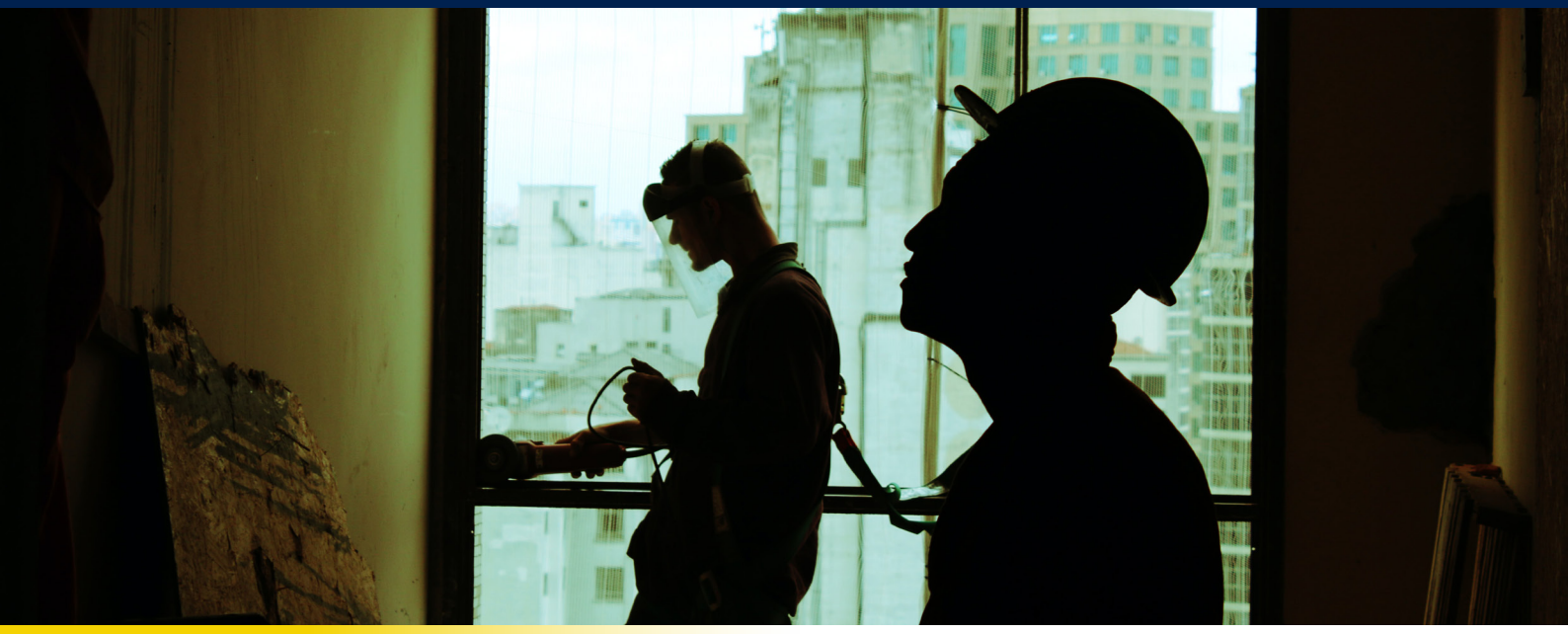

Overhaul coming to the regulation of engineers

By Sam Dorne

The Ministry of Business, Innovation and Employment (MBIE) undertook a consultation in 2021 to reform the regulatory regime for engineers. The reforms will move away from a voluntary accreditation scheme into a formal regulated regime.

Current regulations

Banking, insurance, doctors, solicitors, food, transport, aviation and pharmaceuticals are heavily regulated in New Zealand. Engineers, the people responsible for construction work in New Zealand (buildings, roads, bridges), are currently largely unregulated.

Instead, what currently operates is a largely voluntary accreditation scheme from the industry's primary professional organisation – Engineering New Zealand.

Presently there are no restrictions on engineers carrying out or supervising any engineering work on buildings. The qualifications bestowed by such professional organisations are generally not designed to ensure competence and experience for high-risk work, nor do they prevent engineers from working in areas outside their expertise. There is no regulatory oversight which holds engineers to account and even if the regulatory body revokes their accreditation there is nothing in place to stop that individual from continuing to design a building.

In a statement accompanying the proposed regulatory changes, MBIE said:

> *While many of New Zealand's engineers are highly professional, improvements are needed to the engineering regulatory system. In 2021, MBIE consulted on a proposed new regime to ensure engineers are competent, behave ethically and are held to account. The new regime aims to further reduce the possibility of defective engineering work and improve public confidence in the profession.*[1]

A brief history of New Zealand's engineering woes

There are obvious real world consequences for having a lax regulatory framework. A number of serious issues have cropped up over the years which poor engineering standards have, at least in part, contributed to:

- In February 2011 the CTV building collapsed during the Christchurch earthquake, killing 115 people. Following an investigation, the

1 https://www.mbie.govt.nz/have-your-say/proposed-occupational-regulatory-regime-for-engineers/

design engineer was held to be insufficiently experienced and his supervisor senior engineer (who still practices to this day) was found to be providing inadequate oversight.
- The ongoing leaky home crisis, where poor engineering and oversight is believed to have been a large contributory factor in what is estimated to be over 11 billion dollars' worth of repair and replacement costs.
- A study in 2019 showed 1100 buildings have defective or missing concrete or reinforcing steel.
- Havelock North's water contamination in 2016 left four people dead and over 5000 people ill after a structural failure due in part to poor engineering caused campylobacter contamination.

The proposed overhaul

Earlier this year Cabinet agreed to introduce legislation to establish a 2-tiered regulatory regime, with a new regulator established to oversee and enforce the regulations.

Gone is voluntary certification. Instead, all engineers must be registered and subject to oversight by the new regulatory body.

Where there is high-risk and safety-critical work, a "top tier" licensing regime will be introduced to sit alongside the new reforms.

Like in many other industries, the new regulator will be responsible for setting minimum standards and ensuring that these standards are maintained throughout an engineer's tenure, as well as establishing a code of ethics and dealing with complaints and disciplinary matters – including powers to suspend or revoke an engineer's licence to practice.

In the 2021 public consultation, 81% of the 250 submissions agreed that engineers should be subject to occupational regulation.

Public support for reform

Like the industry itself, the public seem largely on board with the reforms.

Maan Alkaisi is a Professor of Engineering at Canterbury University. His wife was killed in the CTV building collapse and he leads the CTV Families Group. In his submission on MBIE's discussion paper on behalf of the families he expresses regret no-one has been held accountable for the CTV collapse despite the investigation's findings that the engineer responsible worked outside his competence and was not properly supervised.

Professor Alkaisi says his group strongly supports the MBIE proposals. The proposed scheme sets more robust guidelines for engineers and a higher engineering practice standard. He added that the new system would also improve accountability.

Conclusion

Currently there are many extremely competent and experienced engineers. However, the lack of mandatory regulation means it can be difficult to identify those who do not meet a minimum basic requirement to practise, let alone prevent them from practising. The reforms will address these issues. A regulatory body with real teeth will only be good for the public. These reforms promise to recognise the vast majority of competent engineers and make engineering work safer for everyone.

The Bill is currently being drafted and is expected to be introduced in late 2022/early 2023 with Royal assent unlikely until 2024. It is likely to take at least six years for the new regime to be set up once assent is given.

ABOUT THE AUTHOR

Sam Dorne is a member of the NZDRC's Knowledge Management team and provides technical support to the Building Dispute Tribunal. Sam recently returned back to NZ after nearly 19 years of living in the UK where he spent the last several years working as a civil litigation solicitor mainly dealing with the recoverability of legal costs and consumer claim cases. He has experience in advocacy, case management and legal drafting and had several cases go to the Court of Appeal in England.