Case Study: Canterbury Earthquake Procurement Support
As the CEO of the Earthquake Commission it has been vital to ensure an effective and highly flexible procurement approach in managing the re-instatement of insured residential properties. The attached case study provides a short overview of a huge, multi-agency team effort to support a multi-billion dollar contract and has many lessons learned for the procurement community.

Ian Simpson  
Chief Executive  
The Earthquake Commission, New Zealand Government

How do you spend several billion dollars properly in just three weeks?

That was the real-life challenge facing the team from the New Zealand Ministry of Economic Development (MED) in placing the principal rebuilding contract in Christchurch following the first earthquake there in September 2010. This latest CIPSA white-paper explains how they did that, and still held dear to the best practice principles of professional procurement. Their work was tested early, with the need to upscale their contract with the supplier Fletcher Construction after the second, even more costly earthquake, on 22nd February 2011.

This case study illustrates how procurement professionals are capable of responding and working with speed when involved in a key project early. It also shows once again how more and more stakeholders are coming to appreciate the wide range of benefits that can be delivered by a professional procurement team. Congratulations to the MED team on a superb contribution to a great team effort in extraordinarily difficult circumstances and thankyou also to MED for sharing their work with the profession for us all to learn from.

NZ MED have also added a section to their website offering guidance on how procurement can best support emergency requirements, and will present this case study at the 6th CIPSA Public Sector Procurement Conference in Canberra on 24th May 2011 as part of a section covering emergency procurement & logistics management.

Given the seemingly growing frequency and severity of natural disasters in our region, including earthquakes, floods, fires and tsunamis, maybe the topic of emergency procurement and supply management is one worthy of even greater study and preparedness?

Jonathan Dutton FCIPS  
Managing Director  
CIPS Australasia  
Melbourne, May 2011
Background

On 4 September 2010 the Canterbury region of New Zealand was hit with a major earthquake of magnitude 7.1. This earthquake resulted in major damage to buildings and infrastructure, resulting in a national state-of-emergency and activation of civil defence systems.

Responses to natural disasters can normally be divided into three phases of action:
Phase 1 - Civil defence actions to rescue people and secure property
Phase 2 - Emergency repairs to essential services and social care
Phase 3 - Reconstruction activities

Due to the high level of seismic activity in New Zealand, all tiers of government (local, regional and national) and private sector organisations, have strong civil defence systems in place. There are also strong efforts by government to communicate to all citizens on what their own individual civil defence provisions need to be, so as such there is a high emphasis on ensuring preparedness for any major natural disaster.

Following this earthquake civil defence systems were activated, with a national state-of-emergency declared and support from the New Zealand Defence Force initiated. This approach ensures the fastest possible action and maximum mobilisation of resources to respond to the disaster at hand.

Government procurement policy

In the event of a national emergency (such as this earthquake) routine government procurement processes/protocols e.g. advertising and openly tendering contracts, are suspended. The MED currently manages the Government Procurement Policy and as such, immediately issued advice to all government agencies advising them that “Emergency Procurement” protocols had been activated.

In simple terms this means that government employees can procure whatever they need, from whoever is most appropriate, to meet the needs on the ground – we worry about the paper work later. Of course procurers are expected to use common sense, but this means that response can quickly progress without employees feeling hindered or fettered by processes. The Emergency Procurement protocols and a quick guide on managing emergency procurement can be found at www.procurement.govt.nz

Teamwork

To support civil defence activities and the national state-of-emergency, government departments and agencies collaborate together as needed, pooling resources, systems and people to quickly support whatever is required for recovery. Also, a Minister of Earthquake Recovery was quickly appointed (the Hon. Gerry Brownlee) to further support effective coordination.
Earthquake Commission (EQC)

Due to the historic number of earthquakes New Zealand experiences, the government created a specific Crown entity with responsibility for providing both scientific research and practical support to residential property owners in the event of an earthquake.

Within New Zealand, everytime a homeowner purchases home insurance, a $50\(^1\) levy is charged. These monies are collected and managed by the Earthquake Commission (EQC). The main feature of this system is that the EQC then covers the first $100,000 of damage to each insured residential property in New Zealand. This approach manages risk for insurers and ensures property insurance remains affordable for the average family.

The EQC invests the monies collected to maximise available funds, and they also re-insure the earthquake risk to manage the financial risk and liability for the Crown.

This means that New Zealanders with insured property have immediate access to initial EQC funds to ensure rapid repair action in the event of an earthquake. For commercial property or residential property damage in excess of $100,000, this is covered by private insurers, who work collaboratively with EQC.

Residential property repairs

Following the 26 September 2010 earthquake, the MED was asked to provide a full-time procurement resource to support the Earthquake Commission (EQC) in procuring resources to support residential property repairs. It was decided that rapid action needed to be taken to ensure that repairs to residential properties could commence quickly and effectively – to reassure homeowners.

In September 2010 the EQC and MED quickly developed a procurement strategy and began immediate engagement with the market to procure residential repair services. At the time the full scale of the project was not known, but it was clear that it was not tenable to wait several months for everything to become clear before taking action and starting to repair properties.

At the time it was assumed that EQC would receive about 160,000 claims for damage and that about 60,000 properties would need significant repairs. It was also assumed that a typical claim would be for approximately $25,000.

Key challenges in this work included:

- Numerous clients to manage (each property owner)
- Sourcing enough capable trade resources and contractors to complete the work in an acceptable timeframe
- Managing quality, cost and time
- Sourcing enough building materials
- Ensuring that resourcing this major project, did not distort the wider New Zealand building and construction sector

\(^1\) Levy rate under review
On this basis the procurement strategy adopted was to establish a Project Management Office (PMO) that would procure trade resources, provide the management and delivery structure to support this scale of project. Principal features of this approach include:

- Establishing a quality management system to select trade resources and ensure repairs meet required standards
- Setting cost and time benchmarks to measure performance
- Rewarding the best performing contractors and tradespeople with the most work and weeding out any potential ‘rorters’
- Providing an approach that is highly visible and community focused, with resources placed in suburbs and at the street level to maximise efficiency and ensure things are monitored.

To provide maximum flexibility, a very open specification for this project was established and suppliers were encouraged to provide their own ideas to run and manage the project.

**Difference with normal practice**

From start to finish, this multi-billion dollar procurement was put in place within 3 weeks. This included a competitive tender exercise, detailed evaluation, due diligence check, with probity auditing to ensure good practice procurement application.

It was not possible to agree a fixed price for this work due to the large number of unknowns in the project:

- the precise numbers of properties affected
- the specific scale of damage to each property
- the impact of the 2,000 aftershocks experienced

Rather the approach was to identify a provider with the strongest track record and best methodology to manage these issues, with mechanisms for determining and managing costs agreed. This was normal government procurement practice, that is often risk averse and typically tries to establish fixed prices for construction works.

This is therefore a highly collaborative procurement approach, with checks and balances put in place to provide independent scrutiny e.g. cost audits, cost benchmarks, quality inspections etc.

Following a competitive tender exercise the contract for the PMO was awarded to Fletcher Construction. Fletcher Construction is the largest construction company in New Zealand and, as such, is well-placed to manage a project of this scale. It is important to note, that Fletchers are not actually undertaking the building work themselves, rather they are sub-contracting and managing a large range of contractors and sub-contractors. EQC and MED both believe that builders managing builders in a very practical, hands-on manner has the highest chance of success. This approach has also been taken to ensure that the business opportunities from repair and reconstruction activities are spread as wide as possible.

At the time this contract was awarded it was estimated that approximately 4,000 trade resources would be required to complete this work. Therefore immediate action was taken to begin assessing trades resources to establish a pool of quality people to support this work.
Significant effort has been made to consider how this project is as attractive as possible for tradespeople, whilst not incurring excessive costs. To manage labour costs, a maximum hourly rate for trade resources was set of $40 per hour: this is a very reasonable rate, but manages expectations. However, quality tradespeople can expect continuous work for a long period of time, to be paid quickly and to have a great working environment, with strong professional peer support from Fletcher Construction.

The mobilisation of these resources was progressing to plan, repairs to properties had started (focusing on vulnerable residents and homes needing to be made weather tight) – then the second earthquake struck.

**February earthquake**

On 22 February 2011, a second major earthquake struck the Canterbury region, whilst a lower magnitude than the first, this earthquake was just 5km deep and was only 10km from Christchurch city centre. This earthquake occurred at lunchtime, during the working week and as such caused major damage, personal injury and significant loss-of-life – currently estimated at 172 fatalities.

A national state-of-emergency was declared and civil defence systems activated. Fortunately, as the PMO for residential property repairs was largely up-and-running and located in communities, these resources were readily available and were immediately deployed supporting civil defence teams. These teams were then tasked with undertaking emergency repair works to buildings. So far approximately 10,000 emergency repairs have been undertaken by these teams.

**Scaling-up**

The precise impacts of the 22 February earthquake are still being determined following a programme of rapid inspections. EQC estimates that approximately 300,000 claims will be received and are assuming that 160,000 properties may require repairs (potentially doubling the original scope of work).

The original procurement approach is highly adaptable and scalable; in effect EQC will add additional hubs in communities to service a higher number of repairs. The EQC and Fletcher Construction are currently working to re-allocate resources from immediate emergency repairs to now support re-instatement activities. This will involve sourcing additional contractors and tradespeople.
Conclusion

The approach undertaken in responding to natural disasters and providing procurement support is one that, by nature, must be highly flexible and responsive – rather than being mired in bureaucracy and process. However, whilst being adaptive, commercial risk matters must be addressed and, as such, non-traditional procurement techniques often need to be employed - such as cost benchmarking, incentive mechanisms and strong performance assessment. These approaches are by no means new, but the challenge is deploying them rapidly and in an uncertain environment – for example procuring a multi-billion dollar contract for housing repairs in days as opposed to months.

If procurers can be adaptable and flexible, whilst still managing commercial risks, they are an invaluable part of any team working to re-instate communities after a major natural disaster. For information and guidance on supporting emergency procurement see the procurement guidance issued by the New Zealand government on www.procurement.govt.nz

About the Author

Christopher Browne, MCIPS is Director of the Commercial Solutions Branch of the Ministry of Economic Development. Chris is currently working on New Zealand’s Government Procurement Reform Programme, which aims to transform New Zealand government procurement practice. More information on the reform programme can be found at www.procurement.govt.nz Chris can be contacted on +64 4 470 2334 or at chris.browne@med.govt.nz