

How to get it right from the ground up

A follow-up paper to our survey on construction
disputes focusing on solutions for the
construction sector's perennial problems

Russell
McAugh



Introduction

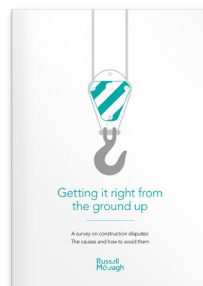
In August 2018, Russell McVeagh published a report on construction disputes: 'Getting it right from the ground up', which contains results of a survey of construction industry participants, including principals, contractors, project managers, engineers, and consultants.

The key findings of that survey were as follows:

- NZS 3910 is still the most popular standard form contract, with over 80% of respondents basing their contracts on it.
- The number one factor identified as contributing to disputes is a lack of understanding of contract obligations within the industry, with bespoke contract amendments reportedly not always being read and understood by all parties.
- Both principals and contractors identified Principal variation as the leading cause of delays. However, they did not agree on what the other leading causes were. Principals blamed the slow pace of construction and the consent process, while contractors blamed the quality of design.
- Over 70% of respondents expect disputes to rise over the next two years. Contractors are more pessimistic – 91% expect disputes to rise in the next two years.

This publication follows on from our survey results to focus on solutions for the sector's recurring issues. It draws on further engagement with construction sector stakeholders and international reports to better understand mechanisms for proactively avoiding the causes of construction disputes in New Zealand.

Discussions with industry stakeholders have deepened our understanding of mechanisms that could be adopted or strengthened to help avoid disputes. Stakeholders are calling for better quality design, more collaborative procurement, improved project management and proactive contract administration to help avoid disputes in the construction sector. When these fail, there is scope for resolution processes to be utilised more effectively.



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International Experience

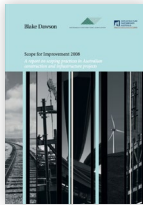
Our survey findings echoed similar findings from numerous international reports and events published over the last three decades, including:



The Latham Report: Constructing the Team (UK 1994) which resulted in legislative change in the UK. This, in turn, led to the Construction Contracts Act 2002 (NZ).

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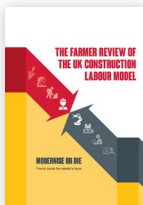
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Blake Dawson Waldron Report: "Scope for Improvement" (Australia 2006). This focused on the "pressure points" with Australian construction and infrastructure projects. Similar to current circumstances in New Zealand, it was written when construction activity was ostensibly booming.

FIND IT ONLINE

<http://bit.ly/2tFzAZv>



Farmer Review: "Modernise or Die" (UK 2016). This found that the UK was still struggling with the issues identified in the Latham Report.

FIND IT ONLINE

<http://bit.ly/2E9eQhN>



NZ Property Council: "The Great Construction Debate" (NZ 2018). This was a panel discussion, involving contractors, principals and consultants. It considered the current barriers, challenges, opportunities and solutions for the New Zealand construction industry.

FIND IT ONLINE

<http://bit.ly/2GHCyoZ>

The common themes raised as to the causes of disputes have been summarised in the chart on pages 4 and 5.

In a world where we are used to “change” being the only constant, by contrast, these reports, combined with our own survey results depict, internationally, an industry where the same issues have continued to arise throughout the last 25 years. It seems that the key factors causing disputes are the same worldwide and remain much the same in 2019 as they were in 1994.

The collapse of Carillion plc (employing over 40,000 people) in January 2018, was a high profile example.

“Carillion was indicative of an industry struggling to cut down on inefficient business models and worksite practices, with little ability to innovate or modernise.”







Consistent with his 2016 report, Mark Farmer has suggested that Carillion was indicative of an industry struggling to cut down on inefficient business models and worksite practices, with little ability to innovate or modernise. A number of factors are said to have contributed to its collapse:

- accepting too many projects which transpired to be unprofitable;
- overly complex internal management structure;
- overly optimistic assumptions with insufficient regard to contractual risk; and
- an accumulation of poorly managed contracts, delays to works, and payments withheld by clients.

In New Zealand, recent high profile insolvencies include Ebert Construction, RCR Infrastructure (NZ) and Arrow International. The country’s largest contractors have also suffered well publicised challenges on significant projects.



What solutions are there to these issues?

CAUSE OF DISPUTES	LATHAM REPORT (UK 1994)
 Unrealistic time/cost	✓
 Poor scoping	✓
 Skill shortage	✓
 Poor risk allocation	✓
 Wrong contract strategy	
 Changing customer design requirements	✓
 Not understanding costs of changes	
 Bad plan of execution	
 Little constructability input	
 Boom/bust cycle	
 Insufficient standardisation of contracts	✓

BDW REPORT (AUS 2006)	FARMER REVIEW (UK 2016)	RUSSELL MCVEAGH SURVEY (NZ 2018)	PROPERTY COUNCIL DEBATE (NZ 2018)
✓	✓	✓	✓
✓	✓	✓	✓
✓	✓	✓	✓
✓	✓	✓	
✓			✓
	✓	✓	
	✓	✓	
	✓		✓
	✓		
	✓		✓
✓	✓	✓	

Summary of recommendations

Drawing on our survey results, international learning and discussions with clients and key stakeholders in the industry following the release of our report, our recommendations for the New Zealand market are as follows:



Procurement methods need to evolve

Where possible, finalisation of the contract should be collaborative, and the preferred Contractor should be involved in the negotiation of the contract, rather than simply given concluded terms to price. The Principal and the Contractor both need to ensure they are happy to do the deal recorded in the contract.



More realistic timeframes

Incomplete and/or poor quality design frequently results in the Contractor incurring delays and additional costs. High quality, well developed designs and specifications should be included in the contract documents. This may require principals to allow more time in the development programme to finalise the design before the Contractor starts work. Timescales and price agreed by contractors are consistently shown to have been unrealistic.



Better training

High quality training, resulting in accreditation, may assist to improve standards of Engineers to the contract. There are a number of excellent Engineers but quality is not consistent.



Build better teams

Where a Principal has a significant pipeline of work the emphasis should be on building an effective team, including strong, collaborative relationships with preferred consultants and contractors. Providing some assurance that a Contractor will be engaged to perform a pipeline of work allows for greater investment in recruitment and training and encourages long-term cooperation. Given the significant infrastructure and other construction works planned by the public sector, being at the 'front of the queue' as a Principal is likely to be a key strategy to ensure effective procurement.



More effective dispute resolution

The dispute resolution processes can be used more effectively by the parties. Adjudication works best when used proactively, to resolve disputes as they arise. Dispute Resolution Boards are also worth considering, particularly on larger projects.

Four key areas for improvement consistently stood out – better design, better contracting, better project management and better dispute resolution.

Better design

Designs which are incomplete and/or poor quality at the time of contracting have been identified as a key cause of disputes. Committing to time and cost only once the design has been completed, to a high standard, would be expected to significantly reduce the risk of construction disputes. An emerging tool available to assist in this regard is Building Information Modelling.

Building Information Modelling (BIM)

Commentary by Will Smith from WJS Advisors



"Data is the new currency in the construction industry ecosystem. It is part of the digital landscape that is redefining the world.

It offers great opportunities for improving construction delivery. There is an urgent need for owners and principals to get on board and invest in BIM and digital capability as a priority on future projects.

"Designers and engineers need to redesign their workflows (and business models) to incorporate these practices of collaboration."

My recommendations are:

- The New Zealand BIM Handbook provides a solid framework and is well worth a read for those new to the area.
- On a typical project, engagement with BIM experts should occur in the pre-design phase, even before engaging the design consultants, and continue for the whole life of the project, including operation of the asset.
- The BIM data and models should be included as a contract requirement (as opposed to for information only) and the models should be used to continuously analyse the progress of design

and construction. This allows for continuous detailed analysis of the interrelationship between physical and functional design and construction characteristics of an asset in a three dimensional model.

More project owners are engaging constructors earlier in complex projects as constructors can play a major role in transforming the industry. Designers and engineers need to redesign their workflows (and business models) to incorporate these practices of collaboration, which will potentially provide more certainty for all participants, reduce risks of procuring projects with incomplete designs, reduce construction duration and improve productivity and quality.

In the end, this will be an owner led industry transformation, but already owners are starting to realise the importance of expert information management and the need to invest in digital capability and BIM management discipline skills, time and resources up front."



Better contracting

Commentary by Russell McVeagh

Given the issues currently plaguing the New Zealand construction industry, we thought it appropriate to ask whether NZS 3910 was at fault, having regard to its very broad adoption by the industry. Anecdotally, two thirds to three quarters of all non-residential projects use 3910.

"Collaborative sharing of risk and reward at the heart of modern procurement."

However, the commonality of the causes of dispute in many different jurisdictions and throughout three decades of observation led us to conclude that NZS 3910 is not specifically at fault. It would appear likely that it is no better or worse than standard form contracts fulfilling equivalent roles in other countries.

We note that a “lack of understanding of the contract terms” is a key cause of disputes in New Zealand. 3910’s wide use in New Zealand would suggest a large proportion of the industry should be familiar with it. Accordingly the “lack of understanding” is much more likely to be arising as a result of the increasing use of longer and more complicated special conditions, and as a consequence, disputes would likely be reduced if fewer special conditions were considered necessary. An updated or alternative standard form contract is likely to be required to achieve this change in behaviour.

“... the NEC4 suite of contracts from the UK has some appeal.”

We have considered whether there is an alternative contract form available in another jurisdiction which could be adopted here. In this context, the NEC4 suite of contracts from the UK has some appeal. The suite was updated in 2017 (and so represents the most up-to-date of the standard form suites) and includes not only long form construction contracts but also professional services contracts; subcontract and supply contracts, and short form contracts, all of which use a consistent terminology and can be used together to structure multiple layers of contracting for a particular project.

NEC promotes the contract suite as putting “collaborative sharing of risk and reward at the heart of modern procurement”.

Better project management

Commentary by Jeremy Hay, Managing Director at RCP.



“The construction environment has changed substantially over the years. Projects are getting larger and more complex. However, procurement strategies have not kept up. There is an urgent need for clients to improve their procurement strategies.

My recommendations include:

- clearly define the brief and feasibility hurdles early with a small team of trusted advisors;
- appoint the best team for the project - not necessarily the cheapest;
- set realistic programmes and ensure buy in from the team; and
- define the form of contract and engage with the market early.

Designers and contractors should be set up to succeed. That way the project as a whole will succeed. Specifically:

in relation to designers:

- set a fair fee budget to allow proper outputs;
- set a reasonable design programme with review/hold points; and
- control changes especially late in the design phase and absolutely limit them during construction.

in relation to contractors:

- provide comprehensive and detailed design documentation;
- allow for a reasonable delivery programme;
- acknowledge that changes in the project have time and cost consequences;
- accept a reasonable and clear risk allocation; and
- opt for a quick fire decision/dispute framework.”

Better Dispute Resolution

Commentary by Russell McVeagh



When problems arise on a construction project, there are a number of ways to resolve them. They include:

- Engineer's Decision
- Expert's recommendation
- Dispute Board
- Adjudication
- Arbitration.

Better use can be made of these processes with three issues standing out:

1. More training for engineers

Our survey identified dissatisfaction with the performance of engineers to the contract. Under NZS 3910 or 3916, the Principal must appoint a "suitably qualified" person to act as the engineer, but qualifications and experience vary amongst engineers to the contract.

Two possible solutions are:

- The gold standard would be the creation of a recognised industry entry-level qualification. This could follow a similar approach to the accreditation program put in place by ICE in the UK to better equip its project managers and supervisors with the skills required to fulfil their roles under NEC engineering and construction contracts. This is a medium-long term solution. It would need industry buy-in, funding and a host organisation.
- A short-term solution is less centralised education, perhaps using an "open source" approach in which training is made freely available.

2. Experts and Dispute Resolution Boards – be aware

Parties are reminded by NZS 3910:2013, that they can agree to refer disputes to an expert for a recommendation (cl.13.2.3). This is worth bearing in mind for lower value disputes, or where the parties hold an expert's opinion in particularly high regard.

Dispute Resolution Boards are also worth considering. This is a standing panel, appointed at the outset of the contract, usually of one or three people. They stay informed of the progress with the project and provide a means by which issues can be quickly resolved before they become disputes. The New Zealand market has been slower to adopt Dispute Resolution Boards, but particularly with larger projects, they can be well worth the investment.

3. Adjudication – be proactive

Adjudication should provide a mechanism for a quick and inexpensive resolution to disputes arising under a construction contract. Issues can if necessary be referred for a decision as they arise, so that parties can get an answer and get on with the project.

In many cases parties stockpile claims, and matters remain unresolved until the final account negotiations. By then, many of the potential advantages of adjudication may be lost.

Both contractors and principals can make better use of adjudication. Claims could often be made more promptly and proactively. Doing so in the right case allows the parties to proceed with clarity about their rights and liabilities, rather than allowing disputes to fester until the final account.

APPENDIX: Summary of survey results

Mitigating risks in construction contracts is a key concern for all respondents in the sector we surveyed in 2018.



Contracting

The number one factor identified as contributing to disputes is a lack of understanding of contract obligations within the industry, with bespoke contract amendments reportedly not always read and understood by all parties.



Delay

Both principals and contractors identified principal/employer variation as the leading cause of delays. However, they didn't agree on what the other leading causes were. Principals blamed the slow pace of construction and the consent process, while contractors blamed the quality of design.



Disputes

A clear majority (over 60%) of respondents believe disputes in the construction sector have been on the increase for the last two years. While some causes of a rise in disputes appear to be structural to the industry, others, particularly around relationships, risk allocation and contractual terms, are within the parties' control.



Solutions

Suggested ways of decreasing the risk of disputes fall into two broad categories: improving the construction contract and improving industry conditions. Principals may wish to focus on the need to remedy the skills shortage through training programmes and immigration, while contractors are calling for more standardisation of contracts and rethinking risk allocation.

NZS 3910 IS MOST COMMON, WITH SOME DIVERSITY

- NZS 3910 a clear favourite: over 80% use it
- Limited use of NZIA/ NEC/ FIDIC standard forms and bespoke contracts

Over **80%** of respondents base their contracts on

NZS 3910

SEE PAGE 4 OF SURVEY RESULTS

VARIATION, DESIGN QUALITY, SHORTAGES AND INSOLVENCY

- Respondents felt that principal/employer variation is the leading cause of delay
- Principals and contractors did not share the same views on the other causes of delay

Top causes of delay viewed differently by **Contractors** v **Principals**

SEE PAGE 5 OF SURVEY RESULTS

ON THE INCREASE; DRIVEN BY POOR CONTRACT UNDERSTANDING, ESPECIALLY AROUND RISK ALLOCATION

- Lack of understanding of contract is by far the biggest perceived cause of disputes (over 60%)
- Over 70% of all respondents expect disputes to increase in the next two years
- Contractors are more pessimistic – 91% expect disputes to rise in the next two years

Over **70%** of respondents expect disputes to rise over the next **two years**

SEE PAGE 6 OF SURVEY RESULTS

PREPARATION, STANDARDISATION, RELATIONSHIPS

Pre-contract

- More sophisticated assessment of project risk
- Fairer allocation of contractual risk
- Greater standardisation of contracts

During contract

- Focus on relationship and project outcome
- "Empowered" project committees to resolve disputes

External

- Meeting the skills shortage: immigration and training

100% of respondents favoured negotiation between parties over more formal **dispute resolutions**

SEE PAGE 9 OF SURVEY RESULTS

Contact one of our experts

Please get in touch if you would like to discuss how the report's findings may be relevant and helpful to you and your organisation.

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