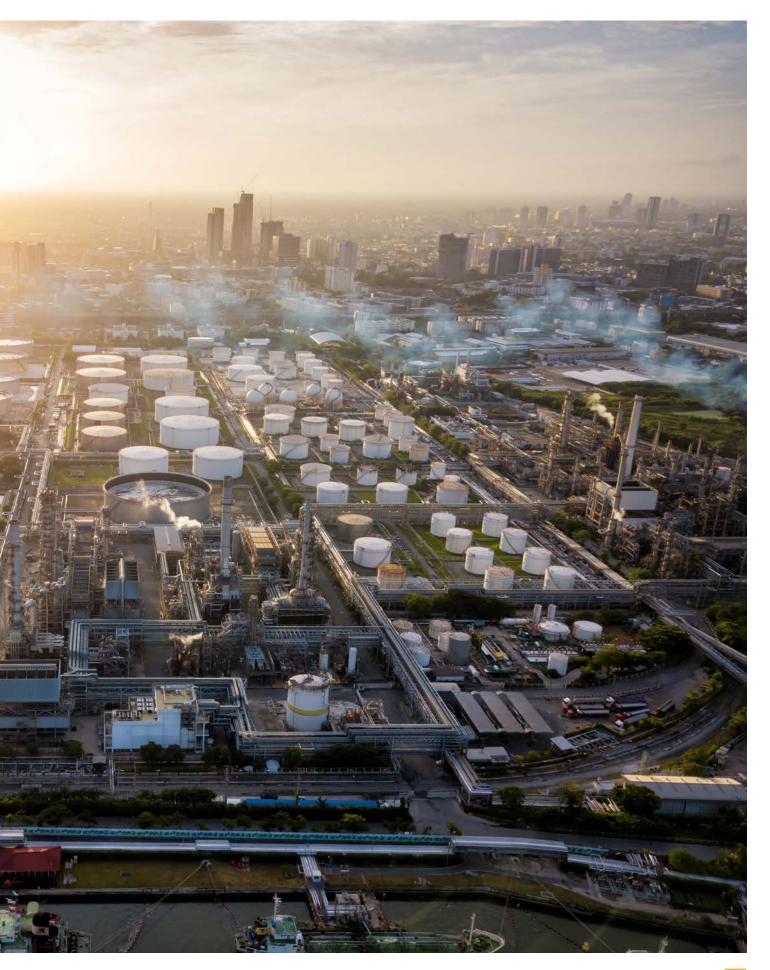
In order to succeed with a claim for Idling Owned-Plant based on hire value, a contractor will need to be able to:

- Prove that the Idling Owned-Plant could have been hired out, or that it would have been used on other work but for delay; and
- 2. Show that a reasonable hire rate has been demonstrated.

It is not usually appropriate to simply use commercial pricing sources as proof of loss. It is necessary to demonstrate the actual loss which, more often than not, will comprise actual recorded items such as depreciation and finance related costs.

- Plant as used by the builder or contractor in construction work may be divided into two classes: 1. Small and nonmechanical plant and tools 2. Power-driven mechanical plant, which consists of such plant as lorries, backhoe loaders, concrete mixers, compressors, cranes, excavators, dumpers, tractors, rollers, etc.
- 2. FIDIC Sub-Cl.1.1.4.3
- 3. Bailey, Julian. Construction Law 11.131
- 4. Alfred McAlpine Homes North Ltd v Property & Land Contractors Ltd (1995) 76 BLR 59.
- 5. 1980 Edition, clause 26.
- 6. Sunley & Co Ltd v Cunard White Star Ltd [1940] 1 K.B. 740.
- 7. Converse et al. v. U.S
- 8. Cotton et al. v. U.S.
- 9. Bahen & Wright, Inc. v. United States, 94 C. Cls. 356, 360, 361, 365
- 10. Laburnum Construction Corporation (1964) 163 Ct. Cl. 339.
- 11. Phoenix Bridge Co. v. United States, 86 C. Cls. 603, 631
- 12. The associated General Contractors of America Contractors







# Our team gains a new world class expert...



It was with delight that we welcomed Quantum Expert David Merritt to Driver Group in October 2020, based in our Dubai office. David is a Chartered Quantity Surveyor and Chartered Civil Engineering Surveyor with over 35 years' experience in the construction industry.

On David's appointment to the Group, Mark Wheeler, Chief Executive Officer said:

When the opportunity came along to talk to David about joining our team, I was very keen to ensure we went the extra mile to secure his services. He is extremely professional and very experienced, not only in delivery but in business management and strategy. David is highly respected by his industry peers and someone whose values entirely reflect ours. I am delighted to have David as part of the Driver Group team.

Based in Dubai, David has been engaged by contractors, private and public sector employers and various professional practices. David's major sector experience includes buildings, infrastructure, marine and energy projects across Europe, Africa, Far East and the Middle East where he has worked on many high-profile projects with values in excess of \$5 billion.

David's main area of technical expertise is in evaluating contractual claims, covering such subject matters as prolongation, disruption, acceleration, cost escalation, depreciation, head office overheads, and loss of profit claims.

His move to the Group was influenced by various elements including the rich heritage and pedigree in the construction claims and expert witness sector, the passion shown by Mark Wheeler, CEO, and the calibre of the Middle East team and the Group's global practitioners.

On why he made the move to Driver Group, David commented:

"It was an easy decision really!

When I met with Mark Wheeler, the Chief Executive Officer, and he set out his plans and vision for the Driver Group, I was on board straight away. I knew of Driver Group and their rich heritage and pedigree in the construction claims and expert witness sector, but it was Mark's enthusiasm and commitment to the business that won me over.

Driver is passionate about its people and its clients, and that resonates with me. They do not compromise on quality, which of course is very important.

In short, Driver Group was a great fit for me. They are a world class business in a niche industry, with some of the very best practitioners around. Driver Group has always had a very strong presence in the United Kingdom, but it is now firmly established and recognised as one of the leading commercial, claims and expert witness businesses in the world.

The Diales Expert Witness brand is globally recognised as one of the very best, so that was a big attraction. When you add into the mix an enviable list of blue-chip clients, it was an easy decision."

Phil Duggan, Head of Diales Middle East said:

"David is an excellent addition to our team in the Middle East. Not only does he provide us with another top quality expert to assist clients old and new, but he also brings a wealth of knowledge and experience that will no doubt prove invaluable to the development of all of our team."

# ... and welcomes three new starters to the APAC region



Mark Murphy Director APAC

A Quantity Surveyor with over 18 years' experience in the construction industry, Mark has worked for Professional Quantity Surveying (PQS) firms engaged on large scale commercial and residential projects, and for owners, main and sub contractors, on contract and claims matters. Mark has extensive international experience, working on projects across Asia, the Middle East, North Africa and Europe. He is a Certified Assessor and Counsellor for the Royal Institution of Chartered Surveyors.

We are delighted that Mark has joined our team based in Singapore.



Adrian Kong
Director and Delay Expert
APAC

An Experienced Delay Expert with over 15 years' industry experience, Adrian also joins our Singapore office as a Director and brings with him extensive knowledge and experience from projects across Asia Pacific, North America and Europe.

Adrian has testified as a Delay Expert in Court and Arbitration proceedings and has particular expertise in offshore construction, oil and gas, refineries and petrochemical plants.

We are delighted to have him as part of the team.



**David Satchell** Technical Expert APAC

David is a Structural Engineer with over 25 years' industry experience, from projects spanning Australia, Hong Kong, Macau, Vietnam and the UK.

David has extensive experience in the design and construction supervision of a variety of structures, including: large and complex steelwork structures and high-rise reinforced concrete buildings, and he has been cross-examined twice.

David joins our team in Hong Kong.



# Article byte



# NOT BITING THE HAND THAT DOESN'T FEED YOU

Stuart Baird, Regional Operational Director Driver Trett, UAE

In this article published on LinkedIn, Stuart Baird reflects on Driver Trett's experience in managing disputes across the Middle East, where we work with a number of contracting entities who, as part of a wider business strategy, do not fully protect and/or pursue their entitlement under the contract as they believe it may be considered as acting badly towards an employer or, in the context of the title, biting the hand that feeds them.

Read the article to find out some techniques that can be used by a contractor when submitting a claim to maintain a positive working relationship with an employer and at the same time, fully protect the entitlement to receive additional time and/or payment under a contract.



Scan the QR code to go to LinkedIn and read the article in full.

https://www.linkedin.com/pulse/biting-hand-doesnt-feed-you-stuart-william-baird/

# CONTACT US



With 31 offices across 17 countries, spreading over 5 continents, we understand the needs of our clients - their culture, and the culture of their location - enabling us to understand their problem, and set about the solution.

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