## Resilient New Zealand A Aotearoa manahau



National Civil Defence Emergency Management Strategy – 2003-2006



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National Civil Defence Emergency Management Strategy 2003–2006

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#### Foreword

New Zealand is a truly unique nation. We enjoy an environment and quality of life that is known around the world. However, New Zealand's wild and diverse landscape, plus our relatively isolated geographic location, means we are threatened by significant hazards. The reality for New Zealand is that hazards can pose significant risks to life and can destroy property, infrastructure and livelihoods. As Sir Geoffrey Palmer put it:

"Sometimes it does us a power of good to remind ourselves that we live on two volcanic rocks where two tectonic plates meet, in a somewhat lonely stretch of windswept ocean just above the Roaring Forties. If you want drama – you've come to the right place."

The National Civil Defence Emergency Management Strategy is the Crown's vision for Civil Defence Emergency Management (CDEM) in New Zealand. The vision will be realised through participation from all New Zealanders. The framework for realising this vision has been established under the new Civil Defence Emergency Management Act 2002 (CDEM Act). The Act seeks to improve New Zealand's resilience to emergencies through promoting a comprehensive, all-hazards approach to managing risk.

I hope that this National CDEM Strategy is the first step towards a comprehensive, integrated approach to CDEM. The Crown is embarking on a journey to address how we can better protect our country against the consequences of disasters. I want you to be a part of that journey, to understand what hazards can do to you, your loved ones, businesses and livelihoods – to make informed choices and commit to action.

Hon George Hawkins

Minister of Civil Defence

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## The New Zealand Hazardscape

New Zealand's dynamic physical environment and level of technological development means the country is subject to a wide variety of hazards. The CDEM Act takes a broad interpretation of the term "hazard". This reflects the "all hazards" approach of the new CDEM environment.

The natural hazard that most often leads to a community-wide emergency is flooding<sup>1</sup>, the most under-estimated is volcanic eruption and potentially the most dangerous is an earthquake. One of the more significant scenarios is a major earthquake on either the Alpine or Wellington faults. One regional study in Wellington<sup>2</sup> gives the estimated impact as 657 fatalities for a daytime event, with 137 if at night, and the Earthquake Commission estimates its claims settlements for residential homes alone following a large earthquake would total up to NZ\$6.8 billion<sup>3</sup>.

Other significant natural hazards include snow, wind, landslide and severe storms. Coastal erosion, storm surge and tsunami pose significant risks to many coastal areas of the country.<sup>4</sup> New Zealand's increasing exposure to risks from natural hazards is consistent with international trends. During the last four decades, global economic losses from natural disasters have increased almost 10 times.<sup>5</sup> This increase led the United Nations to adopt the International Strategy for Disaster Reduction<sup>6</sup>, which emerged from the International Decade for Natural Disaster Reduction (IDNDR, 1990-1999).

In addition to natural hazards, technological development has created new hazards and risks. Reliance on lifeline utilities (including electricity, gas, water, sewerage, communication and transport systems) leads to greater vulnerability in the event of their failure. The increasing complexity and interdependency of these services raises the possibility of multiple failures, progressive failures or extended outages beyond the control of individual utilities. The 40-day electricity supply interruption in the Auckland central business district in

- 1 Ministry of Civil Defence & Emergency Management Civil Defence Declarations since 1 January 1963 Internal document, (2000).
- Spence, R.J.S., Pomonis, A., Dowrick, D.J. and Cousins, W.J., Estimating Human Casualties in Earthquakes: the case of Wellington, Proceedings, Sixth Society for Earthquake Civil Engineering Dynamics Conference, Oxford, U.K (1998).
- Earthquake Commission, Briefing for the Minister-in-Charge of the Earthquake Commission. December 1999.
- 4 Ministry of Civil Defence & Emergency Management From 'Response' to 'Resilience': Emergency Management Reform in New Zealand (1999)
- 5 Munich Re Topics, Natural Catastrophes the current position (2000).
- 6 Resolution, UN General Assembly 54/219.

early 1998 was a technological emergency that caused significant social and economic disruption, with up to 5% of New Zealand's workforce affected at a cost of approximately 0.3% of New Zealand's GDP<sup>7</sup> or approximately NZ\$300 million.

Hazardous substances and introduced organisms may also adversely affect New Zealand's environment, health and economy. In the wake of the terror attacks of 11 September 2001 in New York and Washington, the threat of terrorism poses a risk to public safety and national security that no one can ignore.

New Zealand's vulnerability to hazards is influenced by the structure of its economy and society. The economy depends heavily on agriculture, tourism and international trade - all of which could be severely affected by New Zealand's hazardscape. In addition, the nature of our lifestyles, settlement patterns and resource use affect New Zealand's vulnerability to hazards. For example, the population is expected to peak at 4.81 million by the year 2046, with an increasing number of people living in urban areas. If other patterns of development continue, such as a growing number of people living in coastal areas, more and more of the population will be concentrated in areas of relatively high risk. Scientific research into the New Zealand hazardscape continues to identify new hazards and often points to a more compelling risk from our known hazards than was previously understood. For example, a health pandemic is recognised as a major risk to New Zealand. With the passing of the CDEM Act, New Zealand is moving into an environment where it must take a more comprehensive approach to CDEM. A sound understanding of the hazardscape is crucial to the development of CDEM and to the Crown's vision of a Resilient New Zealand. The National CDEM Strategy sets out the direction for dealing with local, regional and national risks from the hazardscape.

<sup>7</sup> Auckland City Council: Perspective on their Power Crisis Address by Manley C. (1998).

<sup>8</sup> Statistics New Zealand: Projected New Zealand Population 2001 (base) - 2101, Projection Series 4, www.stats.govt.nz (2003)

## A New Approach to Civil Defence Emergency Management in New Zealand

#### **Background to CDEM Reforms**

A series of reviews in the 1990s looked at how CDEM in New Zealand was being carried out under the Civil Defence Act 1983. The reviews identified the need for a new, more holistic approach to CDEM, including:

- Greater focus on identifying and reducing the risks posed by hazards
- Enhancing knowledge about New Zealand's hazards and the associated risks
- Integrating planning and promoting inter-agency coordination
- Greater ability to adapt to societal, political and economic change
- Enhancing the capacity to deal with a disaster of national proportions
- Promoting a risk management approach to hazards

The reforms identified that the new approach to CDEM can be broken down into four areas of activity, known as the '4 Rs':

#### **Reduction**

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

#### Readiness

Developing operational systems and capabilities before an emergency happens. These include self-help and response programmes for the general public, as well as specific programmes for emergency services, utilities and other agencies.

#### Response

Actions taken immediately before, during or directly after an emergency, to save lives and property, as well as help communities to recover.

#### Recovery

Activities beginning after initial impact has been stabilised and extending until the community's capacity for self-help has been restored.

The reforms of the CDEM sector over the last few years have been designed to fit this new approach. To implement the reforms, the Ministry of Civil Defence & Emergency Management (MCDEM) was created on 1 July 1999. The role of the Ministry includes providing overarching policy advice to Government and the coordination and oversight of CDEM provision, funding and monitoring.

#### The CDEM Act 2002

The reforms of the 1990s are embodied in the CDEM Act 2002, which replaced the Civil Defence Act 1983. The Act defines Civil Defence Emergency Management as:

"The application of measures, knowledge and practices that:

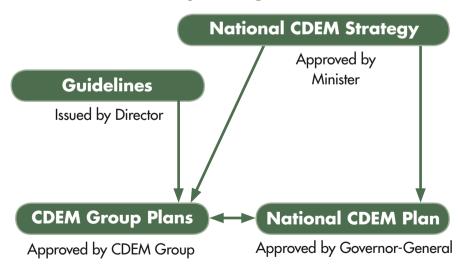
- are necessary or desirable for the safety of the public or property; and
- are designed to guard against, prevent, reduce or overcome any hazard or the harm or loss that may be associated with any emergency; and
- includes, without limitation, the planning, organisation, coordination and implementation of such measures, knowledge, and practices"

The Act establishes a framework for CDEM aimed at building resilient New Zealand communities. The National CDEM Strategy is a part of that framework. It will be supported by a National CDEM Plan and regional plans developed by CDEM Groups. The National CDEM Plan will include a range of commitments and requirements of stakeholders to manage events of national significance. CDEM Groups are consortia of local authorities working in partnership with emergency services, lifeline utilities, government departments and others within regional boundaries. This CDEM framework is being implemented through the planning and activities of central and local government, emergency services, lifeline utilities, businesses and volunteer agencies.

#### A more comprehensive approach to CDEM

The Act requires that a risk management approach be taken when dealing with hazards. In considering the risks associated with a particular hazard, both the likelihood of the event occurring and its consequences must be considered. As part of the comprehensive approach to civil defence emergency management, all hazards, not only natural hazards, must be taken into consideration. The primary goal for communities is to be self-reliant. Communities should aim to reduce the likely impact from, prepare for, and be able to respond effectively to, emergency events on their own. To encourage this, regional cooperation and coordination is paramount and is one of the cornerstones of the Act.

#### The CDEM planning framework





### Vision and Values

#### **Vision**

The Crown's vision for CDEM is that New Zealanders will understand and routinely act to reduce and avoid the adverse effects of hazards because they value the enduring social, economic, cultural and environmental benefits of doing so. This is encapsulated as:

"Resilient New Zealand – communities understanding and managing their hazards"

"A Aotearoa manahau - he pūioio ngā hapori, he mārama ki ō rātou pūmate me te whakahaere"

Realising this vision will require action from all areas of society. The Crown's vision will be realised when New Zealanders:

- Recognise the critical role of CDEM in protecting their safety and prosperity
- Are well informed about the hazards they face and their consequences
- Make decisions about how best to manage the risks from hazards in a way that contributes to the overall sustainable development of communities
- Are committed to managing their risks
- Prepare themselves for emergencies
- Integrate CDEM planning with everyday decision-making.

A resilient New Zealand is founded upon strong partnerships between communities and all levels of government. The Crown's vision is of all New Zealanders understanding the risks from hazards to their safety and livelihoods and developing their capability to manage them. Such capability will be dependent upon bringing together an appropriate mix of:

- Resources (financial and human)
- Systems (planning and operational arrangements)
- A culture of self-help, community support and leadership.

#### **Values**

Important values underpin the vision for CDEM in New Zealand. The Crown respects the diversity of all New Zealanders, with particular regard to its Māori Treaty partner. The Crown recognises the benefits that come from mutual understanding and cooperation. The Crown places a high value on the health, safety and prosperity of all and wishes to preserve the willingness of New Zealanders to help each other in times of adversity, while encouraging individuals and communities to make responsible choices. The Crown's vision will be realised through individuals, communities, businesses and government living these values.

## Principles

The following principles are guides to action and underpin the development and success of CDEM in New Zealand. They derive from the new approach to CDEM laid out in the CDEM Act 2002. The principles apply to all New Zealanders as CDEM stakeholders. In addition, there are key agencies that have an explicit role in supporting New Zealand through CDEM arrangements.

## 1. Individual and community responsibility and self-reliance

Individuals and communities are ultimately responsible for their safety and the security of their livelihoods. The new CDEM arrangements support and encourage local ownership of this responsibility. With assistance from CDEM stakeholders, individuals and communities must be able to care for themselves and each other, as much as possible, when the normal functions of daily life are disrupted. Arrangements to support this are best developed at the local level

## 2. A transparent and systematic approach to managing the risks from hazards

Communities must be given a say in what levels of risk they consider acceptable and what measures are put in place to manage those risks. A systematic approach is necessary to ensure that a logical and consistent process is followed when identifying and assessing risks, consulting and communicating with communities and, where appropriate, implementing cost-effective measures to reduce risk.

## 3. Comprehensive and integrated hazard risk management

Comprehensive risk management means dealing with the risks associated with all our hazards, both natural and man-made, through the '4 Rs' of risk reduction, readiness, response and recovery. Integrated activity promotes the coordinated involvement of all CDEM stakeholders that have a role in managing these risks.

#### 4. Addressing the consequences of hazards

The consequences of natural and man-made hazards can be physical, social, technical, environmental or economic and may affect one or more communities. Focusing on consequences provides a basis for planning, informs decision-making and enables more effective action through improved prioritisation and resource allocation. CDEM arrangements must also ensure that support is available to individuals and communities that are overwhelmed by disasters despite having taken responsibility and action to manage their own risks.

## 5. Making best use of information, expertise and structures

Making the best use of information, as well as improving both information systems and the applicability of research is crucial. In order to realise the Crown's vision, it is necessary to develop the appropriate range of skills and knowledge (professional and voluntary) within our society and share best practice approaches to hazard management planning and operational activity.

### Goals

For the purposes of this strategy four broad spheres of activity have been identified that will build toward the Crown's vision of Resilient New Zealand. These spheres of activity are expressed as the four goals of the National Strategy. The goals reflect the Crown's priorities for CDEM in New Zealand. These priorities have been established from years of review, policy development and research into CDEM. They also reflect the principles and arrangements of the CDEM Act 2002.

## Goal 1) To increase community awareness, understanding and participation in CDEM

To achieve the vision of a Resilient New Zealand, communities must first be aware of the New Zealand hazardscape. Many of New Zealand's wide array of hazards are only now being better understood, thanks to research. The strategy aims to build awareness of this environment. Awareness by itself, however, is only the first step. New Zealanders must also understand the risks from hazards, i.e. "what can this hazard do to me?" A solid understanding of CDEM will build upon an awareness of hazards and risks and encourage communities to actively participate in CDEM, particularly in decision-making. As such, a key goal of the strategy is to encourage individuals and communities to take responsibility for their safety. These steps aim to strengthen a culture of community safety. This culture drives the development of the new CDEM arrangements and will help create resilience in communities.

## Goal 2) To reduce the risks from hazards to New Zealand

Reducing risk is fundamental to realising the vision of a resilient New Zealand and is a consistent message in the CDEM Act. The focus on risk reduction is a key difference from the old civil defence arrangements, which focused primarily on emergency readiness and response. Reducing risk lessens the likelihood and the consequences of emergencies for communities.

Reducing risk cannot be viewed in absolute terms. It is physically impossible to completely remove the risks from all hazards. The new CDEM arrangements, however, assist communities and government to reduce risk to acceptable levels. It is recognised that the risks from hazards are just some of the multitude of risks that New Zealanders face in their everyday lives. Communities and government must manage a host of variables that affect the acceptability of risk, from economic costs to the country's international reputation.

Given the complexity of risk, the new CDEM arrangements aim to enhance the tools that communities and government can use to reduce the risk from hazards. This includes the removal of legislative and regulatory barriers, research into mitigation options and the promotion of hazard risk management practices. The tools for reducing risks should be simple, transparent and readily accessible.

#### Goals

## Goal 3) To enhance New Zealand's capability to manage emergencies

Notwithstanding efforts to reduce risk, emergencies happen, and New Zealand must be prepared to manage them. This goal identifies stakeholders that have responsibility for preparing and responding to emergencies, namely local and central government, emergency services and lifeline utilities. It sets out actions that will assist these stakeholders to more effectively manage emergencies.

A consistent message is the need for integration and cooperation. As a nation, we have only limited capability to manage emergencies, particularly large ones. New Zealand must make best use of its existing resources and planning arrangements. It must also plan for any necessary international assistance. The National CDEM Plan and regional CDEM Group Plans play a key role in facilitating the integration of stakeholders, identifying areas of mutual benefit and cooperation, eliminating duplication or inefficient use of resources and identifying gaps in national capability.

## Goal 4) To enhance New Zealand's capability to recover from disasters

Recovery planning forms a key part of the new comprehensive approach to CDEM. Recovery plans establish recovery needs and the ways to meet them prior to a disaster and in doing so help communities get back on their feet more quickly.

Disasters can inflict enormous damage on the physical environment. It is vital that planning addresses the reconstruction and restoration of property and infrastructure. This planning will involve the assessment and prioritisation of needs and the coordination of resources to meet those needs. When considering reconstruction, stakeholders should consider longer-term issues about the sustainable management of hazards. In some cases, damage to the physical environment can provide opportunities to rebuild or relocate property and infrastructure in new ways or locations.

Planners at all levels should also consider the social and economic impacts of disasters. This sphere of activity is critical to the community's ability to recover. Communities that can restore the "normal" functions of daily life, such as people returning to their homes, businesses reopening and children back in school, will recover more quickly from disasters. Recovery planning should also consider the long-term health and welfare needs of communities, such as psychological support services. Planning should reflect the economic consequences of disasters, both at the local and national levels. Good recovery planning will increase the speed by which communities can resume normal activities. The importance of reducing the long-term impacts of disasters through sound recovery planning cannot be overstated.

#### **Objectives**

The Crown has identified a number of objectives to be pursued to achieve each goal. Each objective is followed by a supporting statement, which explains the rationale of the objective.

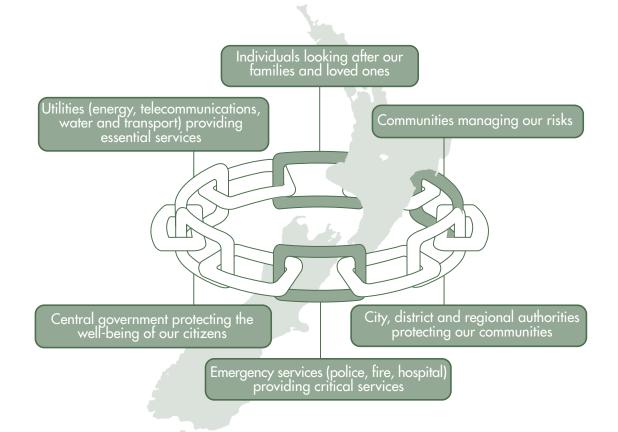
### Goals

#### Targets, outcomes and actions

The targets and outcomes are indicators that the Crown's objectives are being achieved. The actions are the practical steps needed to produce these results.

The new CDEM arrangements are in their initial stages of development. This first National CDEM Strategy lays out the Crown's priorities in line with its vision of Resilient New Zealand. Many of the actual work programmes to support the goals and vision will be delivered through the National CDEM Plan and regional CDEM Group Plans. The CDEM Act requires these plans to be completed in the next 3 years. For this reason, the Strategy will be reviewed in 2006 with the intent of adding more action items and further developing measurable targets. This timeframe is also appropriate for reviewing targets for awareness and risk reduction activities. The review in 2006 will be informed by the development of a formal National CDEM Strategy monitoring and evaluation programme (refer to page 30).

#### **Resilient New Zealand**



## Goal 1: To increase community awareness, understanding and participation in civil defence emergency management

## Objective A

Increase the level of community awareness of the risks from hazards

Communities must be aware of the risks from hazards in New Zealand. Resilient communities can only be built upon a sound awareness of the New Zealand hazardscape.

#### **Targets & Outcomes**

- Improved and better coordinated public education activities through completion of the short, medium and long-term tasks of the 5-year national public education strategy.
- CDEM stakeholders supporting CDEM Groups in their public awareness activities.
- An increase in the level of individual and community awareness of the risks from hazards. This will be measured by the monitoring and evaluation of the national public education strategy and CDEM Group Plans.

- MCDEM, supported by CDEM stakeholders, will implement a five-year national public education strategy.
- CDEM stakeholders will liaise with MCDEM, where appropriate, on public awareness programmes that will enhance awareness of the New Zealand hazardscape.
- The Ministry of Education will work with MCDEM to develop guidelines for schools, which will promote the use of best practice risk management techniques and business continuity planning.

## Goal 1: To increase community awareness, understanding and participation in civil defence emergency management

## Objective B

## Improve community understanding and participation in CDEM

A sound understanding of CDEM will encourage New Zealanders to take action to better prepare for, respond to, and recover from disasters when they occur. A good understanding of CDEM, combined with an enhanced awareness of the New Zealand hazardscape, will encourage New Zealanders to take action and improve a community's ability to cope in an emergency.

#### **Targets & Outcomes**

- Communities taking action to improve their readiness and response arrangements for emergencies. This will be measured by the monitoring and evaluation of the national public education strategy and CDEM Group Plans.
- Stakeholder initiated activities that increase the level of understanding and encourage community participation in CDEM.

- MCDEM will monitor and evaluate the community consultation aspects of CDEM Group plans.
- Research providers, in liaison with MCDEM, will promote information on CDEM for the benefit of communities.

## Goal 1: To increase community awareness, understanding and participation in civil defence emergency management

## Objective C

# Encourage and enable community participation in determining acceptable levels of risk

Communities that are aware of the risks from hazards and that have an understanding of CDEM are better able to make decisions regarding the acceptability of risk. How acceptable the risks from hazards are will vary among different communities and will often be subject to a number of factors. Nonetheless, it is the right of all New Zealanders to have a say in what level of risk is acceptable to their community. This objective aims to enhance that right.

#### **Targets & Outcomes**

- Greater community input and participation in local government decisions regarding hazard risk management, such as land use planning decisions.
- National and regional CDEM Group Plans show increased community participation in the decision making process regarding the acceptability of risk as evidenced by public submissions.
- Hazard risk management and CDEM are included in Long Term Council Community Plans (LTCCP).

- Local authorities will continue to seek community input and participation in decisions regarding hazard risk management.
- MCDEM and CDEM Groups will encourage and enable community input and participation in national and regional planning respectively.

## Objective A

Improve the coordination, promotion and accessibility of CDEM research

Top quality national and international research is crucial to New Zealand's understanding and development of CDEM. Research is particularly relevant to hazard and risk identification, assessment, mitigation and monitoring and to the overall development of CDEM planning.

#### **Targets & Outcomes**

- In 2004, MCDEM will commence development of a national CDEM research strategy.
- Improved coordination between MCDEM, research providers and other CDEM stakeholders in decisions regarding CDEM research in order to achieve best-value outcomes for end-users.
- CDEM planning is informed by sound evidence-based research.

- The Ministry of Research, Science and Technology, Foundation for Research, Science and Technology, MCDEM and research providers will work together to ensure research needs are consistent with the national CDEM research strategy and other stakeholder strategies relevant to CDEM.
- MCDEM will assist in the dissemination of national and international research for the benefit of all CDEM stakeholders.

## Objective B

# Develop a comprehensive understanding of New Zealand's hazardscape

New Zealand has a large and varied number of natural, technological and man-made hazards – we must understand them and the risks they pose. Understanding the New Zealand hazardscape is crucial for identifying and prioritising risk reduction activities and for informing readiness, response and recovery planning.

#### **Targets & Outcomes**

- In 2006, MCDEM will commence reporting every three years on New Zealand's hazardscape.
- National and regional CDEM planning reflects a greater understanding of the New Zealand hazardscape through contributions from CDEM stakeholders.

- By 2006, MCDEM will develop a nationally accessible system for the coordination, presentation and communication of information on New Zealand's hazardscape.
- MCDEM will, over time, identify and assess hazards and risks of national significance.
- Central government agencies with responsibilities for managing specific hazard risks will contribute to the understanding of New Zealand's hazardscape.

## Objective C

# Encourage all CDEM stakeholders to reduce the risks from hazards to acceptable levels

Reducing risk can be as simple as safely securing home furniture to reduce earthquake damage and as complex as land-use planning to reduce the risks associated with flooding. Across the spectrum, it is the responsibility of all CDEM stakeholders to take actions to reduce the risks from hazards.

#### **Targets & Outcomes**

- An increase in the use of best-practice risk reduction techniques by CDEM stakeholders. This includes evidence of an increase in the use of risk management practices, business continuity planning and household survival kits. This also includes a decrease in the number of uninsured.
- Central government taking and reporting on measures to reduce risks of national significance to acceptable levels.

- Central government will, over time, develop programmes to prioritise and reduce hazards and risks of national significance.
- MCDEM and CDEM Groups will encourage the private sector to reduce the risks from hazards to acceptable levels through a risk management approach.



## Objective D

## Improve the coordination of government policy relevant to CDEM

The CDEM Act emphasises the importance of coordinating legislation, policies and work programmes that affect CDEM. Improving the coordination of government policy is necessary to avoid duplication, make the best use of resources and achieve best-possible integrated outcomes for CDEM.

#### **Targets & Outcomes**

Greater cooperation and coordination between central government agencies regarding CDEM.

- Central government agencies will work together to promote legislation, government policy and work programmes that further the intent and requirements of the CDEM Act.
- Central government agencies will work together to establish links between the CDEM Act and related legislation.
- MCDEM will develop principles for central government involvement in addressing national interests in risks managed at the local level.
- Government departments will consider CDEM issues when entering into contracts with service providers where appropriate.

## Objective A

## Promote continuing and coordinated professional development in CDEM

Competent people are essential when it comes to managing emergencies. Professional development aims to educate and train people in CDEM as well as enhance the skills of those already involved in the sector. Enhancing professional development is also about tapping into existing knowledge and skills outside the sector that are relevant to CDEM.

#### **Targets & Outcomes**

- An increase in the number of people accessing and completing CDEM professional and volunteer development programmes. This will be monitored and reported on through the MCDEM professional development programme.
- CDEM Group plans show evidence of professional development activities.

- MCDEM will foster tertiary education programmes that improve CDEM knowledge and practice.
- MCDEM will develop and promote standards for key CDEM positions and roles outlined by the CDEM Act.
- CDEM Groups and emergency services that use volunteers will enhance their recruitment, training, management and retention through inter-agency cooperation and assistance from other CDEM stakeholders. This could include the development of national standards and guidelines on volunteering.
- Emergency services will work with MCDEM on a joint agency framework for professional development in the emergency services.

## Objective B

Enhance the ability of CDEM Groups to prepare for and manage emergencies

Under the CDEM Act, each CDEM Group is responsible for managing emergencies in their region. CDEM Groups depend on assistance from the community, emergency services, lifeline utilities, government departments and one another. Integrated planning and coordination is therefore essential to assist CDEM Groups in preparing for and managing emergencies.

#### **Targets & Outcomes**

• By the time of the review of the National CDEM Strategy in 2006, evidence that the outcomes of CDEM Group Plans are being achieved, with demonstrated involvement from all CDEM stakeholders.

- MCDEM will support CDEM Groups through the development and promotion of best-practice techniques and guidelines.
- MCDEM will encourage and support CDEM Groups to engage with one another to identify cross-regional risks from hazards and develop compatibility in operational procedures.
- CDEM stakeholders will continue to participate in CDEM Group planning to coordinate and promote local and regional capability.
- By 2006, MCDEM will develop a Community Emergency Response Team (CERT) framework to develop CDEM Group capability.

## Objective C

# Enhance the ability of emergency services to prepare for and manage emergencies

Emergency services are the first-line responders in any emergency situation. They are critical for treating the injured and saving lives. Emergency services are also responsible for preventing further loss of life or injury during and immediately after an emergency. Integrated planning and coordination is essential to ensure an effective and rapid response from emergency services.

#### **Targets & Outcomes**

• Greater coordination amongst the emergency services that enhances their ability to prepare for and manage emergencies.

- MCDEM will support emergency services through the development and promotion of best-practice CDEM techniques and guidelines.
- Emergency services will support ongoing training activities and multi-agency initiatives relevant to CDEM.
- Emergency services will work with MCDEM to develop a common framework for their involvement with CDEM Groups.
- Emergency services will incorporate Coordinated Incident Management Systems (CIMS) practices into their Standard Operating Procedures.
- The Ministry of Health will advise and coordinate hospital and health services regarding their CDEM capability.

## Objective D

# Enhance the ability of lifeline utilities to prepare for and manage emergencies

Lifeline utilities manage New Zealand's infrastructure, like our road and rail networks, and provide essential services such as electricity, gas, water, wastewater, transportation and communications. Damage or loss to infrastructure and essential services can severely disrupt people's lives and inhibit the ability of CDEM Groups to manage emergencies. Severe or prolonged disruption to infrastructure and essential services can also have negative impacts for the economy.

#### **Targets & Outcomes**

• Lifeline utilities preparing for emergencies through the use of business continuity plans and participation in lifeline groups.

- MCDEM will support lifeline utilities through the development and promotion of best-practice CDEM techniques and guidelines.
- Lifeline utilities will demonstrate business continuity planning in order to function to the fullest possible extent during and after an emergency.
- Lifeline utilities will support and participate in the establishment and ongoing work of lifeline groups in order to facilitate communication and cross-industry planning.

## Objective E

Enhance the ability of government departments to prepare for and manage emergencies

Government departments have a number of roles and responsibilities in emergencies. These will be captured in the National CDEM Plan and regional CDEM Group Plans. In addition, government departments must adequately prepare for emergencies to ensure they can continue to provide services to the public during and after an event.

#### **Targets & Outcomes**

- Government departments have planned for the consequences of emergencies through business continuity planning.
- Increased interdepartmental cooperation that enhances central government's ability to prepare for and manage emergencies.

- MCDEM will support government departments through the development and promotion of best-practice CDEM techniques and guidelines.
- MCDEM will engage government departments regarding their roles and responsibilities in the National CDEM Plan.
- Government departments will establish cluster groups for the purpose of coordinating advice to Government and planning for emergencies. This work is being developed through the MCDEM cluster strategy 2003–2008.

## Objective F

Improve the ability of government to manage an event of national significance

An event of national significance, as defined in the CDEM Act, will have enormous short and long-term consequences for New Zealand. Central government will play a critical role in New Zealand's ability to manage a major event, but it is the responsibility of CDEM stakeholders at all levels to work together to plan for major events.

#### **Targets & Outcomes**

- By the time of the review of the National CDEM Strategy in 2006, evidence that the outcomes of the National CDEM Plan are being achieved, with demonstrated involvement from all CDEM stakeholders and that arrangements for managing events of national significance are in place.
- Continued enhancement of national crisis management arrangements.

- MCDEM will work with CDEM stakeholders to plan for events of national significance through the national planning process.
- Central government agencies will continue to develop and maintain the infrastructure and information systems of the National Crisis Management Centre (NCMC) – a multi-agency centre for use in times of crisis.
- Central government agencies with lead roles in the NCMC will promote the participation of other agencies in regular exercises in the NCMC.

#### Goal 4: To enhance New Zealand's capability to recover from disasters

## Objective A

# Implement effective recovery planning and activities for the physical impacts of disasters

Disasters can inflict enormous long-term damage on property, infrastructure and the environment. Comprehensive research, planning and policy around recovery will substantially assist people to rebuild their communities.

#### **Targets & Outcomes**

- A greater understanding among CDEM stakeholders of the **physical** impacts of disasters and the means to recover from them.
- Recovery planning and activities by CDEM stakeholders at local, regional and national levels for the physical impacts of disasters.

- Research providers, in liaison with other CDEM stakeholders, will conduct and promote research relevant to recovery from the **physical** impacts of disasters.
- During 2004, MCDEM will facilitate a multi-agency 'Focus on Recovery' group for the purpose of further developing recovery concepts, principles, planning and activities.
- CDEM Groups, with support from MCDEM, will establish the long-term community needs for recovery from the **physical** impacts of disasters.
- Government departments, including those with responsibilities for infrastructure, resource management, biosecurity and the environment, will engage in recovery planning and activities at local, regional and national levels.
- Lifeline utilities will demonstrate recovery planning and activities for the **physical** impacts of disasters.
- International research and professional development opportunities regarding recovery from the **physical** impacts of disasters will be promoted by MCDEM and other CDEM stakeholders.



#### Goal 4: To enhance New Zealand's capability to recover from disasters

## Objective B

# Implement effective recovery planning and activities for the social and economic impacts of disasters

While recovery from the physical effects of disasters is the most visible post-event consideration, disasters also have devastating impacts on the social and economic well being of communities. Comprehensive recovery requires these effects to be understood and addressed.

#### **Targets & Outcomes**

- A greater understanding among CDEM stakeholders of the social and economic impacts of disasters and the means to recover from them.
- Recovery planning and activities by CDEM stakeholders at local, regional and national levels for the social and economic impacts of disasters.

- Research providers, in liaison with other CDEM stakeholders, will conduct and promote research relevant to recovery from the social and economic impacts of disasters.
- CDEM Groups, with support from MCDEM, will establish the long-term community needs for recovery from the **social and economic** impacts of disasters.
- Government departments, particularly those with responsibilities for health, welfare, education and the economy, will engage in recovery planning and activities at the local, regional and national levels.
- International research and professional development opportunities regarding recovery from the **social and economic** impacts of disasters will be promoted by MCDEM and other CDEM stakeholders.

## Summary of Goals and Objectives

Goal 1: To increase community awareness, understanding and participation in civil defence emergency management

#### **Objectives**

- A Increase the level of community awareness of the risks from hazards
- B Improve community understanding and participation in CDEM
- C Encourage and enable community participation in determining acceptable levels of risk

#### Goal 2: To reduce the risks from hazards to New Zealand

#### **Objectives**

- A Improve the coordination, promotion and accessibility of CDEM research
- B Develop a comprehensive understanding of New Zealand's hazardscape
- C Encourage all CDEM stakeholders to reduce the risks from hazards to acceptable levels
- D Improve the coordination of government policy relevant to CDEM

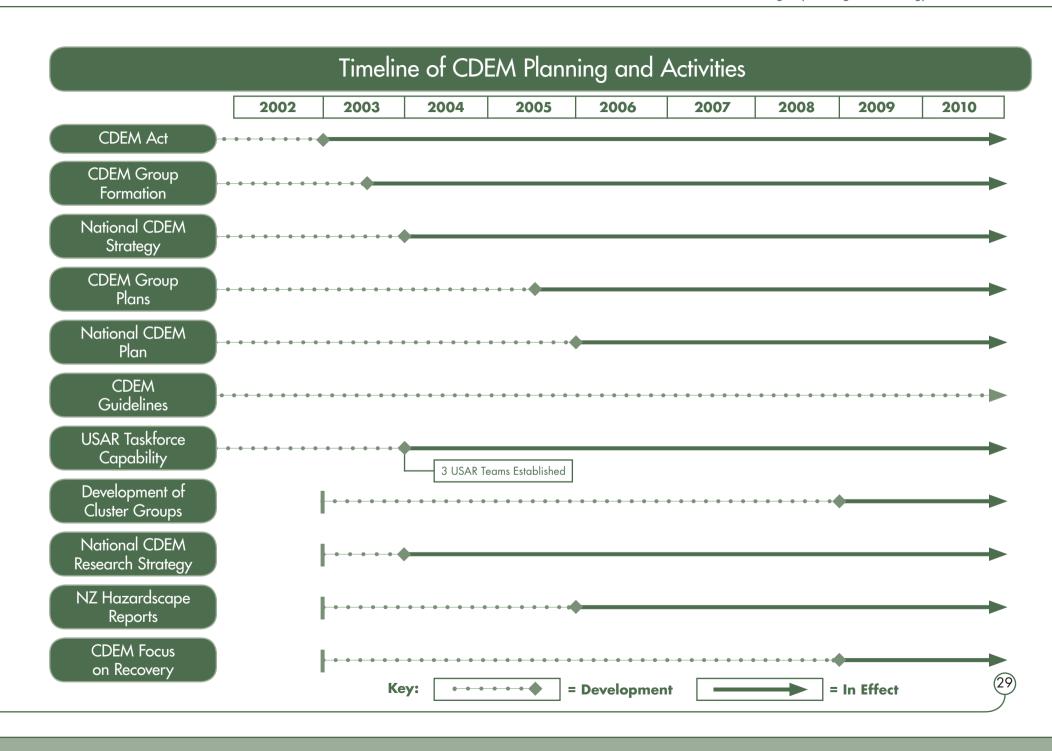
## Goal 3: To enhance New Zealand's capability to manage emergencies

#### **Objectives**

- A Promote continuing and coordinated professional development in CDEM
- B Enhance the ability of CDEM Groups to prepare for and manage emergencies
- C Enhance the ability of emergency services to prepare for and manage emergencies
- D Enhance the ability of lifeline utilities to prepare for and manage emergencies
- Enhance the ability of government departments to prepare for and manage emergencies
- F Enhance the ability of government to manage an event of national significance
- Goal 4: To enhance New Zealand's capability to recover from disasters

#### **Objectives**

- A Implement effective recovery planning and activities for the physical impacts of disasters
- B Implement effective recovery planning and activities for the social and economic impacts of disasters



## Monitoring and Evaluation

#### Monitoring progress and outcomes from the Strategy

The Ministry of Civil Defence & Emergency Management will monitor progress and outcomes from the Strategy while it is in effect. Further performance measures and indicators will be developed for the objectives, targets and actions through a formal National CDEM Strategy monitoring and evaluation programme. This programme will be developed by 2006.

Existing monitoring and evaluation programmes will be reviewed and re-aligned to ensure an appropriate fit with the Strategy's needs. In addition, the Ministry is developing an evaluation framework to measure outcomes related to the implementation of the CDEM Act. Evaluating outcomes of this initial National Strategy will be a key component of this framework.

The development of awareness, participation and capability in CDEM, across the 4 R's, is crucial to the Crown achieving the goals of the National CDEM Strategy. By the end of 2005, the National CDEM Plan and CDEM Group Plans will detail the commitments and requirements of stakeholders to enhance national capability. This will provide accurate and up to date information that can then feed into the wider monitoring and evaluation framework of the CDEM Act 2002.

#### Reporting on the Strategy

Under the CDEM Act 2002, the Strategy, once approved, remains current for 10 years or any lesser period specified in the Strategy. The Minister may however amend or revoke the Strategy earlier if necessary, though subject to the standard procedures for completing a new Strategy. The Strategy is a strategy of the Strategy of the Strategy of the Strategy of the Strategy.

As the new CDEM arrangements are in their initial stages of development, the Strategy will be reviewed in 2006. The Ministry will deliver a National Strategy Progress Report in 2006, which will inform this review. While the vision is not expected to change, and the goals and objectives are expected to hold for periods longer than five years, the targets and actions will be amended with further performance measures developed by the monitoring and evaluation programme. From 2006 onwards, the Ministry will produce 3 year National Strategy Progress Reports that will report on how well the Crown is achieving its vision and goals.

<sup>10</sup> Section 34, CDEM Act 2002

<sup>11</sup> Section 36, CDEM Act 2002

## Key CDEM Stakeholders

#### **Local Government (CDEM Groups)**

Local government has a range of established roles in managing hazards, responding to emergencies, and ensuring the maintenance of essential services. All of the following local government activities are relevant to CDEM: resource management; marine pollution and harbour management; water and wastewater management; river management; environmental health; road infrastructure; community development; rural fire and hazardous substance and building standards compliance. Under the CDEM Act, local authorities must form CDEM Groups within each region. CDEM Groups must develop regional plans to implement CDEM policy, programmes and operations in their areas.

#### **Central Government**

Central government, which includes a range of government agencies, develops and implements legislation, policies, programmes and services that influence CDEM. In addition, central government has a range of responsibilities in emergency situations. This will include providing assistance in responding to and managing situations and assisting in recovery activities. The detailed requirements of central government will form part of the National CDEM Plan.

#### **Emergency Services**

Emergency services are critical first line responders to emergencies. They manage incidents that occur daily, and also prepare for major events that may involve significant social disruption, injury and loss of life.

#### **Lifeline Utilities**

Lifeline utilities are organisations that manage infrastructure and provide essential services. The CDEM Act requires that they are able to operate during and after an emergency. The Act also requires lifeline utilities to participate in the development of the National CDEM Strategy, the National CDEM Plan and regional CDEM Group Plans.

#### **Research Providers and Academic Institutions**

Research into hazards and CDEM is crucial to the development of effective planning. The National CDEM Plan and regional CDEM Group Plans must be informed by the latest information and scientific research on New Zealand's hazardscape. Crown Research Institutes and State Owned

Enterprises are essential providers of this research. Private consultants, universities and other tertiary education providers also play an important role in increasing the pool of skills and knowledge about hazards and CDEM.

#### **Insurance Providers**

Insuring properties and other assets is a key activity in the treatment of risk and to building resilience in communities. Insurance providers play an important role in researching and communicating risk as well as helping individuals and communities to offset potential losses from disasters. In particular, insurance providers can play a critical role during the recovery phase.

#### **Individuals, Communities and Businesses**

Individuals, communities and businesses have a general responsibility to identify, assess and manage their risks from hazards. They also contribute to choices about managing hazards and risks within their communities. Volunteers are often a critical resource in readiness, response and recovery arrangements. Businesses must act to reduce the risks from hazards to their assets, markets and operations, ensure the safety of employees and plan for business continuity.

#### whānau, hapū, iwi and Māori

As an important community stakeholder, Māori can have a unique interest in the management of hazards and risks, for example the protection of wahi tapu sites and other places of significance for Māori. It is important whānau, hapū, iwi and Māori are involved in CDEM planning. In addition, Māori communities often have important resources for response and recovery such as the use of marae as emergency shelters and Māori welfare and support services.

## Glossary

Unless the context otherwise requires, in this document, the following terms and words have the meaning specified below.

#### **Business continuity planning:**

An organisation's risk management of threats that may terminate or significantly disrupt core business. It involves mitigation activities and contingency planning for response and recovery actions.

#### **Capability:**

Ability or power of action to deliver resources in the event of an emergency (Note: capability = capacity + delivery, and therefore includes process).

#### **Capacity:**

The content or measure of resources (including supplies, equipment, and personnel).

#### **Civil Defence Emergency Management (CDEM):**

- (a) means the application of measures, knowledge, and practices that:
  - are necessary or desirable for the safety of the public or property
  - are designed to guard against, prevent, reduce, or overcome any hazard or the harm or loss that may be associated with any emergency
- (b) includes, without limitation, the planning, organisation, coordination, and implementation of such measures, knowledge, and practices.

#### **CDEM Groups:**

Consortia of local authorities working in partnership with emergency services, major utilities and others to ensure that emergency management principles are applied at the local level.

#### **CDEM Stakeholders:**

For the purposes of this strategy, CDEM stakeholders are central government, local government, emergency services, lifeline utilities, businesses, communities, Maori and individuals.

#### **Community:**

A collective of people unified by a common interest.

#### **Consequence:**

The outcome of an event expressed qualitatively or quantitatively, being a loss, injury, disadvantage or gain. There may be a range of possible outcomes associated with an event.

#### **Disaster:**

An event that causes significant loss or damage and that overwhelms the capability of the community to manage it. Such an event could require significant additional resources.

#### **Emergency:**

Means a situation that:

- (a) is the result of any happening, whether natural or otherwise, including, without limitation, any explosion, earthquake, eruption, tsunami, land movement, flood, storm, tornado, cyclone, serious fire, leakage or spillage of any dangerous gas or substance, technological failure, infestation, plague, epidemic, failure of or disruption to an emergency service or a lifeline utility, or actual or imminent attack or warlike act; and
- (b) causes or may cause loss of life or injury or illness or distress or in any way endangers the safety of the public or property in New Zealand or any part of New Zealand; and
- (c) cannot be dealt with by emergency services, or otherwise requires a significant and coordinated response under the Act.

#### **Emergency Services:**

The New Zealand Police, New Zealand Fire Service, National Rural Fire Authority, rural fire authorities, and hospital and health services.

#### **Government Department:**

A department of the public service listed in the First Schedule of the State Sector Act 1988.

#### Hazard:

Something that may cause, or contribute substantially to the cause of, an emergency.

#### Hazardscape:

The net result of natural and man-made hazards and the risks they pose cumulatively across a given area.

#### **Impacts:**

The physical, social and economic attributes associated with a hazard, for example, building collapse as a result of ground shaking during an earthquake.

#### **Lifeline Utility:**

Any entity responsible for managing infrastructure or essential services and/or an entity named or described in Part A of Schedule 1, or that carries on a business described in Part B of Schedule 1 of the CDEM Act 2002.

#### **National significance:**

Includes, without limitation, any case where the Minister of Civil Defence or Director considers that:

- a) there is widespread public concern or interest; or
- b) there is likely to be a significant use of resources; or
- c) it is likely that the area of more than one CDEM Group will be affected; or
- d) it affects or is likely to affect or is relevant to New Zealand's international obligations; or
- e) it involves or is likely to involve technology, processes, or methods that are new to New Zealand; or
- f) it results or is likely to result in or contribute to significant or irreversible changes to the environment (including the global environment)

#### **Recovery activities:**

Means activities after an emergency occurs, including:

- a) the assessment of the needs of a community affected by the emergency; and
- b) the coordination of resources made available to the community; and
- c) actions relating to community rehabilitation and restoration; and
- d) new measures to reduce hazards and risks.

#### Risk:

The likelihood and consequences of a hazard.

#### **Risk management:**

The culture, processes and structures that are directed towards the effective management of potential opportunities and adverse effects. It is a process involving the systematic application of management policies, procedures and practices to the tasks of establishing the context, identifying, analysing, evaluating, treating, monitoring and communicating risk.

#### **Vulnerability:**

The exposure of a community or social group in being able to anticipate, avoid or reduce, cope with, and recover from the consequences of a hazard or hazards.



