

Chair  
Cabinet Economic Growth and Infrastructure Committee

## **PROGRESS OF THE NATIONAL CIVIL DEFENCE EMERGENCY MANAGEMENT STRATEGY**

### **Proposal**

1. I propose the Committee note this report back on progress with implementing the National Civil Defence Emergency Management Strategy, and agree to release this paper and the attached progress report (*Appendix 2*).

### **Executive Summary**

2. Under the Civil Defence Emergency Management Act 2002 (the Act), the Minister of Civil Defence must complete a National Civil Defence Emergency Management Strategy (the Strategy). Under the current Strategy, the Minister is to report to Cabinet on progress. The Strategy's four goals and 16 objectives describe a continuum aimed at achieving ever higher levels of improvement to New Zealand's resilience.
3. This report outlines the 'state of play' and achievements since the current Strategy's introduction in 2008. The results show that, overall, good progress has been made in building New Zealand's resilience to hazards and risks, and capability to manage civil defence emergencies.
4. While the report does not make recommendations, it notes current actions, broad trends in hazard risk management and future challenges for civil defence emergency management (CDEM) in New Zealand. Prioritising efforts (both locally and nationally) for best gains remains a significant challenge. The detailed progress report is attached as *Appendix 2* and the main points are summarised below.
5. I am confident that the CDEM sector as a whole is in a good position and that further improvements will be made over the remaining life of the Strategy (to 2017). A further progress report is due in 2016 and will form part of a process to review the Strategy.

### **Background**

6. This section provides information about the Strategy, the approach taken to assessing progress, and the monitoring and evaluation programme.

### ***National Civil Defence Emergency Management Strategy***

7. Under section 31(1) of the the Act, the Minister must, on behalf of the Crown, complete a National CDEM Strategy every ten years. The current version of the Strategy came into force in March 2008. The Strategy sits within the wider emergency management framework for New Zealand, which includes the National CDEM Plan and a suite of non-legislative guidelines.

8. The Strategy is designed to set the overarching direction for emergency services. The document consists of values and principles, four goals, several objectives, and the vision “Resilient New Zealand – communities understanding and managing their hazards”.
9. The Strategy supports the Act by:
  - providing a basis for integration of national and local planning and activity under the Act;
  - encouraging the coordination of emergency management, planning and activities related to CDEM across the wide range of agencies and organisations managing emergencies under the Act and other relevant legislation;<sup>1</sup> and
  - encouraging activities based on the ‘4Rs’ of emergency management: risk reduction, readiness, response and recovery.
10. The ‘4Rs’ are reflected in the Strategy’s goals and objectives, which are set out in *Appendix 1*.
11. The Strategy helps to bring about a common direction for all organisations with CDEM responsibilities, including central government agencies, local government, lifeline utilities and voluntary welfare organisations. The Ministry of Civil Defence and Emergency Management (MCDEM) has a lead role coordinating across organisations.

#### ***Progress report***

12. Under the Strategy, the Minister of Civil Defence must report to Cabinet every three years on progress towards achieving “Resilient New Zealand”. This report has been delayed by the Canterbury earthquakes and by the need to focus resources on identifying lessons from the earthquakes. A report on progress against the goals and objectives of the Strategy is attached as *Appendix 2*. The main points are highlighted in the Summary of Progress below.

#### ***Approach to assessing progress***

13. Progress with the Strategy is assessed through:
  - lessons identified from emergencies – after every event a formal analysis of performance is undertaken so that lessons can be built into future planning;
  - the National CDEM Exercise Programme, which aims to improve the response capability of national, regional and local CDEM stakeholders and assesses the readiness of all participants; and
  - a monitoring and evaluation programme covering agencies and organisations with responsibilities under the Act.

#### ***CDEM monitoring and evaluation programme***

14. The current Strategy recommends that a monitoring and evaluation framework be developed. To monitor and evaluate CDEM Groups,<sup>2</sup> MCDEM developed a capability assessment tool and process and implemented it gradually across all

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<sup>1</sup> Biosecurity Act 1993; Building Act 2004; Fire Service Act 1975; Forest and Rural Fires Act 1977; Hazardous Substances and New Organisms Act 1996; Health Act 1956; Health and Safety in Employment Act 1992; Local Government Act 1974; Local Government Act 2002; Resource Management Act 1991.

<sup>2</sup> A CDEM Group comprises elected representatives from the local authorities (city, district and regional councils) in a region. Each Group maintains operational staff from local authorities, emergency services and lifelines utilities.

16 CDEM Groups between 2009 and 2011. The results were published in 2012.<sup>3</sup> The process involved a self-assessment by each Group, a series of interviews with key members of each Group, and a review of plans and documentation. The data collected made it possible to evaluate each Group's progress in relation to each goal and objective of the Strategy, taking a scorecard approach.

15. A second capability assessment process is due to begin in the 2013/14 financial year. This second assessment will include targets for CDEM Groups and evaluation of a wider range of agencies with CDEM responsibilities.

## **Summary of Progress**

16. The Strategy has complemented the legislative framework and has been an important means of giving direction to government agencies, local authorities and emergency services. *Appendix 2* sets out progress under the Strategy's four goals. To follow is a summary of the main points under each goal.

### ***Community understanding, preparedness and participation (theme of Goal One)***

17. Recent international and domestic emergencies have heightened awareness about emergency management over the period of the current Strategy. There has been steady improvement in preparedness, with one survey showing that over 30 per cent of New Zealanders are now prepared at home for emergencies.<sup>4</sup>
18. Direct and ongoing engagement with communities utilising existing community networks and social capital is the new approach increasingly being applied to CDEM. There is a heightened awareness among communities, especially isolated ones that they will have to help themselves. For instance, a range of coastal communities (supported by local CDEM offices) have developed tsunami alerting networks and evacuation plans as a consequence of recent tsunami threats in the Pacific region.

### ***Hazard risk reduction (theme of Goal Two)***

19. The experience from the Canterbury earthquakes has significantly heightened the focus on addressing earthquake risks nationally, and in particular, on earthquake-prone buildings and infrastructure.
20. In 2009, the Natural Hazards Research Platform, a multi-party, multi-disciplinary organisation was established to coordinate long-term funding for natural hazard research. The new knowledge and analytical tools generated from Platform initiatives have resulted in improved hazard risk estimates enabling better information for investors, developers, and the insurance sector.

### ***Readiness and response capability (theme of Goal Three)***

21. Improvements to all-of-government crisis management arrangements since 2007 include the National Security System, revisions of the Guide to the National CDEM Plan, and upgrades to the National Crisis Management Centre (NCMC)<sup>5</sup> and its standard operating procedures. Exercises have been undertaken to practice and test these arrangements.

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<sup>3</sup> MCDEM, *Capability Assessment Report: Part 1*, 2012. Available at [www.mcdem.govt.nz](http://www.mcdem.govt.nz).

<sup>4</sup> MCDEM Campaign Monitoring Research 2012.

<sup>5</sup> The NCMC is the national emergency operations centre housed in the basement of the Beehive. National support and coordination of an emergency is managed from there. All relevant agencies have liaison desks in the NCMC. The Officials' Committee for Domestic and External Security Coordination (ODESC), made up of central government agency Chief Executives, also meets in the NCMC.

22. These improvements contributed to enabling emergency services, Ministers, government agencies, the Officials' Committee for Domestic and External Security Coordination (ODESC) and the NCMC to respond effectively to the Canterbury earthquakes. Further enhancements have been identified and will be incorporated into the National CDEM Plan, which is currently under review.
23. The first formal monitoring and evaluation of CDEM Groups showed they were performing satisfactorily overall but had scope to improve. Generally, Groups scored best in the areas of readiness and response.
24. The monitoring and evaluation programme has motivated most Groups to implement changes, some in quite fundamental ways. As a result, MCDEM has observed a step change in the performance of CDEM Groups. The changes include increased professionalism, improved structures and planning, improved community engagement and local government leadership, and the use of new technologies such as social media.
25. Since 2008, the Government has provided a total of \$219 million (GST exclusive) to local authorities to reimburse all or part of their costs in relation to caring for displaced people, reducing immediate danger, and restoring uninsurable essential infrastructure. Ninety-six per cent of this amount related to the Christchurch earthquakes.

#### ***Recovery capability (theme of Goal Four)***

26. The CDEM recovery framework has been consistently successful in facilitating the recovery of communities following emergencies. Examples since the Strategy's introduction include recovery efforts following several floods in different parts of the country. As part of recovery from the Gisborne earthquake in 2007, work was done to strengthen buildings in the region.
27. Following the Christchurch earthquakes, new legislation and initiatives were introduced to facilitate the Canterbury earthquake recovery. Examples of new initiatives included a successful wage subsidy scheme for small to medium enterprises, and the residential red zone purchase offer for insured residential properties. However, the experiences following the Christchurch earthquakes have shown that the recovery framework does not adequately provide for recovery from an emergency requiring large-scale recovery efforts.

#### **Next progress report**

28. The next progress report is due in 2016 and will be undertaken as part of a process to review the Strategy prior to its mandate expiring at the end of 2017 (this process will include public consultation). By that time, it is expected that the lessons from the Christchurch earthquakes will have been incorporated into CDEM arrangements, a revised National CDEM Plan will be in place, and the results of a second round of CDEM Group evaluation will be available.

#### **Consultation**

29. The following agencies were consulted on this paper and the progress report: the Treasury; the Ministry of Business, Innovation and Employment; the Ministry for the Environment, the Ministry of Foreign Affairs and Trade; the Ministry for Primary Industries; the Ministry of Health, the Ministry of Social Development, the Ministry of Transport; the New Zealand Defence Force; the New Zealand Fire Service; the New Zealand Police; the New Zealand Transport Agency; the Canterbury Earthquake Recovery Authority; the State Services Commission; the Tertiary Education Commission and the Earthquake Commission. The

Department of the Prime Minister and Cabinet has been informed of the content of this paper.

### **Financial, legislative and regulatory implications**

30. There are no financial or legislative implications, or regulatory impacts, from this paper.

### **Human Rights Implications**

31. This paper is not inconsistent with the New Zealand Bill of Rights Act 1990 and the Human Rights Act 1993.

### **Publicity**

32. Because the progress of the Strategy is of interest to CDEM Groups and the wider public, I propose that the report to Cabinet be publicly released on MCDEM's website following Cabinet's consideration.

### **Recommendations**

33. I recommend that the Committee:

1. **note** the good progress implementing the National Civil Defence Emergency Management Strategy and the challenges;
2. **note** that the next three-yearly progress report will form part of a process to review the Strategy prior to its mandate expiring at the end of 2017; and
3. **agree** to release this paper and the attached progress report (Appendix 2) on the website of the Ministry of Civil Defence and Emergency Management.

Hon Nikki Kaye  
**Minister of Civil Defence**

/ / 2013

Proactively released by the Minister of Civil Defence

## APPENDIX 1

### Overview of National CDEM Strategy

The '4Rs', principles, strategic linkages, goals and objectives of the National CDEM Strategy are outlined below and in the diagram over the page.

#### *The '4Rs'*

The '4Rs' are the core concepts of CDEM:

**Reduction:** Identifying and analysing long-term risks to human life and property from natural or technological hazards; taking steps to eliminate these risks where practicable, and if not, reducing the magnitude of their impact and the likelihood of their occurring.

**Readiness:** Developing operational systems and capabilities before a civil defence emergency happens. These include self-help and response programmes for the general public, building resilience, and specific programmes for government agencies, local government, emergency services, lifeline utilities and other agencies.

**Response:** Actions taken immediately before an imminent emergency, and during or directly after an emergency, to save lives and property, as well as to help communities to respond to the immediate problems.

**Recovery:** Efforts and processes to help a community recover following a civil defence emergency, including taking the opportunity to reduce exposure to hazards and their associated risks.

#### *Principles*

The Strategy outlines five common principles underpinning all the goals and objectives:

1. Individual and community responsibility and self-reliance
2. A transparent and systematic approach to managing the risks of hazards
3. Comprehensive and integrated hazard risk management
4. Addressing the consequences of hazards
5. Making best use of information, expertise and structures.

#### *Alignment with other Government strategies*

Other national strategies, plans and reforms that align with, and are relevant to, the context of the National CDEM Strategy include:

- New Zealand's National Security System (2011)
- New Zealand Influenza Pandemic Plan: A framework for action (2010)

- The Biosecurity Strategy for New Zealand Tiakina Aotearoa – Protect New Zealand: (2003)
- New Zealand Marine Oil Spill Response Strategy – 2006
- National Infrastructure Plan 2011
- National Counter-Terrorism Plan
- Resource management reforms

*Proactively released by the Minister of Civil Defence*

# Goals and objectives of National CDEM Strategy



Proactive

## APPENDIX 2

# National Civil Defence Emergency Management Strategy – progress on the goals and objectives

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This is an appendix to the Cabinet paper entitled National Civil Defence Emergency Management Strategy: Progress Report (dated 22 March 2013 and publicly released). This appendix covers achievements towards the National Civil Defence Emergency Management (CDEM) Strategy's goals and objectives over the past five years, along with some current actions and future challenges where applicable.

### Overall conclusion

The Strategy's four goals and 16 objectives describe a continuum of achieving ever higher levels of resilience towards "Resilient New Zealand – communities understanding and managing their hazards". Overall, since 2008, good progress has been made in building New Zealand's resilience to hazards and risks, and capability to manage civil defence emergencies. The biggest challenge for 'business as usual' (both locally and nationally) remains prioritising effort for best gains given the range of hazard risks.

## Goal One – Increasing community awareness, understanding, preparedness and participation in civil defence emergency management

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*Objective 1A : Increasing the level of community awareness and understanding of the risks from hazards, and*

*Objective 1B: Improving individual, community and business preparedness*

A series of significant international and domestic emergencies have heightened awareness about emergency management over the period of the current Strategy. These included the Samoa/Tonga tsunami in September 2009 followed by low level tsunami alerts on New Zealand coasts, and the typical mix of flooding, winter storms, snow and tornadoes reported in the news media. The Canterbury earthquake sequence in 2010 and 2011 has had the greatest impact on New Zealand of any emergency in the last eighty years, with consequences that will continue to affect communities and businesses for some years to come. The earthquakes have also had a major impact on awareness of the risks from hazards.

### Individual and community preparedness

To build on the public's awareness of hazard risks, and inform them about how to be prepared, several nationwide social marketing campaigns have been running since 2008:

- the Get Ready Get Thru social marketing campaign, which has been running since June 2006;
- the Shakeout exercise for earthquake preparedness on 26 September 2012, in which 1.3 million people participated;
- the Earthquake Commission's Quake Safe Your Home;
- What's the Plan Stan? curriculum material aimed at school children;
- the Turtle Safe DVD aimed at pre-school children;
- Earthquake Commission and GNS Science GEONET public education programmes;
- use of new media/outreach programmes, such as Twitter alerts and a programme for the hard of hearing and sight impaired; and
- tsunami video and hazard event dramatisations made for television.

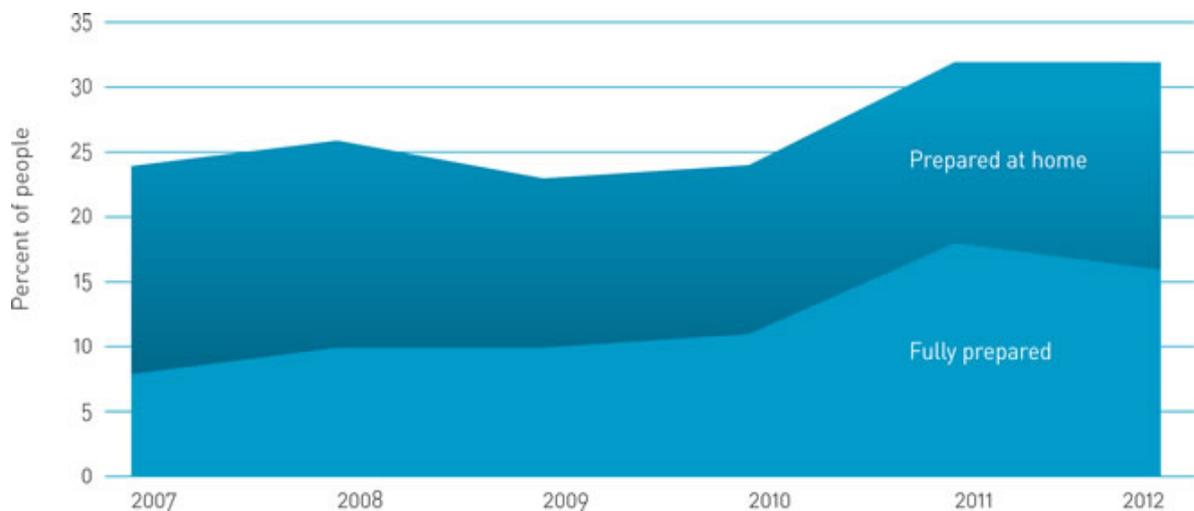
Surveys to assess levels of the public's awareness and preparedness showed the following:

- Since the *Get Ready Get Thru* campaign started, there has been a modest yet steady improvement in the numbers of people taking some action to be better prepared. In 2012, over 75 per cent of people who

had seen the advertising had taken some action to be better prepared.<sup>1</sup>

- As shown in Figure One below, 30 per cent of New Zealanders are now prepared at home for emergencies, while the percentage of people who are fully prepared has more than doubled from the 2006 benchmark of seven per cent.<sup>2</sup>
- Of those who believe preparedness is important and yet have not made any preparations, the reasons given include low motivation (31 per cent), a perception that the likelihood of a civil defence emergency is low (25 per cent) and cost (18 per cent).
- For those who have prepared, the main prompt has been awareness of disasters that occurred in New Zealand and overseas.
- Those less likely to be prepared are young people, those who identify with ethnic groups other than New Zealand European or Māori, and those who have lived in New Zealand for ten years or less.
- Homeowners are generally more prepared than renters, and one-parent families are least prepared. This suggests that preparedness is linked to the broader socio-economic circumstances of households.<sup>3</sup>
- Wellington and Christchurch residents are more likely to be prepared than are Auckland residents.

**Figure One:** New Zealanders prepared for emergencies



**Source:** Ministry of Civil Defence and Emergency Management Campaign Monitoring Research 2012

<sup>1</sup> From MCDEM's Campaign Monitoring Research 2012.

<sup>2</sup> 'Prepared at home' means having an emergency survival plan, survival items and water. Being 'fully prepared' means also being prepared when away from home.

<sup>3</sup> Statistics New Zealand, How prepared are New Zealanders for a natural disaster? (2012).

## Business preparedness

There is little empirical evidence about levels of preparedness in the New Zealand business sector (aside from lifeline utility entities which have statutory responsibilities under the CDEM Act 2002 – see Objective 3D of this report). The New Zealand economy is weighted towards small to medium size enterprises, which are generally more vulnerable to business interruption and sudden changes to the markets they operate in.<sup>4</sup> The February 2011 Christchurch earthquake experience showed that businesses that had prepared well survived and responded more effectively but that many businesses had only given very limited attention to developing resilience for a major emergency.<sup>5</sup>

Guidance material on business preparedness is maintained by the Ministry of Civil Defence and Emergency Management (MCDEM), Civil Defence Emergency Management (CDEM) Groups<sup>6</sup> and other agencies. As part of the New Zealand Shakeout earthquake exercise, Resilient Organisations<sup>7</sup> published a free resource for small and medium sized enterprises to help them plan to “get thru” an emergency.

*Objective 1C: Improving community participation in CDEM, and*

*Objective 1D: Encouraging and enabling wider community participation in hazard risk management decisions*

## Community engagement and volunteers

Community participation in the form of volunteers and community self-help have long been an integral part of an emergency response. A key example is volunteers actively participating to deliver welfare services. As with other community development activities, a ‘one way, top down’ approach to communicating with and involving communities is no longer recognised as good practice. Instead, CDEM uses a collaborative and empowering approach that builds upon existing community networks and resources. This form of community engagement has been increasing over the 2008-2012 period with various local initiatives and emergency planning undertaken. The incentive for communities to become involved is more often as a result of better understanding of the hazards they face or experiences in an emergency. Two examples are:

- A heightened awareness among communities, especially isolated ones, that they will have to help themselves. For instance, a range of

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<sup>4</sup> Hatton, T; Seville, E., Vargo, J. *Improving the resilience of SMEs: policy and practice in New Zealand*, Report prepared for an Asia Pacific Economic Co-operation (APEC) project on improving the resilience of SMEs. (Resilient Organisations Research Report, 2012/012) pp 37; and Stephenson, A., Seville, E., Vargo, J., Roger, D. *Benchmark Resilience, A Study of the resilience of organisations in the Auckland Region*. (Resilient Organisations Research Report 2010/03b), pp 49.

<sup>5</sup> McLean I et al. *Review of the Civil Defence Emergency Management Response to the 22 February Christchurch Earthquake (2012)*, pp 151, available at <http://www.civildefence.govt.nz/>.

<sup>6</sup> A CDEM Group comprises elected representatives from the local authorities (city, district and regional councils) in a region. Each Group maintains operational staff from local authorities, emergency services and lifelines utilities.

<sup>7</sup> Resilient Organisations is a collaboration of university researchers funded by the Natural Hazards Research Platform.

coastal communities (supported by local CDEM offices) have developed tsunami alerting networks and evacuation plans as a consequence of recent tsunami threats in the Pacific region.

- During the February 2011 emergency in Christchurch, Project Lyttelton, a community based support network, was able to use its database and network of people and resources to assist the Lyttelton community with its needs. Also, the Grace Vineyard Church was able to mobilise very quickly in response to the needs of the New Brighton community. CDEM agencies have subsequently had discussions with these groups to learn from their experiences about how they and other community groups can be better supported to engage with CDEM both before and during an emergency.

Other than using pre-existing community arrangements there are also spontaneous volunteers – members of the public who are willing and able to offer help when an emergency happens. The Canterbury earthquakes, and maritime Rena grounding in October 2011, have shown that people have a strong desire to help in an emergency response, and that social media enable them to organise quickly.

Recently, CDEM agencies have developed a measure of pre-planning to enable coordinating, supporting and working with these groups as they may emerge during an emergency. This approach greatly facilitates communities' efforts to help themselves, meet community expectations and build relationships between them and official response organisations, as well as saving time on the day.

### Community participation in hazard risk management decision making

Communities can get involved in hazard risk management decision making either through consultation on local government plans, or consultation on site or hazard-specific issues. People tend to participate more when they are directly affected by a management proposal or during risk mitigation as part of recovery from an emergency. For example, the Canterbury earthquakes have raised nationwide public interest and involvement in the various reviews about managing seismic risks, particularly earthquake-prone buildings.

The 2008-2012 period saw increased use of, and improvements to, online digital technologies so that local authorities can provide better public access to hazard risk information. Hazard maps and information about hazard risks attached to Land Information Memoranda (LIMs) are increasingly informing decisions about property purchases and development.

## Current actions

At the national level, the need to implement better mechanisms for managing volunteers is being addressed as part of the proposed changes to the Coordinated Incident Management System (CIMS). The Directors' guidelines on spontaneous volunteer management are also being updated.

Natural hazard management under the Resource Management Act 1991 (RMA) is also being addressed as part of the Government's RMA law reform programme, with legislative change expected in 2013.

## Looking ahead

Future developments towards better community awareness, preparedness and participation will need to focus on the following:

- raising awareness among those most at risk;
- provision of further business continuity management guidance (within public education messaging for example) in the 2013/14 financial year. This is implementing a recommendation of the *Independent Review of the CDEM Response to the 22 February 2011 Christchurch Earthquake*;
- continued emphasis on business continuity management amongst the various industry sectors, including applying learnings from the experiences of the Canterbury earthquakes, as well as some recent significant gas, electricity, transport and telecommunication outages;
- greater planning for adaptations to build resilience to extreme weather events due to regional climate changes caused by global warming;
- increasing community ownership of CDEM; and
- improving strategies and arrangements for the recruitment and retention of formally trained volunteers.

## Goal Two: Reducing the risks from hazards to New Zealand

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### *Objective 2A: Improving the coordination, promotion and accessibility of CDEM research*

Building New Zealand's resilience requires continuing development of new knowledge, tools, and levels of competency. Scientific research underpins these developments. A major achievement in 2009 was the establishment by the Ministry of Research, Science and Innovation<sup>8</sup> of the Natural Hazards Research Platform. The Platform is a multi-party, multi-disciplinary facility that provides long-term funding for natural hazard research aligned to the National CDEM Strategy. The Platform integrates research across diverse disciplines, and brings research funders, providers and users together.<sup>9</sup>

The Platform has been tested in the responses to the Canterbury earthquake sequence and the ongoing recovery. Platform researchers from a range of disciplines have been actively involved in research investigations to better understand what has happened, to advise emergency managers, communicate with the affected communities and provide technical advice to support decision-making as part of the recovery of Greater Christchurch.

The Earthquake Commission continues to facilitate a wide range of research in support of improved understanding of natural hazards and professional practices for managing hazard risk. In the 2008-2012 period, the Earthquake Commission renewed its commitment as the long-term principal sponsor of GeoNet (the national geological hazard monitoring system). Analysis by the New Zealand Institute for Economic Research in 2009 identified a wide set of benefits from the ongoing GeoNet investment including increased public awareness of geological hazards, improved alerts for emergency managers, and valuable data for hazards research, loss modelling and pricing of reinsurance.

The Treasury's National Infrastructure Unit has noted that the Canterbury earthquake sequence has resulted in a growing body of knowledge about the resilience of infrastructure and the relationship between insurance and risk. This knowledge has the potential to fundamentally change choices about where to invest, how much it will cost, and the rates of return that can be expected.<sup>10</sup>

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<sup>8</sup> The Ministry of Research, Science and Innovation was incorporated into Ministry of Business, Innovation and Employment in 2012.

<sup>9</sup> The Platform includes GNS Science and the National Institute of Water and Atmosphere (NIWA) as anchor organisations and the Universities of Canterbury, Massey and Auckland, together with Opus International Consultants, plus a further 20 subcontracts to other parties. A Strategic Advisory Group provides research user perspectives to the Platform management team. The current Group represents MCDEM, the Earthquake Commission, the Canterbury Earthquake Recovery Authority, the Ministry of Business, Innovation and Employment, the Ministry of Social Development, several local authorities and Transpower.

<sup>10</sup> National Infrastructure Unit. Infrastructure 2012: National State of Infrastructure Report (2012), available at <http://www.infrastructure.govt.nz/>.

Improving the coordination, promotion and accessibility of CDEM research requires knowledge to be transferred from research to policy practice; improved integration across science disciplines and organisations; and better alignment of objectives between researchers and research. Enhancing this knowledge transfer is an ongoing objective for all involved.

*Objective 2B: Developing a comprehensive understanding of New Zealand's hazardscape*

The understanding of New Zealand's hazards continues to increase through new research and technological developments. Risk management standards provide a common approach for all professionals and practitioners to consistently apply hazard knowledge. In 2009, the international ISO 31000 *Risk Management – Principles and Guidelines* standard was introduced. It is based on an approach developed in New Zealand.

The 2007 National Hazardscape Report continues to provide a national summary of the physical nature, impacts, distribution and frequency of occurrence of the seventeen key hazards affecting New Zealand. Knowledge of New Zealand's principal hazards increased over 2008-2012, particularly for earthquake risks. This period also saw improvements in the accuracy of severe weather and climate forecasting (including severe thunderstorm forecasting), improvements in the assessment of national tsunami threats, and development of national and local arrangements for the provision of coordinated science advice.

Local authorities are continuing to improve their hazard and risk assessments as part of their risk management processes in environmental and CDEM Group planning. It is at this level that detailed understanding of a specific hazard and its risks to local communities is developed.

Continuing challenges are to develop multi-hazard approaches (both tools and analytical thinking) that enable comparative risk assessments to better inform priority setting and risk reduction decisions. Developments in this area are continuing under a Natural Hazards Research Platform programme, "Riskscape", involving the Institute of Geological and Nuclear Sciences (GNS Science) and the National Institute of Water and Atmospheric Research. Also, New Zealand is contributing to an international initiative, the Global Earthquake Model that has similar goals specific to seismic risk. In addition, the Earthquake Commission continues to upgrade its loss-modelling system (MINERVA) to incorporate new knowledge of disaster impacts. These local and international initiatives are expected to further improve hazard risk estimates and enable better information for investors, developers, and the insurance sector.

## Current action

The Canterbury Earthquakes Royal Commission<sup>11</sup> recommended increasing New Zealand's understanding of its earthquake prone buildings. The public were recently consulted on the Government's proposals to achieve this.<sup>12</sup>

### *Objective 2C: Encouraging all CDEM stakeholders to reduce the risks from hazards to acceptable levels*

Encouraging risk reduction occurs through a wide range of processes, including land-use planning, regulatory controls for buildings, public works, and market incentives such as lower insurance premiums where risk is mitigated. The experience from the Canterbury earthquakes has significantly heightened the focus on earthquake risks nationally and, in particular, on earthquake-prone buildings and infrastructure.

Achieving and measuring a progressive reduction in risk is an ongoing challenge. New Zealand does not have precise measures of its risk exposure trends. The United Nations reports that globally, over the last 20 years, the risk of deaths in disasters has trended down (and generally more so in developed nations) while economic losses (in absolute dollar terms and as a proportion of GDP) has trended upwards (again generally more so in developed countries).<sup>13</sup>

Over the 2008-2012 period, local authorities have continued to review their resource management policy statements and plans. Generally these next generation documents have improved provisions for hazard management, with some explicitly incorporating risk management concepts. However, it can be a challenge for CDEM stakeholders to improve risk reduction associated with existing development and historical settlement patterns. For instance, intensification of land use and development based on existing use rights can lead to increased levels of risks.

At the national level, a significant development has been the second New Zealand Coastal Policy Statement under the RMA in 2010. This policy statement included stronger policy provisions for managing hazards in the coastal land environment. A key change has also been clarity to plan for effects over a 100 year period and to consider opportunities to reduce risk from tsunami in planning for development.

A nationally led programme, begun prior to 2008, to work with local authorities to improve flood risk management led to a process standard in 2008.<sup>14</sup> However, further policies and tools have not been developed, and any future work will now come under the RMA reforms currently in process.

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<sup>11</sup> The final report published in 2012 is available at <http://canterbury.royalcommission.govt.nz/>.

<sup>12</sup> Public consultation on "Building Seismic Performance" was conducted by the Ministry of Business, Innovation and Employment, and closed on 8 March 2013.

<sup>13</sup> United Nations International Strategy for Disaster Strategy, *Global assessment report on disaster risk reduction* (2011), available at <http://www.unisdr.org/we/inform/publications/19846>.

<sup>14</sup> NZS 9401:2008 Managing flood risk - a process standard.

*Objective 2D: Improving the coordination of government policy relevant to CDEM (reducing the risks from hazards)*

There have been many improvements to incorporate and align CDEM with other relevant policy and programme development. The Canterbury earthquake recovery and associated review processes has led to new policy work being conducted, with increased coordination and strong leadership. MCDEM has noted a far greater willingness among agencies to undertake CDEM-related work. However, achieving systematic, coordinated government policy development incorporating CDEM resilience as a criteria is an ongoing challenge. Opportunities may be missed where the relevance of CDEM is not obvious or well understood.

Examples of achievements since 2008 include:

- The Gas Industry Company, the co-regulator of the natural gas industry, considered CDEM matters in developing the Gas Governance (Critical Contingency Management) Regulations 2008, and Vector (as the Critical Contingency Operator) worked closely with MCDEM and CDEM Groups in planning for contingencies;
- The Ministry of Business, Innovation and Employment's (MBIE's) Review of New Zealand's Oil Security took into consideration New Zealand's hazardscape, and current ongoing work of the oil sector and CDEM Groups;
- MCDEM is engaged with emergency services and the New Zealand Defence Force in supporting the development of MBIE's GeoBuild project for national on-line digital building consents;
- MCDEM is supporting Land Information New Zealand in establishing the National Spatial Data Infrastructure and the Greater Christchurch Spatial Data Infrastructure pilot that supports acceleration of the recovery; and
- Increased interagency input into the research policies and programmes of research funders such as EQC, Envirolink, and the Transport Research and Educational Trust Board.

### Looking ahead

Lessons in risk reduction from the Canterbury earthquakes will continue to be applied, for example, Government proposals for an improved building safety system based on the Canterbury Earthquakes Royal Commission's findings.

The Canterbury earthquakes have also led to a reappraisal of the earthquake risk in New Zealand by the insurance industry. There are signs that insurance cover is becoming more expensive and restricted.<sup>15</sup>

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<sup>15</sup> Middleton, D. Insurance Shocks – Market Behaviour and Government Responses – International Case Studies with Relevance to New Zealand (2012). This report was commissioned by the Earthquake Commission.

## Goal Three: Enhancing New Zealand's Capability to Manage Civil Defence Emergencies

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### *Objective 3A: Promoting continuing and coordinated professional development in CDEM*

The most significant achievement has been the CDEM Competency Framework introduced by MCDEM in 2009 that provides a comprehensive suite of technical competencies across specified CDEM roles. MCDEM has worked closely with the CDEM sector to develop related tools and to support use of the competency framework. For example, when Auckland Council was formed the Framework was used to formulate CDEM job profiles and the upskilling of reassigned staff. The Framework has also received some international interest and acclaim from the United States, the United Kingdom, Australia, and Pacific Island countries.

MCDEM is working closely with education and training providers in using the Framework to develop CDEM related courses and training programmes. Tertiary institutions have also displayed a general willingness to work with MCDEM and with each other to attract students and provide up-skilling opportunities for CDEM professions.

On-the-job learning, through emergencies and realistic exercises, is an essential component of professional development within the CDEM sector. Rotating staff from throughout the country to support the 2011 February Christchurch response, and sharing experiences through seminars, workshops and training courses, has been hugely important.

#### Current action

In December 2012, EMQUAL, an industry training organisation specialising in emergency management, became responsible for coverage of CDEM. MCDEM will work with EMQUAL to develop a suitable set of unit standards that fully reflect the CDEM Competency Framework. Meanwhile, the Ministry of Education is reviewing tertiary education funding arrangements for the training of emergency management volunteers.

### *Objective 3B: Enhancing the ability of CDEM Groups to prepare for and manage civil defence emergencies*

### *Objective 3C: Enhancing the ability of emergency services<sup>16</sup> to prepare for and manage civil defence emergencies*

During 2009-2010, the health and disability sector led a multi-agency response to a novel influenza pandemic (H1N1) which demonstrated the ability of

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<sup>16</sup> The emergency services that work as part of the wider CDEM Group structures are the New Zealand Police, the New Zealand Fire Service, health and ambulance services. The New Zealand Defence Force may also assist in an emergency upon request and when resources are available to do so.

emergency services to respond in a coordinated manner across a range of hazards and under a different lead agency.

The 2008-2012 period has seen advances and improvements in the ability of CDEM Groups and emergency services to prepare for and manage civil defence emergencies. The Canterbury earthquakes tested emergency services and provided lessons to incorporate in planning and operational arrangements. Details on these developments are set out below.

## Capability improvements of CDEM Groups

In 2012, MCDEM published the CDEM Capability Assessment Report, which included the results of monitoring and evaluating the 16 CDEM Groups over 2009-2011 against the Strategy's goals and objectives.<sup>17</sup> The results showed that all CDEM Groups are overall performing satisfactorily but had scope to improve. Generally, Groups scored better in the areas of readiness and response, but weaker in risk reduction and recovery.

The monitoring and evaluation process has motivated most Groups to implement changes, some in quite fundamental ways. As a result, over the last three years MCDEM has observed a step change in the performance of CDEM Groups. The changes include increased professionalism, improved structures and planning, improved community engagement and local government leadership, and the use of new technologies such as social media.

Notable areas of progress are:

- Higher levels of professionalism and competence in the Group Manager role, with more training and some CDEM Groups combining the role with that of Group Controller.
- CDEM Groups restructuring towards a shared services model across their region. Major changes have occurred in Southland, Auckland and Wellington.
- Nearly all second generation CDEM Group Plans have been completed during the 2008-12 period, with guidance from MCDEM.
- Local authority elected members have demonstrated more awareness of their governance responsibilities to deliver CDEM outcomes for communities.
- Social media has had an increasing influence on how emergency management is being carried out in New Zealand, as the public are expecting 'real time' information during the event. CDEM Groups will often use Facebook and Twitter accounts as a means of communication, and will monitor social media activity during emergencies to increase their knowledge of the situation.
- Exercises have become part of the annual planning cycle for CDEM Groups and partner agencies. Public education and participatory

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<sup>17</sup> MCDEM. *Capability Assessment Report: Part 1* (2012), available at <http://www.mcdem.govt.nz>.

activities are a growing trend. For instance, CDEM Groups played a major role getting the public involved in the national New Zealand Shakeout earthquake exercise.

- Amendments were made to the Act and the related CDEM Regulations in 2012 to make it easier for local authorities to manage the processes surrounding decisions to declare, extend and terminate a state of local emergency (and also a national state of emergency).<sup>18</sup> The amendments also improved the process for upscaling a state of emergency from localised to region-wide.

## Government financial support to local authorities

Government financial support available to local authorities following an emergency aims to reimburse all or part of their costs in relation to caring for displaced people, reducing immediate danger, and restoring uninsurable essential infrastructure. Under this claims system (administered by the Department of Internal Affairs), a total of \$219 million has been reimbursed to local government since 2008. Ninety-six per cent of this amount related to the Christchurch earthquakes.<sup>19</sup>

In 2009, the financial support provisions in the National CDEM Plan were revised and extended to add clarity to the criteria and processes.

In addition, the CDEM Resilience Fund, with an annual provision of \$1 million (including GST), provides local authorities with targeted support for community resilience projects (for example, alerting systems, community response plans). A longstanding Government subsidy programme, the Fund was reviewed in 2009 to change the allocation criteria for the subsidy, making it a contestable fund with a prioritisation process.

## Learning from the emergency response to the Canterbury earthquakes

Following the 22 February 2011 Christchurch earthquake, MCDEM commissioned a wide-ranging independent review of the emergency response to identify what worked well and what needs improving. The resulting *Review of the Civil Defence Emergency Management Response to the 22 February 2011 Christchurch Earthquake* concluded that overall, the emergency response was well managed and effective, confirming the strengths of the CDEM framework.

The review found that emergency services responded rapidly and worked well together. However, the review made 108 recommendations, including several to improve the readiness of emergency services. To address the recommendations, the Government produced a multi-agency Corrective Action Plan in 2012.<sup>20</sup>

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<sup>18</sup> The full text of the CDEM Amendment Act 2012 is available from the New Zealand Legislation website or MCDEM's website (<http://www.civildefence.govt.nz>).

<sup>19</sup> A further \$31 million claim related to the Christchurch earthquakes is in process.

<sup>20</sup> The review report and the Corrective Action Plan are available at <http://www.civildefence.govt.nz>.

Internal and independent reviews have also addressed aspects of emergency services' responses to emergencies, as part of continual performance improvement.<sup>21</sup>

### Current actions

The Corrective Action Plan is being implemented over the next two years. The types of changes needed are largely to enhance and address gaps in pre-planning, operational systems, training, coordination and community welfare arrangements. The changes will, for the most part, be incorporated into the National CDEM Plan and Guide and supporting arrangements. The result will be a greatly enhanced arrangements and a firm platform for further developments.

MCDEM is developing performance targets for each CDEM Group, based on the CDEM Capability Assessment Report findings, to encourage further improvements.

### *Objective 3D: Enhancing the ability of lifeline utilities to prepare for and manage civil defence emergencies*

Maintaining or quickly restoring lifeline utility infrastructure services (water, wastewater, energy, communications, and transport) is a critical component of building community and societal resilience to disasters. For this reason lifeline utility companies have a statutory duty under the CDEM Act to ensure they can function to the fullest extent possible, even though this may be at a reduced level, during and after an emergency.<sup>22</sup>

The National CDEM Plan requires establishing Lifeline Utility Coordinators to operate in emergencies within the National Crisis Management Centre and CDEM Group emergency coordination centres. In 2010, the CDEM Competency Framework set out role descriptions for coordinators, and MCDEM is currently developing training materials and guidance to support CDEM Groups with their recruitment and ongoing professional development needs.

Lifeline Groups are voluntary collectives of public and private lifeline utility operators that collaborate with scientists and emergency managers to improve the resilience of infrastructure, as well as contributing to emergency responses and recovery. Lifeline Groups are active across all regions of New Zealand except the Chatham Islands.

### Lifeline sectors

The *Review of the CDEM Response to the 22 February Christchurch Earthquake* noted the successful response of lifeline organisations serving Christchurch. The report found that success of this sector was due to a high

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<sup>21</sup> For example, the New Zealand Fire Service commissioned an independent review of its management of the first twelve hours of its response to the February 2011 Canterbury earthquake. The report is available at: <http://www.fire.org.nz/Documents/>.

<sup>22</sup> See Section 60, CDEM Act 2002.

level of preparedness, including an understanding of the vulnerability of lifeline assets and embedded relationships. A 2012 report (commissioned by the EQC) into *The Value of Lifeline Seismic Risk Mitigation in Christchurch*<sup>23</sup> notes that seismic mitigation undertaken by Christchurch lifelines since the 1990s has served Christchurch well in reducing losses that would otherwise have been much greater. The report shows that the costs of seismic risk mitigation in Christchurch will have been repaid many times over.

Recently, greater awareness of societal risks from hazards, including business risk, is leading to higher levels of business continuity planning, intra-sector collaboration and resilience building. Examples include:

- Industry-led Sector Coordinating Entities have developed in the lifeline clusters. Some clusters, such as those for transport and telecommunications, have also become regular forums for emergency planning during business as usual. Most lifeline utility companies have been able to look past commercial rivalries in undertaking sector planning activities.
- Local authority water and wastewater services may be vulnerable to high capital and maintenance costs and past under-investment. However, asset renewal programmes are generally addressing known hazard risks using new technologies as part of scheduled maintenance programmes.
- The Government Policy Statement on Land Transport Funding, and the 2012-15 National Land Transport Programme, give effect to a significant programme of investment, including ensuring the network is resilient to disruption.
- National pandemic planning has led to better collaboration and improvements in business continuity planning within the fast-moving consumable goods sector.

### The National Infrastructure Unit

In 2009, the Government established the National Infrastructure Unit (NIU) within Treasury to enable a more strategic focus on the performance of infrastructure that underpins the functioning of the economy. The NIU develops and monitors the Government's National Infrastructure Plan. A guiding principle of the plan is that national infrastructure networks, such as lifeline utilities, are able to deal with significant disruption and changing circumstances.

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<sup>23</sup> The report is available at [http://www.eqc.govt.nz/sites/public\\_files/documents/lifeline-seismic-risk-mitigation.pdf](http://www.eqc.govt.nz/sites/public_files/documents/lifeline-seismic-risk-mitigation.pdf).

## Current actions

In November 2012, the Gas Industry Company proposed an amendment to the Gas Governance (Critical Contingency Management) Regulations to ensure that essential services with responsibilities under the National CDEM Plan, and critical care providers such as hospitals, are treated as high priority gas users in an emergency.<sup>24</sup>

## Looking ahead

Ongoing challenges to the progress of lifeline utility resilience are:

- The current economic environment, since 2008, has constrained some public and private utility providers' finances for capital works that will increase the resilience of their infrastructure. Deferred expenditure in the short term could mean an increasing backlog of work, and hence reduced resilience.
- Competing priorities, as capital expenditure is also required for reasons other than increasing resilience, such as meeting higher environmental standards or heightened community expectations.
- Future-proofing lifeline infrastructure for changes in hazard risks resulting from climate change. Current 'horizontal' infrastructure upgrades, such as for stormwater and roading, are likely to still be in place by the end of the century and need to take into account climate change effects. Gaining agreement on exactly what these effects will be, and the additional costs of upgrades to meet with them, is a contentious issue for some organisations and communities.

### *Objective 3E: Enhancing the ability of government agencies to prepare for and manage civil defence emergencies*

Improvements to all-of-government crisis management arrangements since 2007 include the National Security System, revisions of the Guide to the National CDEM Plan, and upgrades to the National Crisis Management Centre (NCMC)<sup>25</sup> and its standard operating procedures. Exercises have been undertaken to practice and test these arrangements.

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<sup>24</sup> For more information see <http://gasindustry.co.nz/work-programme/critical-contingency-management/>.

<sup>25</sup> The NCMC is the national emergency operations centre housed in the basement of the Beehive. National support and coordination of an emergency is managed from there. All relevant agencies have liaison desks in the NCMC. The Officials' Committee for Domestic and External Security Coordination (ODESC), made up of central government agency Chief Executives, meets there.

The outcomes of these improvements can be seen in the findings of the *Review of the Civil Defence Emergency Management Response to the 22 February Christchurch Earthquake*:<sup>26</sup>

- emergency services responded rapidly and worked together well; and
- communication between Ministers, departments, the Officials' Committee for Domestic and External Security Coordination (ODESC) and the NCMC ran well.

As emergency management covers many functional areas, a number of clusters of agencies with common interests and overlapping jurisdictions have been formed. The clusters that were established under the National CDEM Plan and Guide in 2005 and 2006 have now reached a state of maturity. Examples of the progress of these clusters are:

- the Transport Emergency Coordination Group is now a longstanding and self-sufficient cluster;
- the National Welfare Coordination Group, chaired by the Ministry of Social Development, is collectively responsible for the strategic planning and coordination of welfare in an emergency at the national level. Over the 2008-2012 period it has further strengthened collaborative and integrated means to support delivery of the different streams of welfare support; and
- the Government Sector Business Continuity Group share resources, information and experiences on organisational and inter-agency arrangements. The number of agencies represented on this Group has increased since the Christchurch earthquakes.

### Looking ahead

A key challenge is maintaining capability to manage an event of any type occurring at any time and for an extended period. Maintaining capability requires regular training of staff, beyond those having dedicated emergency management and liaison roles. International experience suggests the momentum to act on lessons following an emergency and improve preparedness arrangements tails off rapidly once the immediate event is over.

### *Objective 3F: Improving the ability of government to manage an event of national significance*

Achieving this objective depends on having centrally-led plans and systems in place, national coordination arrangements between lead agencies, and conducting regular exercises. These are discussed below.

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<sup>26</sup> McLean I et al. Review of the Civil Defence Emergency Management Response to the 22 February Christchurch Earthquake.

## The National Security System

Administrative oversight of the Government's objectives for CDEM is provided by the National Security System, led by the Department of the Prime Minister and Cabinet. In 2009, an 'all hazards-all risks' review of the New Zealand National Security System was conducted. The review led to a strengthening of comparative risk assessment processes, and a defined structure of lead and support agencies to address different strategic areas of national risk. The system incorporates the Domestic and External Security Coordination (DESC) System, a statutory arrangement of oversight by an officials' committee. This structure is primarily focused towards threat monitoring, preparedness, response and recovery needs.<sup>27</sup>

## National CDEM Plan and Guide to the National CDEM Plan

The National CDEM Plan (the Plan) is a key component in the legislative framework for CDEM. The Plan sets out statutory roles, powers and responsibilities for emergency management, and is required to be reviewed every five years. MCDEM began reviewing the Plan prior to the Canterbury earthquakes. The review was put on hold during and following the emergency response, to allow time to identify lessons from the earthquakes. The review has now recommenced and a new Plan is scheduled to be in force by June 2014.

## Lead agency plans and national coordination arrangements

All lead government agencies have advanced their planning arrangements since 2007 to better enable the effective management of events of national significance, including:

- The Ministry of Health revised and reissued the *New Zealand Influenza Pandemic Action Plan* in 2010 to take into account the lessons learned following the 2009 pandemic influenza A(H1N1) response.
- An emergency management information system was utilised in the health sector during the H1N1 pandemic and Canterbury earthquakes. Health is now implementing the same system as CDEM Groups and looking for opportunities to support interoperability across agencies.
- The Ministry of Agriculture and Forestry (now the Ministry for Primary Industries) issued the first *Whole-of-Government Biosecurity Response Guide* in 2011.
- MBIE produced the Oil Emergency Response Strategy in 2008.

## National CDEM Exercise Programme

The National CDEM Exercise Programme is a means by which the operational capability of agencies, and CDEM Groups and their partners, such as lifeline

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<sup>27</sup> *New Zealand's National Security System* (2011), available at <http://www.dpmc.govt.nz/sites/all/files/publications/national-security-system.pdf>

utilities, are tested. The lessons identified in national exercises are fed into an action plan. The programme is conducted from the local up to national level exercises, involving government agencies and CDEM Groups. Since 2008, the following national level exercises have been conducted:

- Exercise Ruamoko (an Auckland volcanic field scenario) in 2008;
- Exercise Tangaroa (a distant source tsunami scenario) in 2010; and
- New Zealand ShakeOut (an earthquake drill) in 2012.

Exercise Tangaroa and a number of real tsunami events (including the 2009 Samoa and 2010 Chile events) contributed to major enhancements to the National Warning System tsunami templates and standard operating procedures.

### Current actions

A number of initiatives are currently underway which will improve the ability of government to manage events of national significance:

- The revised National CDEM Plan will clarify and build on current arrangements, incorporating lessons learned from events over the past few years, and thus setting the stage for further development.
- The National Animal Welfare Emergency Management advisory group is advising on opportunities to address animal welfare emergency management during the current review of the Animal Welfare Act 1999 and the development of the New Zealand Animal Welfare Strategy.
- Integrating the new CDEM Emergency Management Information System (EMIS) across agencies will greatly improve communication and data management.
- An independent review of the response to the Rena grounding is currently being completed. The review may provide insights into improving the coordination of agencies, and drawing upon local community support, when managing an event of national significance.
- The Privacy Commissioner's proposed Civil Defence National Emergencies (Information Sharing) Code (which has been out for public consultation) will allow the sharing of personal information to help individuals in an emergency. It was modelled on a temporary code created in response to the Canterbury earthquakes, which seems to have been beneficial.

### Looking ahead

The key challenge for all CDEM stakeholders is to maintain current systems and the capabilities of emergency management personnel in the constrained fiscal environment.

## Goal Four: Enhancing New Zealand's capability to recover from civil defence emergencies

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*Objective 4A: Implementing effective recovery planning and activities in communities and across the social, economic, natural and built environments*

*Objective 4B: Enhancing the ability of agencies to manage the recovery process*

The CDEM recovery framework outlined in the Act, the Plan and the Guide to the Plan includes provisions for recovery planning, financial support, and the appointment of a recovery coordinator with powers. This framework has been used many times over the years and has been consistently successful. Examples over the 2008-2012 period include recovery following floods in Kaeo, the Hawkes Bay and Nelson and Tasman. Highlighted below is progress in relation to the Canterbury recovery, Government financial assistance, and local preparedness for recovery from emergencies.

Following the 2007 Gisborne earthquake, the *Post-Earthquake Building Safety Evaluation Procedures* (produced by the New Zealand Society of Earthquake Engineering) were updated. The revised guidelines were endorsed by the then Department of Building and Housing and released in 2009.

### Canterbury recovery

The extent and long-term dimension of the Canterbury recovery required bold new approaches to leadership and planning, including legislative changes. The Canterbury Earthquake Recovery Authority (CERA) was established in 2011 to lead and coordinate the recovery effort. The Canterbury Earthquake Recovery Act 2011 provides for a range of functions and powers to assist recovery and rebuilding. Other examples of new initiatives include:

- the wage subsidy scheme for small to medium enterprises;
- Crown-facilitated project management of house repairs, a winter heating programme, and land damage assessment and repairs;
- the Canterbury Earthquake Temporary Accommodation Service;
- the residential red zone purchase offer for insured residential properties; and
- the Stronger Christchurch Infrastructure Rebuild Team, which is accountable for operational prioritisation and programme implementation for the infrastructure rebuild.

One of the experiences out of the Canterbury earthquake recovery has been the ongoing need for services to address the psycho-social and health effects on the community, such as counselling for bereavement and trauma.

In late 2011, the Standing Orders Committee recommended that there be a Select Committee Inquiry into Parliament's legislative response to the February 2011 earthquake, following a reasonable period to enable the progress of the recovery from the Canterbury earthquakes. The purpose of the inquiry would be to ensure Parliament is better prepared for a legislative response to a future large-scale disaster.<sup>28</sup>

## Recovery funding

Insurance, both private and public, plays a critical role in recovery from emergencies. Up to 5 February 2013, the Earthquake Commission had paid a total of \$4.226 billion in claims from the Canterbury earthquakes. Further funding for recovery for the Canterbury earthquakes is channelled through CERA.

The Ministry for Primary Industries administers a rural recovery claims fund. The Primary Sector Recovery Policy was announced in June 2012 to guide Government decisions on recovery assistance following adverse climatic events, natural disasters and biosecurity incursions affecting farms.

## Local preparedness for recovery

The National Capability Assessment showed that recovery is the weakest of the '4Rs'.<sup>29</sup> CDEM Groups consistently scored the lowest in this goal. Although Groups have a good understanding of the principles of recovery, this has not been translated into planning or action in most areas. A good example of learning from recovery work is in Gisborne, where crucial experience has been gained from significant events and work has been done to strengthen buildings in the region following the 2007 earthquake.

## Current actions

The experiences following the Canterbury earthquakes have shown that the recovery framework does not adequately provide for recovery from an emergency requiring large-scale recovery efforts. Consequently, during 2013, the Department of Internal Affairs is leading a review of the legislative framework for recovery from major emergencies and MCDEM will be reviewing the operational guidelines for recovery.<sup>30</sup>

Effective risk management is a crucial aspect to increasing resilience and reducing the costs of a recovery effort. Key initiatives to this end are Treasury's review of disaster insurance arrangements, and MBIE's policy programme to improve the management of earthquake-prone buildings. MBIE will also be leading a review of the *Post-Earthquake Building Safety Evaluation Guidelines*.

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<sup>28</sup> No decision has been made to initiate the inquiry. The Committee's report is available at: [http://www.parliament.nz/en-NZ/PB/SC/Documents/Reports/4/a/8/49DBSCH\\_SCR5302\\_1-Review-of-the-Standing-Orders-I-18B.htm](http://www.parliament.nz/en-NZ/PB/SC/Documents/Reports/4/a/8/49DBSCH_SCR5302_1-Review-of-the-Standing-Orders-I-18B.htm).

<sup>29</sup> (Risk) Reduction, Readiness, Response and Recovery

<sup>30</sup> This review was signalled in the Department of Internal Affairs' Statement of Intent for 2012-2015.