

**The World Conference of Disaster Reduction
Kobe-Hyogo, Japan
18 – 22 January 2005**

New Zealand's Response to the 1994 Yokohama Strategy and Plan of Action for a Safer World.

National Information Report

Introduction

In the period 23-27 May 1994 representatives of United Nations member states, other states, non-governmental organisations, international organisations, the scientific community, business, industry and the media met in the city of Yokohama, Japan, at a World Conference on Natural Disaster Reduction. The main outcome of the Yokohama Conference was the widely distributed "**Yokohama Strategy and Plan of Action for a Safer World**" which was designed to guide disaster reduction activities world-wide for the rest of the International Decade for Natural Disaster Reduction (IDNDR) and for later years.

From 18-22 January 2005 a Second World Conference on Disaster Reduction will be convened in Kobe, Japan to:

- *Increase the international profile of disaster risk reduction;*
- *Promote integration of disaster risk reduction into development planning and practice; and*
- *Strengthen local and national capacities to address the causes of disasters that continue to devastate and impede the development of many countries.*

The Conference will build on the findings of a review of the implementation of the Yokohama Strategy and Plan of Action that will:

- *Assess achievements and identify good practices since its adoption in 1994;*
- *Define the remaining challenges, critical needs and opportunities in disaster reduction initiatives worldwide, and examine emerging issues;*
- *Develop an articulated program for disaster risk reduction to implement the UN's Millennium Development Goals (MDGs) and the objectives of the Johannesburg Plan of Implementation for sustainable development.*

New Zealand's national contact and report provided by:

Ms Lynda Angus
Manager Capability
Ministry of Civil Defence & Emergency Management
PO Box 5010
WELLINGTON
NEW ZEALAND

Phone: +64 4 4737363

Fax: +64 4 473 7369

Email: Lynda.Angus@dia.govt.nz

Website: www.civildefence.govt.nz

New Zealand's national report

Component 1: Political Commitment and Institutional Aspects

1.1 National policy, strategy and legislation addressing disaster risk reduction

New Zealand's most successful move forward in this field over the past 10 years has been the introduction of new legislation, the **Civil Defence Emergency Management Act 2002**, replacing the 1983 Civil Defence Act. This followed 10 years of reviews over the 1990s as to the effectiveness of NZ arrangements and capacity to manage significant disasters. While we have effective, modern and well-resourced emergency services for dealing with day-to-day emergencies and local government for decades has been effectively dealing with small localised events, we were, however, found to have significant gaps and deficiencies with respect to dealing with major "nationally significant" disasters.

The disaster management environment prior to the Act was a traditional focus on response planning for small local emergencies. Responsibilities were held separately at local community level by 86 local authorities, with the Fire service providing much of the manpower and the Police involved as the law and order authority. Regional and local planners were doing some good, but variable and isolated, hazard and resource management work, but it was not linked into the disaster management knowledge base. National planning for response existed on paper, but was never tested and was probably ineffective in that there was no substance behind the written plan. There were extremely variable levels of commitment and accountability within local and national levels of government. Major government restructuring during the 1990s was the focus of central government attention and at local government level, significant resource constraints and a lack of priority meant that civil defence emergency management was the preserve of a handful of struggling, dedicated individuals.

The Civil Defence Emergency Management (CDEM) Act 2002 has brought in responsibilities and structures that have started to allow us to improve our nation's approach to hazard management. It takes an all-hazards, multi-agency approach across the 4Rs (reduction/mitigation, readiness/preparedness, response and recovery).

The purpose of the Act is to:

- (a) improve and promote the sustainable management of hazards in a way that contributes to the social, economic, cultural and environmental well-being and safety of the public; and
- (b) encourage and enable communities to achieve acceptable levels of risk including,
 - (i) identifying, assessing and managing risks, and
 - (ii) consulting and communicating about risks, and
 - (iii) identifying and implementing cost-effective risk reduction, and
 - (iv) monitoring and reviewing the process, and
- (c) provide for planning and preparation for emergencies and for response and recovery in the event of an emergency, and
- (d) require local authorities to co-ordinate, through regional groups, planning programmes and activities related to civil defence emergency management across the areas of reduction, readiness, response and

- recovery and encourage co-operation and joint action within those regional groups, and
- (e) provide a basis for the integration of national and local civil defence emergency management planning and activity through the alignment of local planning with a national strategy and national plan, and
 - (f) encourage the co-ordination of emergency management, planning and activities related to cdem across the wide range of agencies and organisations preventing or managing emergencies under this Act and other Acts.

The National Civil Defence Emergency Management (CDEM) Strategy

Government'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 in the vision statement as:

“Resilient New Zealand – communities understanding and managing their hazards”

The Government has approved a 10-year National CDEM Strategy which contains four goals, each with its own objectives and targets for action. The goals are:

1. To increase community awareness, understanding and participation in CDEM;
2. To reduce the risks from hazards to NZ;
3. To enhance NZ's capability to manage emergencies; and
4. To enhance NZ's capability to recover from disasters.

Key drivers in NZ's disaster management approach

(Key drivers, contained in legislation and government policy that are necessary for the effective implementation of a comprehensive disaster management approach are highlighted in bold italics)

It takes an ***all-hazards, multi-agency*** approach, across the 4Rs of reduction/mitigation, readiness/preparedness, response and recovery.

The “4Rs” (as defined in the NZ National CDEM Strategy):

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.

NZ's emergency management system is fundamentally ***centred in the community***. It is driven down to individuals and their families through education that informs people they are responsible for their own welfare. The structures are community-based structures, using organisations located in the community and volunteers from the community. Legislation provides an overall direction: planning and

implementation is done at the community level and according to variable community profiles and needs.

NZ, unlike many western nations does not have specific stand-alone, organisations that step into managing disasters. Therefore our disaster management system is based on ***organisations responsible for doing what they do for day-to-day*** business and planning together for how they will coordinate a multi-agency approach to disasters, (including international assistance for large disasters). These agencies (listed in the Act) are required to have business continuity plans in place in order to be able to continue to operate during disasters and to plan for whatever is necessary to manage their set of responsibilities during and post emergencies. This driving of the accountability down to businesses and agencies, rather than stand-alone specialist disaster management agencies provides a cost effective and sustainable approach to disaster management over time.

Integrated planning is the key to combined agency preparedness. ***Coordination*** is the key to NZ's management of significant emergencies, coordination of existing structures and systems through an agreed multi-agency framework. Local government, emergency services, central government, lifeline utilities and scientific agencies, are formally bound together through this coordination.

New Zealand in the last 10 years has moved to a ***comprehensive*** emergency management approach that links hazard analysis and impact assessment with land use planning and resource management; to one that takes a multi-agency, all hazard approach to planning for managing significant disasters; and where recovery planning is focussed on community, economic, environmental, utility reconstruction and psychosocial development, rather than simple reinstatement of what was there before.

We have come a long way in the last 5 years, particularly. The frameworks and the theory have been accepted. We have a long way still to go to continue to implement the approach and bed it down into the normal way to doing business.

1.2 National body for multi-sectoral coordination in disaster risk reduction

NZ does not have a national body that combines all sector coordination and collaboration in disaster risk *reduction*. Disaster risk reduction is done, but through a number of structures.

The Ministry of Civil Defence & Emergency Management is responsible for *promoting* disaster risk reduction generically across disasters, and is responsible for the *management* of all-hazard risks and disasters with the exception of health (Ministry of Health); law and order issues and terrorism (Police); Agriculture (Ministry of Agriculture & Fisheries). These agencies act as "lead agency" in their respective risk areas and are responsible for both risk reduction and disaster response.

The 28 person central government Ministry of Civil Defence & Emergency Management (MCDEM) provides leadership to the disaster management sector, promotes a risk management approach across the reduction, readiness, response and recovery aspects of disaster management, encourages and supports the implementation of the CDEM Planning framework, builds commitment to the goals and purposes of the Act, facilitates whole of government involvement and supports regional structures in both peace time and during emergencies.

New Zealand has a national disaster management committee, called the Officials Domestic & External Security Committee (ODESC), administered by the Dept of Prime Minister & Cabinet, which coordinates central whole of government disaster *response and recovery*.

Local government, (which consists of 16 regions and 72 territorial district bodies) through various statutes, is primarily responsible for *the implementation* of risk assessment and hazard reduction. The Local Government Act 2002 (LGA), which recently updated the 1974 Act, recognizes the importance of local government in New Zealand and contains extensive new provisions relating to planning, decision-making and accountability.

The Resource Management Act 1991 (RMA) is the principal Act for the management of land use, subdivision, the use of water and soil resources, the use of the coastal marine area, discharges to land, air and water, and noise control. Its purpose is to promote the sustainable management of natural and physical resources. Local government administers it. Regional councils are required to prepare a regional policy statement setting out an overview of regional issues and policies to achieve the management of all resources in the region in an integrated way. Regional councils have primary responsibility to avoid and mitigate natural hazards: and prevent or mitigate any adverse effects of the storage, use disposal or transportation of hazardous substances and primary responsibility for the management of water, soil and discharges. Territorial authorities (district councils) have primary responsibility for land use management. Each territorial authority has a district plan in accordance with the RMA.

Some central government agencies are also responsible through their legislation for risk reduction, notably, Ministry of Agriculture and Fisheries, Ministry of Health, Ministry for the Environment.

1.3 Sectoral plans or initiatives incorporating risk reduction concepts into development

Disaster risk reduction **is** taken into consideration in the preparation of regional and local development plans. It is also a fundamental driver for utility planning. Regional and territorial local authorities are required to do risk management under the Local Government Act, 2002. Developmental Plans such as Regional Policy Statements, regional Plans, District Plans, Coastal management plans, water plans etc link development to the environment and are required to consider natural disasters and include community safety goals.

Hazard impact studies are prepared for new developments. Under the Resource Management Act, 1992 local and regional authorities must manage land use for the purpose of reducing or avoiding natural hazards. Local authorities also maintain data such as fault line mapping, flood plains and natural disaster history on property documents. The RMA also binds development through a resource consent and consultation processes. The RMA is linked to the CDEM Act 2002 in a requirement to consider natural hazards.

Challenges and limitations include - low priorities given to some activities because of the many and varied immediate needs of the community such as employment, housing and health; insufficient evidence of hazard information and other mitigation actions contributing to risk reduction; decision makers do not always have access to

with all the relevant information to make informed decisions on funding priorities; the cost benefit of risk reduction concepts is not easily established.

The Ministry for the Environment also legislates around environmental safety and development which other agencies are required to take account of in development.

Multi-agency, multi-sectoral planning is the cornerstone of disaster risk management in New Zealand, at least for preparedness, response and recovery. There is a start, commencing with the passing of the CDEM Act 2002 to **link** disaster risk management planning with hazard impact and risk reduction planning. The **linkages** are still variable around the country and we have some way to go in this area.

Refer to the discussion on planning frameworks and requirements under section 5.3.

1.4 N/A

1.5 Building codes accounting for seismic risk

Yes, the Building Act 1991 and subsequent Building Code of 1992.

New Zealand is a country with a high degree of seismic activity and risk. Measures have been taken to upgrade the resistance of key buildings and the main community lifelines (water, electricity, communications, transport systems etc). Building Code reviews have successively required demolition and retrofitting of buildings according to when they were built. Building code compliance is not a problem as inspection and approval regimes are well in place.

1.6 Annual budget for disaster risk reduction

Risk reduction initiatives are funded through annual local government budgeting processes. Occasional special case specific funding is approved from central government for projects where the costs of reducing likely risk is beyond the ability of the community to pay for it.

Post disaster, central government funding is also available through a formula process of shared funding, but government policy emphasises the responsibility of regional and local authorities making a significant effort to invest in risk mitigation work before central government funding is available.

1.7 Private sector, civil society, NGOs, academia and media involvement in disaster risk reduction efforts and coordination between government and civil society

Community resilience and responsibility. A significant goal of much government legislation and policy, and the CDEM Act, is for communities to be resilient. New Zealand also runs a devolved and decentralised system of governmental responsibility and for disaster risk management the principle is that communities are the ones affected. Therefore, communities should aim to reduce the likely impact from, prepare for, and be able to respond effectively to, emergency events on their own. To ensure this, responsibility for disaster risk reduction and risk management is driven down to the community level and held by local government with obligatory consultation with and participation by the community.

NZ, unlike many western nations does not have stand-alone, funded organisations that step into managing disasters. NZ's disaster management system is based on organisations responsible for doing what they do for day-to-day business and planning together for how they will coordinate a multi-agency approach to disasters,

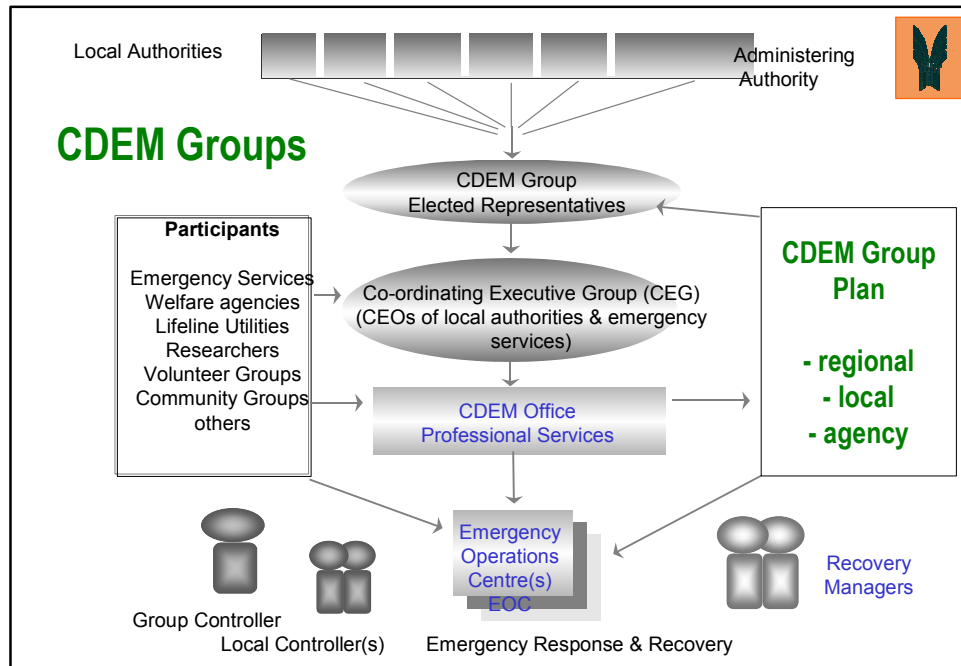
(including international assistance for large disasters). These agencies (specified in the Act) are required to have business continuity plans in place in order to be able to continue to operate during disasters and to plan for whatever is necessary to manage their set of responsibilities during and post emergencies. This driving of the accountability down to businesses and agencies, rather than stand-alone specialist disaster management agencies provides a cost effective and sustainable approach to disaster management over time.

It does not matter what the hazard, natural or technological, the planning is primarily done on the basis of generic hazard impacts, roles and responsibilities, that is, functional planning rather than an emphasis on specific hazard contingency planning, (although some of that is carried out as required, particularly for nationally significant hazard impacts).

Disaster management structures

The key structure for planning and implementation across the 4Rs is the Civil Defence Emergency Management (CDEM) Group, based on Regional council boundaries (that is 16 in New Zealand). These statutorily include local government, Fire Service, Police, Ambulance, Health and Lifeline Utilities, but also include any agency public or private with an interest in this sector.

The following diagrammatically represents the structure at regional and local level. Powerfully the CDEM Group, that is the governing body is composed of all the elected Mayors of the region and the Coordinating Executive Group responsible for Group Plan and the implementation of the plan is composed of the Chief Executives of district local government and the senior executives of the regional emergency services. Groups all have a working party structure under the CEG, supported by the Group CDEM office, which covers, variously: Reduction (linked into other local government accountabilities); preparedness and response, and recovery (linked into central government and Non-Government Agency welfare and other agencies).



Multi-agency approaches to Reduction/mitigation

Regional and territorial local authorities are required to do risk management under local government; environment; and resource management (land-use) legislation AND the CDEM Act 2002. Their long term community development plans are required to be linked to the environment and are required to consider natural disasters and include community safety goals. Data on risks, disaster history and hazards is available on all property. Building code legislation and standards have long been in place in NZ.

Regional local government employs hazard analysts and planners. Now, with the advent of the CDEM Act 2002, there is an opportunity for the first time to effectively link disaster management with hazard management, for each to use the knowledge of the other to inform and improve the respective work.

Knowledge about hazards and their impacts are hugely contributed to by a range of academic and scientific agencies in NZ, who have been working in and researching these areas for many years. Their work and its application have been enhanced by the requirements of the new CDEM legislation that legislates for and encourages strategic partnerships between all agencies that have an involvement in disaster management. Agencies such as the Earthquake Commission (EQC), the Institute for Geological & Nuclear Sciences (GNS), the National Institute of Water & Atmospheric Research (NIWA), the NZ Meteorological Service and academic institutions such as Massey, Auckland and Canterbury Universities are working with regional government. Through these strategic partnerships have vastly contributed to NZ's knowledge of its seismicity, its land structures, its flooding & tsunami risks, sociological impacts, to mention just a few. The Foundation for Scientific & Technology Research, funded by central government, allocates significant funding to support these studies.

Hazard education is done in NZ by all agencies concerned with community safety. The focus is each person in their family and their community being self-reliant, capable of dealing with the variety of hazards faced today.

Clusters

As well as the CDEM Groups at the regional level, NZ has developed a "cluster approach" to disaster risk management, across the 4Rs. These clusters are being encouraged and developed at the national level by MCDEM and they "mirror" or parallel the sort of relationships that need to occur at the regional level. "Clusters" are "Agencies with similar purposes working together to achieve common outcomes". Clusters include government, non-government and voluntary agencies.

The approximately 11 clusters, such as health, welfare/recovery, agriculture and rural, lifeline utilities, emergency services, scientific and research agencies, business, voluntary agencies etc together perform risk assessment, planning and implement improvement and development initiatives according to their gap analysis of deficiency.

Media

All media are utilised in various campaigns to target individual and organisational efforts at reducing risk.

Component 2: Risk Identification

2.1 Hazard mapping

New Zealand's dynamic physical environment and level of technological development means the country is subject to a wide variety of hazards. Considerable work has been carried out over the years by scientific agencies, academic and research institutions, in conjunction with local government and central government into the history, coverage, impacts, and characteristics of our most common hazards.

Flooding, earthquakes (liquefaction, ground shaking and active faulting), coastal inundation (tsunami and storm surge), coastal erosion, volcanic hazards, slope instability, meteorological hazards (snow, wind, rain and lightning, drought) and wild fire. Most regional councils (main source of this information) have a programme of updating hazard maps on a 5 yearly basis – or when new information is collected/compiled or when new modeling techniques etc may become available.

Scales – anywhere from 1:500 / 1:2000 for very site-specific work to 1:500,000. Most regional and district scale information is collected/compiled at about 1:5000 to 1:50,000.

Yes they include characteristics, impacts (but normally a separate report to the hazard assessment work and not as advanced as the hazard assessments – but the CDEM Act is influencing change here), historic data (considered an integral part of most hazard assessment studies and particularly for earthquakes and flooding) and multi-hazards (greater recognition of man-made hazards through CDEM Act).

Local government (regional and district councils) and CDEM Groups are requesting/receiving the information. All hazard and risk information collected by local government is generally publicly available.

A number of scientific, research and academic agencies are contracted to and in partnership with local government for hazard mapping for earthquake and seismic activity (Institute of Geological & Nuclear Sciences), water, flooding and tsunami (National Institute of Water & Atmospheric Research) weather (NZ Meteorological Service). Studies range over many years.

Hazardous substances and introduced organisms may also adversely affect New Zealand's environment, health and economy. The threat of terrorism also poses a risk to public safety and national security that no one can ignore, although the risk of mass events is deemed to be less in NZ than in some other countries.

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.

Utilities are recognised as the fundamental infrastructure that keeps communities functioning and therefore they need to be involved in the planning for consequences of disasters with disaster managers, with exchange of information and interdependency and priority restoration planning between parties. Since local

government is primarily responsible for hazard research, along with scientific partners, then this is vital information to impart to lifelines. Each region in NZ has an Engineering Lifeline Group, which utilities (electricity, gas, water, wastewater, telecommunications) and transportation networks (road, airport, rail, port) participate in voluntarily. They take a multidisciplinary approach to the examination of hazards and the Lifeline Projects then undertake a work programme to reduce the impacts of these hazards.

Additionally, Civil Defence Emergency Management (CDEM) Groups consisting of local authorities, emergency services, health, lifeline utilities and other related organisations are required under CDEM Act 2002 to conduct hazard and impact analysis, through a risk management process. All regions in the country have now conducted such an analysis. The Ministry of CDEM is required to collate all these hazard analyses on a national basis to address disasters of national significance, through the mechanism of the National CDEM Plan.

2.2 Vulnerability and capacity assessments

This work has not had a national focus, neither has it been a feature of the disaster risk reduction and management arena. Work is done by a variety of agencies in their particular area of concern and influence, for example social welfare agencies, but it is not currently linked in any systematic way to disaster risk management. This is identified as an opportunity and as a necessity in disaster planning and we have been exploring partnerships and IT solutions to support this work in the future.

2.3 Risk monitoring and mapping

Refer comments above in 2.1. Risk mapping (at least “risk assessment”) is an integral and necessary part of the mitigation process, although the emphasis is still very much on the first step in risk assessment, that of hazard identification. Further work is still to come.

River flow and flood monitoring are the main examples of Risk monitoring. There are also local site-specific monitoring programmes – volcanic activity, slope stability (particularly for dams and reservoirs) and earthquake activity and geothermal.

Responsibility generally lies with local government and/or the Crown Research Institutes.

2.4 Systematic impact and loss analysis after disasters

No, we are aware of the need to measure this and are looking at how it can be measured, but NZ’s work to date has only been preliminary. Each government and other organisation that incurs cost or funds will have data regarding the cost of that component, but there is no system for putting the information together. Ballpark figures only are available.

2.5 Early warning systems

NZ has well practised and long standing Standard Operating Procedures between scientific agencies, and national, regional and local government agencies for the communication of hazard warnings, particularly for natural hazards and with lifeline utilities and those agencies for technological hazards. All these agencies share emergency radio frequencies and these are tested nationally on a monthly basis.

The Ministry of Civil Defence & Emergency Management has the role to pass warnings to appropriate ministries and government agencies. Warnings to the public are the responsibility of local government civil defence personnel and sometimes the police, who use a variety of warning methods, mostly through the media.

We have learnt that redundancy and back-up needs to be built in to early warning systems, that is, there must be a variety of mechanisms.

Component 3 Knowledge Management

3.1 Disaster risk reduction information management systems

Scientific institutions have the most complete and effective national coverage of risk reduction information with respect to seismicity, water and atmosphere and climate, for example.

At local government level there is the requirement under local government and CDEM legislation to collect risk information. The systems for this vary around the country, but it primarily involves partnerships between scientific, academic institutions and local government users. We have some way to go to collect this into national information. There are some particular groups, for example, regional river managers who exchange risk reduction information nationally.

At national government level the information collected is primarily for response and recovery, as opposed to risk reduction. All agencies involved with response and recovery exchange information through the multi-agency response structures and the multi-agency cluster groups, which are involved in recovery.

3.2 Academic and research institutions involvement

These institutions are an integral part of disaster reduction in NZ, see above. The linkage is through publicly funded research programmes; through funding partnerships between organisations requiring risk information and scientific institutions; and through purchase agreements for scientific institutions that receive government funding.

A number of scientific, research and academic agencies are engaged in the collection of data and information exchange on risk:

- for earthquake and seismic activity, the Institute of Geological & Nuclear Sciences;
- for water, flooding and tsunami, the National Institute of Water & Atmospheric Research;
- for climate and weather, the NZ Meteorological Service.

These agencies are also engaged through SOPs in the early warning systems.

Universities are also engaged in risk reduction work, particularly Canterbury and Massey Universities.

3.3 Educational programmes related to disaster risk reduction in public school system

The Ministry of Education provides curricula material for students and guidelines for school management as to how to plan and manage emergencies. Schools are required to provide for this in their strategic plans under their purchase agreement deliverables.

New Zealand also has a CDEM Public Education Strategy and a multi-agency Committee which oversees the development of initiatives in this arena. Local civil defence personnel are responsible, along with all emergency services, for the running of community safety programmes in schools.

Community safety programmes with respect to a variety of personal risks are well integrated into our public school system, particularly for the primary school age group, that is 5 years to 13 years. Well-designed packages are available.

3.4 Training programmes

The Ministry of CDEM runs national courses in a number of areas. Prior to 1999 the Ministry maintained a School for Civil Defence training. Now, in addition to its national courses, it supports regional initiatives in disaster management professional development and training. Under the CDEM Act, CDEM Groups are required to ensure they have access to competent trained personnel to fulfil their disaster management functions. CDEM courses cover the range of technical skills to management of disasters.

As mentioned previously, 2 academic institutions have diploma and degree courses in disaster management. The NZ Qualifications system has a system of points (or credits) for various courses from 1-day courses to university degrees. Industry Training Organisations (ITOs) moderate and maintain various levels of qualifications in their field. There are a number of ITOs with qualifications in the emergency services, civil defence and emergency management fields.

3.5 Traditional indigenous knowledge used

New Zealand is a multi-cultural society, however, we have a bicultural treaty between pakeha (European) people and the first people in NZ, the Maori. It is incumbent on CDEM Groups (and central government agencies) to consult with Maori, bicultural partners under the Treaty of Waitangi, generally and in relation to CDEM to consult on hazards and risks and the options for the treatment of them, when developing a CDEM Group Plan. Knowledge of the environment, disaster history, sacred sites and cultural approaches to the management of disasters is discussed with Maori and marae (Maori community meeting places) are used for welfare support and accommodation when people are evacuated.

3.6 National public awareness programmes

The CDEM legislation and other legislation in NZ are based upon principles of self-responsibility and resilience. In any significant disaster, emergency services will be over-whelmed. While we will seek international assistance, our distance from the rest of the world requires us to be as self-sufficient as possible. Our public community safety education all promotes this message of looking after oneself and one's family.

We have a multi-agency approach to public awareness programs in community safety. The Fire Service (fires), the Earthquake Commission (earthquakes) Police (law and order), Accident Compensation Corporation (accidents), Ministry of Civil Defence & Emergency Management (natural disasters), Land Transport Authority (road accidents), Ministry of Health and local government all conduct a variety of public awareness programs in their field of risk. National television campaigns, radio, newspaper, pamphlets etc are all utilised. School programs are particularly emphasised.

All programmes and campaigns have a built in research evaluation component. We have recently produced an analysis report about these campaigns, their efficacy and the issues around translating “awareness” into “action”.

The examples are too numerous to mention, but of particular interest perhaps is the Fire Safety campaign with rural, isolated and predominantly Maori communities that has involved a number of agencies working together to promote awareness and practice around fire safety, smoke alarms etc. It has been an example of community outreach, by people from the community and an outstanding success in educating and changing behaviour.

All media are utilised for campaigns. NZ has also always used the back of the telephone books to display information about personal and family preparedness and what to do in a disaster. Probably most NZers would cite that as the most commonly referenced source of information. In a disaster, again all media are used for communication and public information.

Component 4: Risk Management Applications/Instruments

4.2 Financial support to reduce the impact of disasters

Yes, this is readily available in NZ as a developed country. Policies are predicated on self-sufficiency and responsibility; however, various forms of support are available.

Donations are managed by way of NGO and mayoral relief funds (community level funds), which are also contributed to by government (usually matching dollar for dollar donations by the public).

Local governments have disaster funds.

Insurance and re-insurance is utilised. NZ has a unique institution, the Earthquake Commission (EQC) that uses a compulsory, universal, affordable insurance model. It is non competitive and backed by government guarantee. It was set up to help NZers recover from building damage post earthquake, landslide, volcano, hydrothermal activity, tsunami, storm and flood and fire following any of these. It assesses damage, funds repairs and organises the repair work. EQC is also a major funder of research and runs public education programmes. (See example below)

With our earthquake-prone country, there is also a high level of top-up insurance by private householders and business.

There are policy and procedures in the National Plan for local government to apply for central government funding of response costs and recovery costs, apportioned on a share basis according to population. In addition to this, there are various income supplement benefits and hardship financial support available through the government Welfare departments and for rural people through the Ministry of Agriculture and Fisheries.

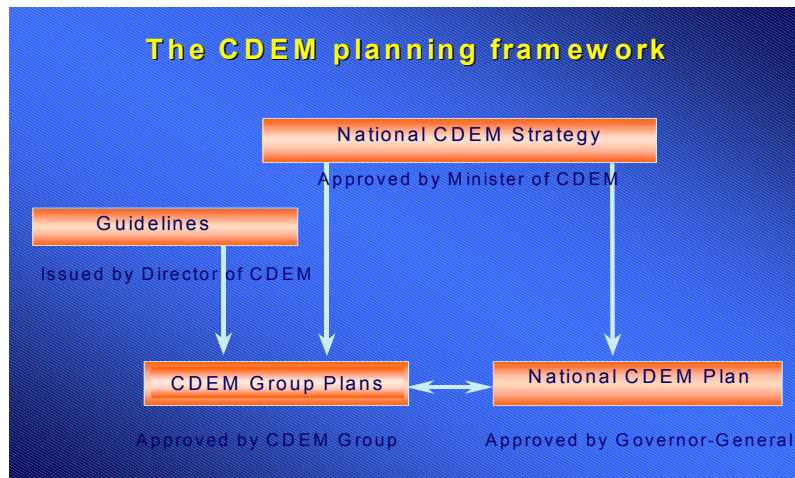
Component 5: Preparedness and Contingency Planning

5.1 Disaster contingency plans in place, at national and community levels

The CDEM Planning Framework

The CDEM Act 2002 legislates for:

- a National CDEM Strategy, agreed by Parliament,
- a National CDEM Plan, approved by the Governor General,
- Director's Guidelines (best practice guidelines for the sector approved by the Director of MCDEM),
- CDEM Group Plans, approved by the regional CDEM Groups



All these plans are in place, down to district level and including some government ministries. They have statutory review periods and have been in place for many years. However, they are being re-written in light of the CDEM 2002 legislation.

The National Plan deals with expectations of and relationships/arrangements between agencies. It is primarily function-based, however there are a number of contingency plans for particular hazards.

In addition to the National Plan, each CDEM Group has been required to produce a Group Plan covering:

- (a) the hazards and risks to be managed by the Group
- (b) the arrangements necessary to manage the hazards and risks
- (c) apportionment between local authorities which make up the Group of liability for financial and other resources for the activities of the Group
- (d) arrangements for declaring a state of emergency and for cooperation and coordination within and with other Groups

Plans must also be consulted with the public through a formal process, before being approved by the Minister of Civil Defence & Emergency Management.

The Act requires a risk management approach be taken when dealing with hazards. As part of the comprehensive approach to civil defence emergency management, all hazards, not only natural hazards, must be considered when planning. Regional hazards are identified with respect to both likelihood of the event occurring and its consequences. Community vulnerabilities are then matched against the

consequences so that impacts are understood. Appropriate resources can then be allocated and plans made for coordinated management of possible events.

The strength of consequence planning is that roles and responsibilities are allocated on a functional basis, whatever the hazard, so the plethora of specific-hazard type planning that one sees overseas, is avoided.

5.2 Emergency funds

Refer question 4.2

NZ does not maintain large national or community storage of goods for disasters, as all goods are readily available throughout the country at any time. However, the health authorities do have some stocks and more particularly arrangements to replenish supplies from overseas. Additionally, some NGOs such as Red Cross do maintain some stocks and supplies. Our aid agencies also maintain stocks for overseas assistance and relief.

There is a strong emphasis in community education for individual and family preparedness and many households and work places store extra supplies of water, non-perishable food, torches, radios, candles etc.

5.3 CDEM structures

There are four levels of structure for disaster response in NZ:

- CDEM Groups – equal partnerships between civil defence, fire, police and health services, lifelines utilities, and
- central government, including the Ministry,
- the community: people, families, community agencies, clubs, service groups, churches etc
- international assistance

Coordination of disaster response preparedness is through these structures, but is the particular responsibility of the Ministry of Civil Defence & Emergency Management at the national level and the CDEM Group at the regional level. The new key structure under the 2002 legislation is the Civil Defence Emergency Management (CDEM) Group, based on Regional council boundaries (that is 16 in New Zealand). These statutorily include local government, Fire, Police and Health services and Lifeline Utilities. Coordination arrangements in NZ are quite effective and frequently practiced at least in small-scale emergencies.

New Zealand also implemented the Coordinated Incident Management System (similar to a number of such integrated incident response systems around the world) a number of years ago, through a multi-agency agreement.

Coordination of large-scale disasters is run on a continuum of the CDEM Group Incident Controllers and Recovery Managers working at the regional level and the Whole-of-Government processes described earlier at the national level. Different agencies take the lead role depending on the nature of the disaster.

Readiness & Response:

Clearly the National and CDEM Group Plans form the basis of NZ's preparation for response in that they specify arrangements for all operational response functions. Scientific agencies are tied in with a national warning system, which involves all emergency services and local government.

In addition to the full-time emergency services of Police, Fire (both national services) & Ambulance (a regional service), the NZ Defence Force has an agreement with the Ministry to support disaster response and while their resources are thinly spread and limited they do participate strongly in disasters. All other agencies such as health and welfare services fulfil their normal functions, but with a different focus in disasters.

The NZ Fire Service provides most of the paid personnel for non-fire emergencies, such as evacuation, flooding clean-up, securing buildings in storms etc. CDEM Groups do have other response resources at their disposal, specifically the multi-agency specialist Urban Search & Rescue (USAR) Taskforces; voluntary community emergency response teams which are multi-skilled; welfare agencies (both state and non-government), first aid agencies such as Red Cross.

In any emergency, big or small, a huge source of personnel is the volunteers from the community, some pre-trained and others spontaneous. CDEM Groups place a significant emphasis on using and supporting volunteers. They are the backbone of any disaster in NZ.

Other aspects of response include:

Emergency Operating Centres at National, CDEM Group and district level

Media management

Disaster Impact Assessment and information exchange and management

Public information

All of these processes are planned for, exercised and utilised in disasters.

Recovery:

Recovery has been further defined in the draft NZ Recovery Strategy document, "Focus on Recovery", as covering economic, environmental, lifeline reconstruction, community and psychosocial aspects and development. It also introduces the considerations applicable to medium and long-term recovery, although NZ has yet to really understand and consider the implications of long-term recovery.

Recovery systems and processes include:

Damage and needs assessment processes

Coordination of resources

Central govt funding

Allocation and distribution of donations

Welfare support

Continued habitation

Financial support through emergency benefits

Non-Government agencies, the voluntary sector, churches, community groups are involved in disaster risk management activities at both national and community levels and are tied into the process through the pre-incident planning and agreements. For example, Red Cross has the responsibility at both national and regional levels for registration of people in disasters. Red Cross and St John Ambulance organisations also provide first aid assistance. Salvation Army for the provision of food and other basic welfare supplies.

Volunteers from the community are integral part of the disaster response system. The Emergency Services run much of their disaster response services with volunteers. For example, 8000 out of 10,000 fire service personnel are volunteers, search and rescue on land and at sea (coordinated by Police) are conducted by

trained volunteers and civil defence uses volunteers in a variety of tasks during emergencies.

International involvement in disaster risk reduction

New Zealand is part of the Pacific region group of countries that work very closely together in disaster risk management. NZ maintains close working associations with Emergency Management Australia (EMA) and the Australian state disaster organisations, with the South Pacific Applied Geoscience Commission (SOPAC) and with other Pacific and Asia disaster agencies.

We are also part of the global international disaster risk management community and as such take knowledge and learning from all thinking and disaster experience all over the world. NZ has an active business, scientific and disaster management participation in disaster response and recovery internationally and uses the experience to inform and improve our own domestic disaster management. We do also have a particular and strong involvement with the UN OCHA and other bodies, specifically the UNDAC and INSARAG programmes. NZ through the Ministry of Foreign Affairs and Trade and NZAID is a funder of various UN programmes and initiatives.

Pacific region commitments and involvement by NZ

By the Ministry of Civil Defence & Emergency Management (MCDEM), the Ministry of Foreign Affairs & Trade (MFAT) and New Zealand Agency for International Development (NZAID) in the recent past and currently:

- Disaster response missions in the Pacific
- Capacity building in Pacific Island Countries (PICs)
- Reviews of national capability and planning arrangements at the request of governments in Tonga and currently in Samoa
- Work with the World Bank on subsequent development programmes
- Support of UN OCHA in the Pacific through the Regional Disaster Response Advisor
- Membership of United Nations Disaster Assessment and Coordination (UNDAC) programme
- Disaster readiness and response training for PIC response agencies
- Ongoing work in preparing a national planning template for PICs in readiness, response and recovery which ties in with hazard reduction
- Co-fund the set-up and operation of the Disaster Management Unit of SOPAC. Ongoing funding of the SOPAC Community Risk Programme.
- Fund SOPAC to coordinate Pacific Islands' input into the ten-year review of the Yokohama Strategy and Plan of Action

Other NZ contributions/work in the Pacific:

NZAID maintains an annual allocation for emergency management and disaster response in the Pacific. A component of this budget is set aside to fund emergency risk management activities identified by partner governments. These activities can be supported on a bilateral or multi-partner level basis.

In 1998 NZAID co-funded the set up and support of the Disaster Management Unit within SOPAC. Key objectives identified were to build capacity mainly within National Disaster Management Offices, but also at the national political level to support

national disaster reduction and risk management initiatives, and to institutionalise regional cooperation in risk mitigation efforts.

NZAID is finalising a MOU with the New Zealand Ministry of Civil Defence and Emergency Management to fund on an ongoing basis the provision of agreed technical inputs in disaster risk management in the region.

New Zealand is a signatory to a MOU with France and Australia (FRANZ), 1992, to co-ordinate response to disasters in the Pacific. Key objectives of the MOU are to maximise use of resources, enhance effectiveness and avoid duplication in disaster response. The partners work cooperatively to gather and share information, to survey damage to PICs, conduct joint relief operations and offer appropriate aid.

NZAID works with all sectors including national governments, non-government organisations and civil society in supporting disaster risk management initiatives and in responding to disasters in the Pacific. Its aim is to encourage institutional strengthening at all levels.

Natural Hazards NZ cluster of companies, research organisations and universities have been pursuing a collaborative strategy on hazard & impact studies in the Pacific, (as in other countries internationally).

Current international policy on risk reduction, including within development or other donor agencies as well as trans-border agreements or regional co-operation.

New Zealand recognises the high level of vulnerability throughout the Pacific to natural disasters. That disasters impact adversely on the economic and social well-being of all citizens and undermine sustainable development. NZAID will give priority to helping partner governments address disaster mitigation and preparedness as an integral component of long-term development planning and comprehensive risk management.

NZAID's key strategic focus in the Pacific is on effective governance. Governance has a key role, especially at national level in reducing vulnerability to disasters.

New Zealand is committed to the United Nations' Millennium Development Goals (MDGs) and the International Development Targets (IDTs). Economic well-being and environmental sustainability are inherent within these goals. A key to achieving these objectives is reducing the impact of disasters.

NZAID works closely with regional and international organisations in disaster reduction and risk mitigation activities. NZAID intends to strengthen its relationship with SOPAC through greater policy engagement and a multi-year funding and assistance framework. NZAID provides core funding to support the UN OCHA regional representative office and this year will co-fund a refresher course for UNDAC Pacific representatives.

Component 6: Examples of successful implantation of disaster reduction activities

EQC (Earthquake Commission)

EQC is crown entity (a quasi-government organisation) set up to educate the public, fund research, and manage the reinstatement and recovery of domestic property following a range of natural disasters, (landslip, earthquake, tsunami, volcanic eruption, hydrothermal activity, storm and flood and fire following any of the former).

Under the EQC Act a compulsory premium on home owners ensures a fund which is used to finance and organise repairs on domestic buildings. It is a non-competitive compulsory scheme which implements NZ government social policy using an insurance model, rather than being an insurance company. The EQC scheme reimburses home and property repairs up to NZ\$100,000, and contents up to NZ\$20,000, for an annual homeowner premium of \$67.50. (People have the option of taking top-up private insurance for amounts in excess of these and there is a relatively high take-up of this kind of insurance in NZ.

The EQC is a social obligation which the NZ government has instigated to ensure that people are housed, given NZ's volatile landscape. Earthquakes in 1931 and 1942 provided the catalyst for the establishment of EQC. The scheme is almost universal, provides an affordable premium, is simply constructed, low overheads, with a government guarantee.

The EQC funds:

Geonet

New Zealand Geonet, established in 2002 is a collaborative system funded by the Earthquake Commission and developed and managed by the Institute of Geological & Nuclear Sciences. It is a seismic monitoring and reporting system, non-profit with data freely available to the disaster management sector. The cost of development is US\$18M for the purchase and installation of equipment, spread over 10 years and US\$2.5M per year to operate.

The system will significantly contribute to risk assessment, avoidance and reduction. It brings together a national project, designed to detect hazards, with forecasting tools for enhanced readiness. It will provide robust and rapid alerts for emergency response and contribute reliable information to assist damage assessment and timely recovery.