



Ministry of Civil Defence  
& Emergency Management

Te Rākau Whakamarumarū

# MCDEM Update

Presenter:  
Mark Constable

8 November 2012

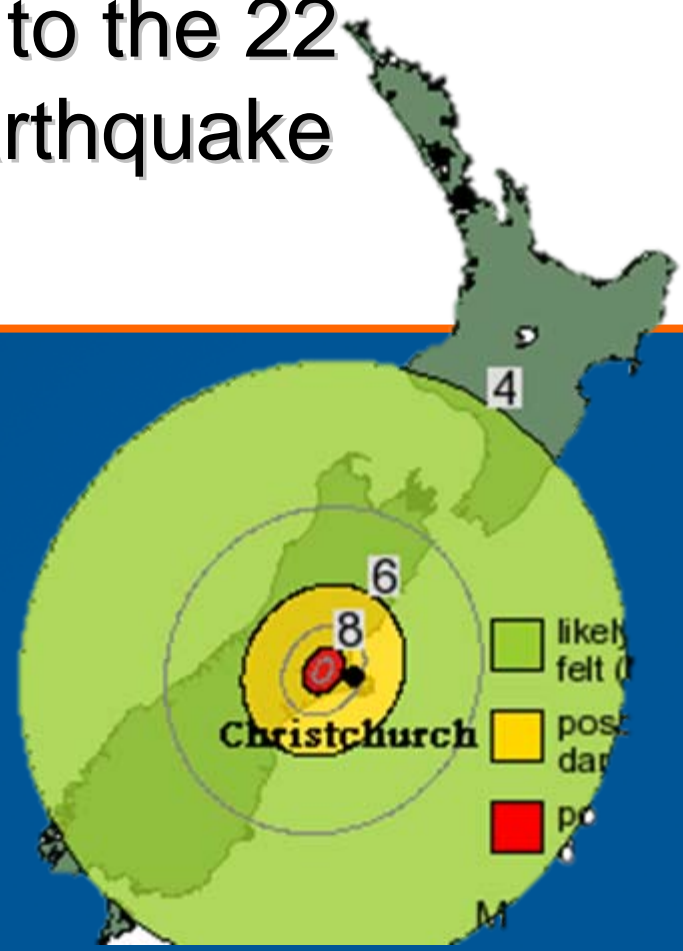
**2012 National Lifelines Forum  
New Plymouth**



# Topics

- Review of Christchurch Earthquake response
- Lifeline utility coordination arrangements
- Emergency Management Information System
- National CDEM Fuel Plan

# Review of the CDEM response to the 22 February 2021 Christchurch Earthquake



# About the review

- MCDEM initiated the independent review
- Focused on the CDEM response and how well the National CDEM Plan worked
- TOR were noted by Cabinet in November 2011

# Review Process

- Commenced November 2011
- More than 200 people interviewed
- Draft report was provided to the Director 30 April 2012. Final review received on 30 June 2012
- Director forwarded the review to the Minister of Civil Defence for consideration by Cabinet

# Recommendations

- Total: 108
- Major: 6
- Related to lifelines: 22

# Major Recommendations

1. That territorial local authorities no longer have power to control the response to emergencies, but that they still retain the power to declare them.
  - **MCDEM to work with CDEM Groups that need strengthening**
2. That a cadre of highly trained emergency managers from organisations across the country be established to lead and control emergency responses.
  - **MCDEM to explore options**
3. That new structures be developed to modify CIMS so as to better link the response to emergencies with the community and community organisations.
  - **CDEM to link emergency response systems more closely with communities**

# Major Recommendations

4. That the preservation of business and jobs be made a higher priority during response to emergencies, and links between response and businesses improved.
  - **MCDEM to review arrangements to ensure a higher priority is given**
5. That consideration be given to locating MCDEM within the Department of Prime Minister and Cabinet so as to provide a better platform for launching responses.
  - **MCDEM to stay a business unit of Department of Internal Affairs**
6. That MCDEM continue to promote a culture of preparedness for major disasters amongst all sectors and be resourced appropriately to do so.
  - **MCDEM to continue to promote a culture of preparedness**



# Lifelines Recommendations

Lifeline recommendations are focused on matters relating to:

- BCM around water and waste water
- Coordination between electricity and telecommunication companies
- Protocols regarding electricity disconnection
- Port, airport and rail emergency planning
- Fuel distribution during restrictions
- LUC training and their links with emergency operations centres
- The role of MBIE in lifelines coordination
- Evaluation of the resilience of infrastructure providers in the main centres of New Zealand

# Corrective Action Plan Process

- MCDEM is coordinating an interagency CAP developed with participating government agencies
- Envisaged that the CAP will inform agency work programmes (2012 – 2014)
- Report back to the Cabinet Committee for Canterbury Earthquake Recovery with the corrective action plan in November

# CAP Themes

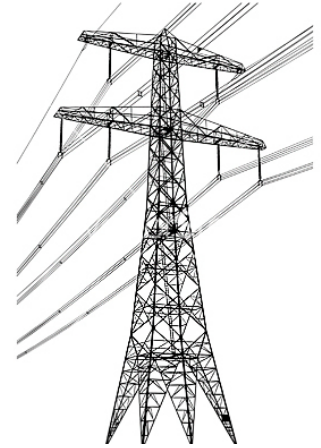
1. Management & Control
2. Emergency Operations Centres & staffing
3. Emergency welfare arrangements
4. First Level ('Front line') response
5. Lifelines
6. Building Management
7. Logistics
8. Information Management
9. Public information
10. Community preparedness & response

# Theme Plans

- Coordinating agency
- Applicable recommendations
- Issues
- Actions
- Projected time frames

# Lifeline Utility Coordination

## Arrangements for responses



# Lifeline Utilities Response

(The National CDEM Plan)

- Manage your response
- Activate plans & coordinate with the lead agency
- Conduct impact assessment
- Maintain or restore services
- Communicate (with lead agencies, other responders, and the public)
- Coordinate with CDEM to provide integrated and coordinated inter-agency responses

# Expectations

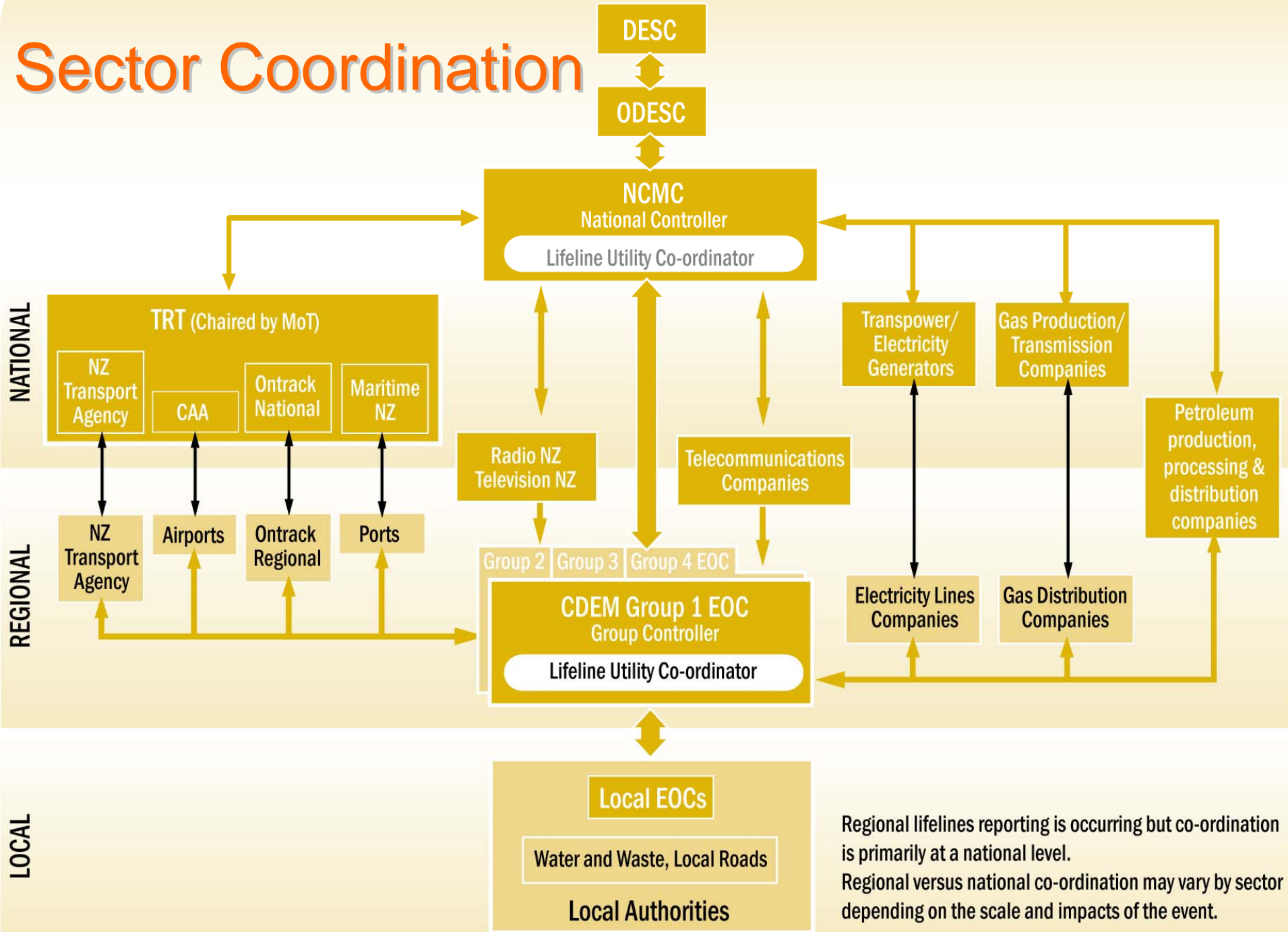
- Establish contact with and provide information on network status the CDEM Group ECC
  - the scale & impact on networks
  - major disruptions (incl. users affected)
  - issues requiring the support for access/tasking prioritisation
  - estimated restoration times
  - priority areas of response
  - alternative solutions available to users (where appropriate);
  - public information to be promulgated;
  - requests for support or specific information.
- Receive CDEM Group reports / action plans
- Action CDEM requests for prioritisation of services/restoration

# Response Hierarchy



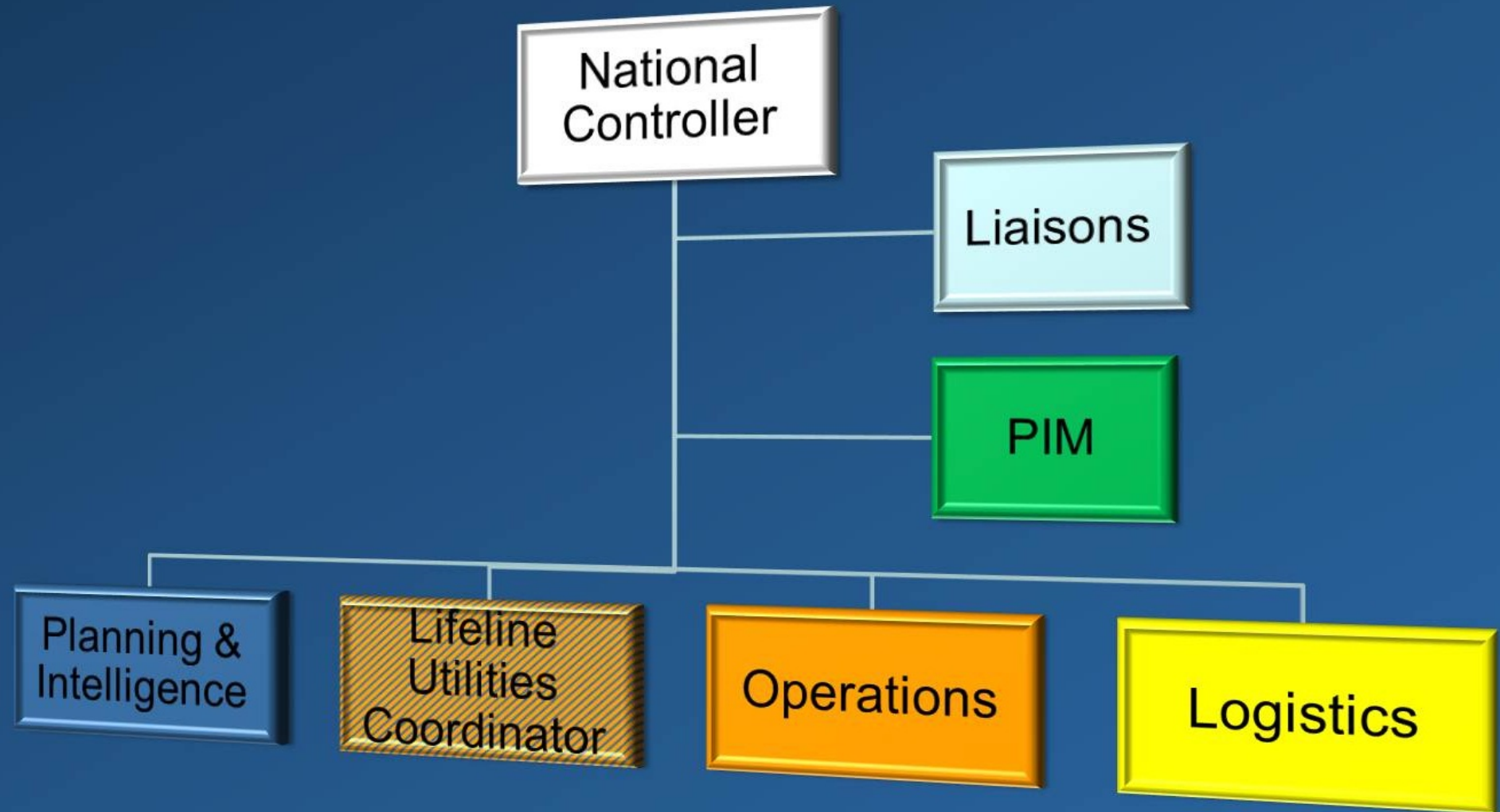


# Sector Coordination



Regional lifelines reporting is occurring but co-ordination is primarily at a national level.  
Regional versus national co-ordination may vary by sector depending on the scale and impacts of the event.

# National Crisis Management Centre



# Lifelines Coordination

- Facilitate (lifeline utility) impact assessments
- Intelligence analysis of lifeline utility information
- Provide advice to the Group Controller
  - regional impacts, response priorities, available resources, strategic goals, tactical objectives, action plans
- Provide information for media releases, situation reports and reports
- Coordinate requests for resources from lifeline utilities
- Update lifelines utilities on CDEM priorities & emerging issues
- Provide for transition to the recovery phase

# Christchurch Response LUC Review

- Reviewed the effectiveness of LUC roles in the NCMC and CRC
- Report sent to all CDEM Groups in June
- Several recommendations
  - expanding LUC numbers, training, reviewing arrangements, etc

# LUC Development

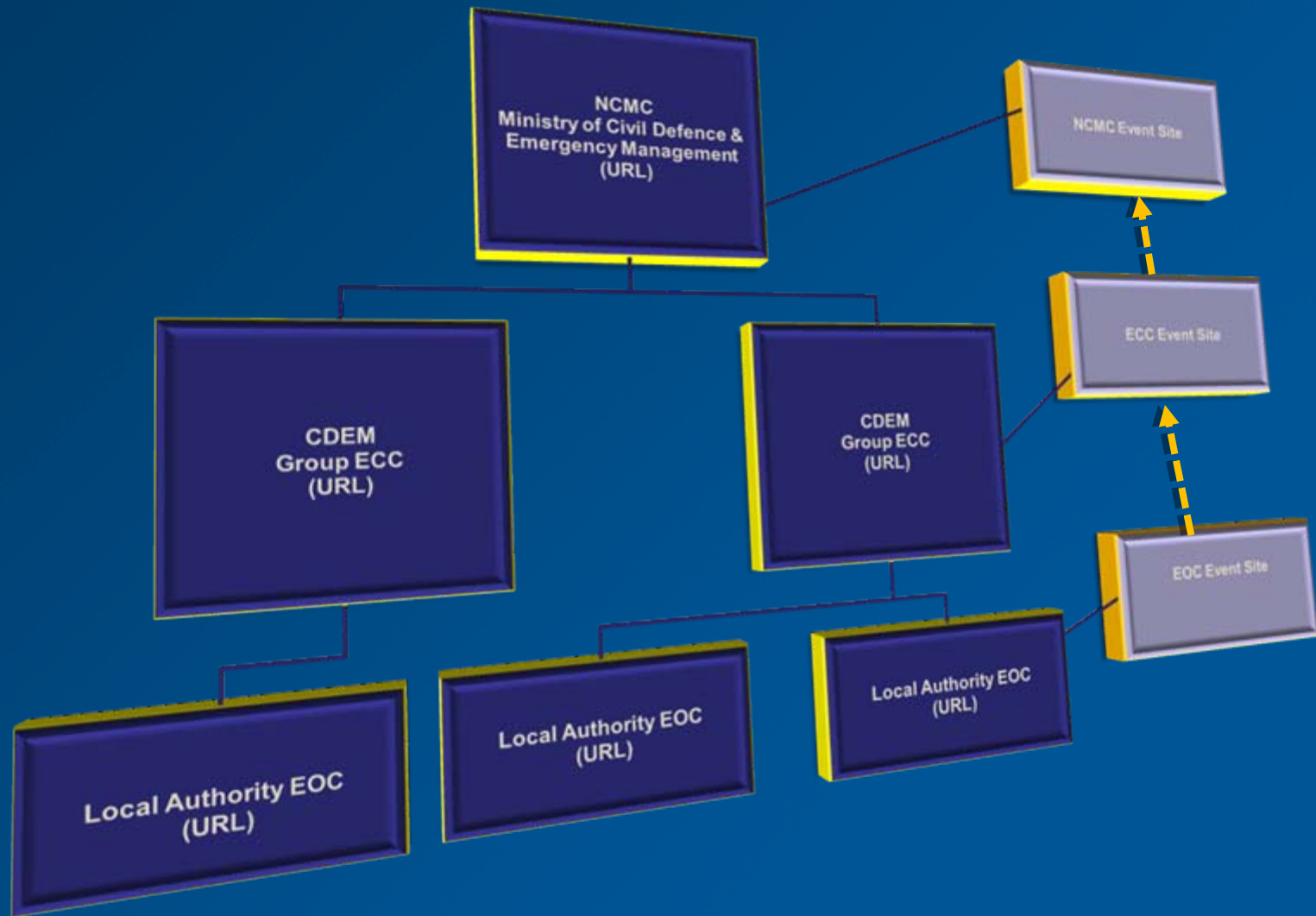
- Review of the National Plan/Guide
- Lifelines DGL & BPG to be reviewed
- LUC training package development
- EMIS training for NCMC lifeline liaisons

# Emergency Management Information System

Update



# Three Tier Solution



# Time Line

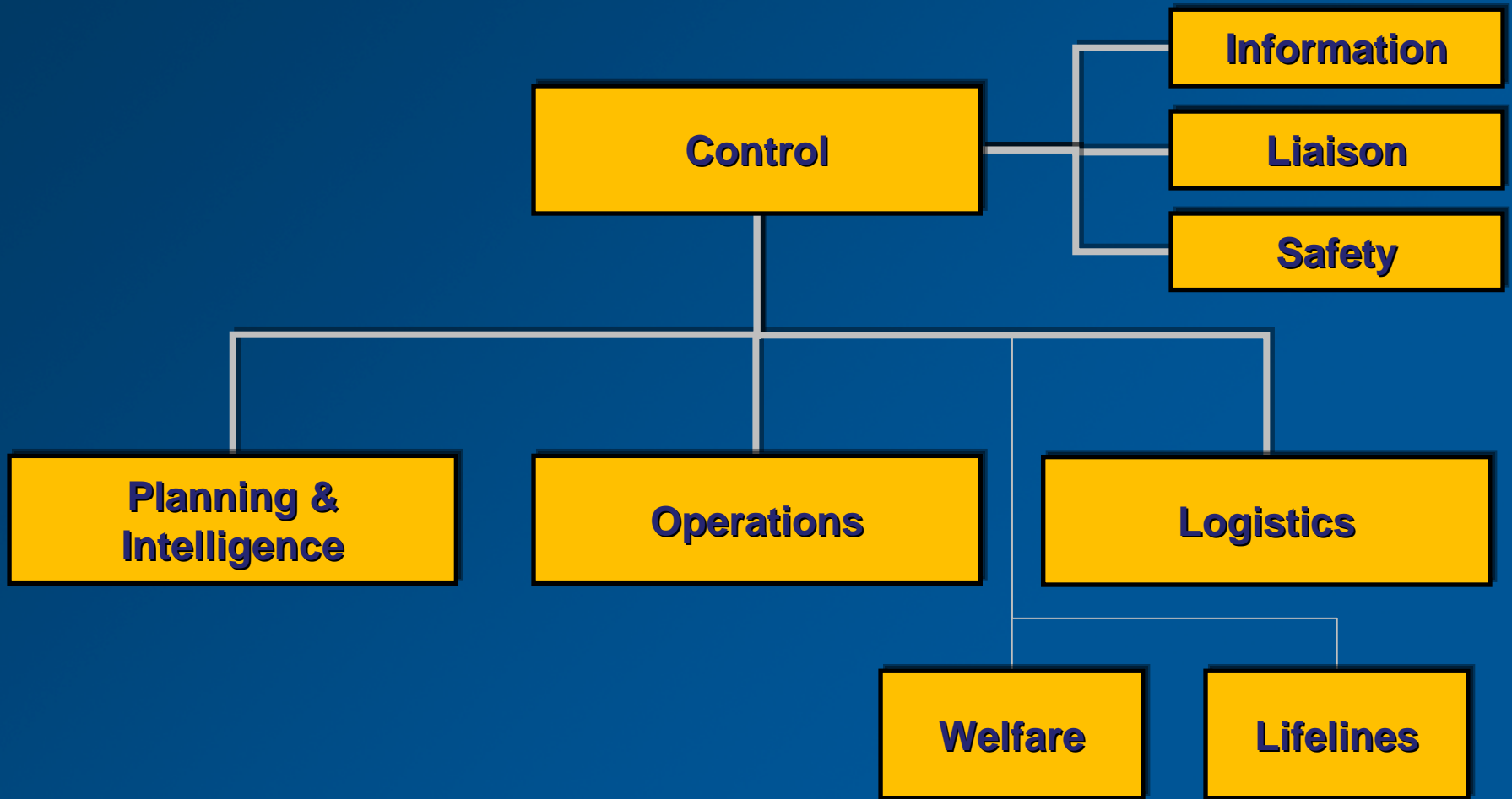
- CDEM Sector Train-the-trainer – October 2011
- ‘Production’ system live at end of 2011
- MCDEM operational on system Feb - Mar 2012
- Planned NCMC Liaison Training March 2013



# Current Status

- 15 of 16 CDEM Groups using EMIS (various levels of implementation)
- > 1000 users registered across the country
- Used for approximately 5 emergency responses since go-live

# Event Sites: CIMS




# Lifelines Status Reporting


<b>Report Number:</b> (Auto-populated on Initial Form Submit.) 2	<b>Lifelines Utility Status Report</b>	
<b>Region:</b> (Select the region for this status report.) Auckland	<b>Date and Time:</b> (Enter when the update was received.) 10/03/2008 09:10	
<b>Sector:</b> (Select the sector for this status report.) Telecommunications		
<b>Organisation:</b> (Enter the company, district, or sub-region of this sector.) Telecom New Zealand Limited		
<b>Status:</b> (Enter a brief description of the overall status of this sector.) No major disruptions to services		
<b>Overview:</b> (Enter a summary of the impacts on the network / assets for this sector.) Due to the recent seismic activity there has been an upsurge of activity in the telecommunications networks including: 1. Voice – landline and mobile 2. Data – dial up and broadband The level 2 crisis management team has been activated. The increase is approximately 30% higher than normal traffic on a Monday morning. There have been no major disruptions to any services. All capital build has been halted in the areas where the seismic activity is being felt, to ensure the health and safety of our engineering outsource partner company.		
<b>Priorities:</b> (Enter an outline of the priorities for the response to the current disruptions.) The priority efforts are currently around monitoring and managing telecommunication traffic.		


# Lifelines Disruption Reporting

Disruption	Lifeline Region	Lifeline Sector	Customers Affected	Colour-Coded Status
Terrace Tunnel Collapse	Wellington	Transport	0	Operational, (but at capacity)
Line disruption	Wellington	Electricity	30	Destroyed/Totally Incapacitated
Line disruption	Wellington	Electricity	30	Destroyed/Totally Incapacitated
Truck Loading Gantry Damaged	Auckland	Petroleum	750,000	Operational, (Partially damaged or partially incapacitated)
Truck Loading Gantry Damaged	Auckland	Petroleum	750,000	Operational, (Partially damaged or partially incapacitated)
Control Centre Operational	Auckland	Water	0	Fully Operational/Open
Call Centre at capacity	Auckland	Water	0	Operational, (but at capacity)
Lower Nihotupu Dam wall failed. Leaking a 2 megalitres per hour	Auckland	Water	50,000	Destroyed/Totally Incapacitated
Watermain leak	Auckland	Water	2,000	Operational, (Partially damaged or partially incapacitated)
Watermain leak	Auckland	Water	6,000	Operational, (Partially damaged or partially incapacitated)
Watermain leak	Auckland	Water	700	Operational, (Partially damaged or partially incapacitated)
Watermain leak	Auckland	Water	1,200	Operational, (Partially damaged or partially incapacitated)
Watermain leak	Auckland	Water	300	Operational, (Partially damaged or partially incapacitated)
Watermain leak	Auckland	Water	950	Operational, (Partially damaged or partially incapacitated)
Watermain leak	Auckland	Water	200	Operational, (Partially damaged or partially incapacitated)
Wastewater Treatment Plant shut down	Auckland	Wastewater/Storm water	500,000	Destroyed/Totally Incapacitated
Control Centre Operational	Auckland	Water	0	Fully Operational/Open
Call Centre at capacity	Auckland	Water	0	Operational, (but at capacity)
Lower Nihotupu Dam wall failed. Leaking a 2 megalitres per hour	Auckland	Water	50,000	Destroyed/Totally Incapacitated
Watermain leak	Auckland	Water	2,000	Operational, (Partially damaged or partially incapacitated)

# Mapping

Site Actions  Lifeline Officer: ncmc\muatncmsu2

 Ministry of Civil Defence & Emergency Management 251011 MCDEM Users Training > Mapping  
To Kaitiaki Takekōwhiri MCDEM User Training: Earthquake scenario.

251011 MCDEM Users Training Control Liaison Lifelines Logistics Operations Planning & Intelligence Welfare Search this site... 

Forms & Libraries

Action Plans

Hazard Reports

Organisational Charts

Situation Reports

Dashboards

Welfare Inquiries

Registrations

Lists & Logs

Activity Log

Consequence Reports

Welfare Centres

E\*SPONDER Alerts

Launch Alert Message

Manage Alert Contacts

Manage Alert Groups











Manage Alert Templates


**E\*SPONDER Mapping**

Reports

E\*SPONDER Mapping




**Map Contents**

-  Lifeline Status Disruptions.All Items
-  EMIS Incoming Messages.Operations
-  MCDEM User Training List.All Items
-  Transportation
-  EmergencyServices
-  Education
-  Community
-  Roads
-  Towns
-  Christchurch Post Earthquake 22 Feb 2011



**Disruption:** Pipeline closed down for inspection  
**Customers Affected:** 20,000  
**Colour-Coded Status:** Destroyed/Totally Incapacitated

ArcGIS Geolist Web Part

Datasets	Results	Disruption	Date/Time	Customers Affected	Colour-Coded Status
<ul style="list-style-type: none"> <li> Lifeline Status Disruptions.All Items</li> <li> EMIS Incoming Messages.Operations</li> <li> MCDEM User Training List.All Items</li> </ul>		Terminal Fire Suppression System failure	21/10/2011 14:00	20,000	Operational, (Partially damaged or partially incapacitated)
		Pipeline closed down for inspection	21/10/2011 14:00	20,000	Destroyed/Totally Incapacitated

# Document Libraries

The screenshot shows a web-based document library interface. At the top, there is a navigation bar with 'Site Actions' and 'Library Tools' (containing 'Documents' and 'Library'). The user is logged in as 'ncmc/mconstable'. The main header identifies the organization as the 'Ministry of Civil Defence & Emergency Management' (Te Rākau Whakamārama) and the current path is '230911 TRAINING SITE Exercise > Lifelines Documents > All Documents'. Below this is a secondary navigation menu with categories like 'Control', 'Liaison', 'Lifelines', 'Logistics', 'Operations', 'Planning & Intelligence', and 'Welfare'. A search bar is present with the text 'Search this site...'. On the left, a sidebar lists various site functions such as 'Pictures', 'Forms & Libraries', 'Action Plans', 'Hazard Reports', 'Organisational Charts', 'Situation Reports', 'Dashboards', 'Site Pages', 'Drop Off Library', 'Lists & Logs', 'Activity Log', 'Consequence Reports', 'cluster example list', 'Heat map example list', 'Test greg', 'E•SPONDER Alerts', 'Launch Alert Message', 'Manage Alert Contacts', 'Manage Alert Groups', 'Manage Alert Templates', 'E•SPONDER Mapping', and 'Reports'. The main content area displays a table of documents:

Type	Name	Modified	Modified By
	Lifeline utility coordinator report Mar 12 7 30AM	16/04/2012 09:16	ncmc/mconstable
	Lifeline Utility Report 1 Telecom	16/04/2012 09:17	ncmc/mconstable

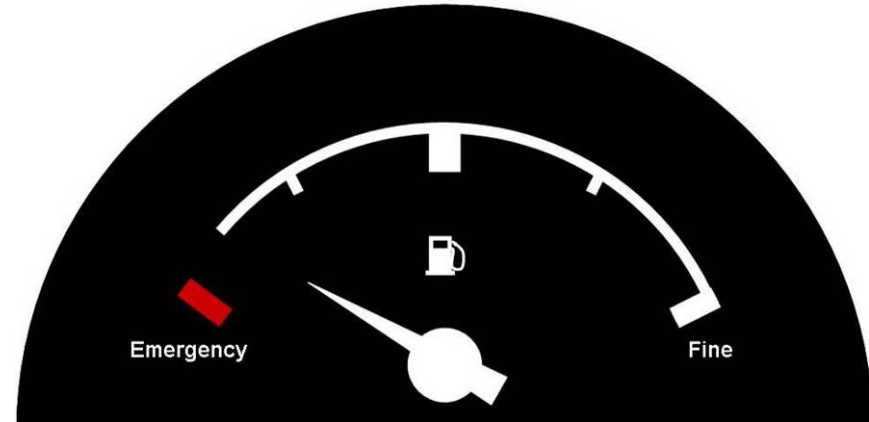
Below the table is an 'Add document' button. The bottom of the screen shows a taskbar with 'Internet | Protected Mode: On' and a zoom level of '105%'.

# NCCMC Lifelines Liaison Training

- Planned for around March 2013
- Contents:
  - User access
  - Site navigation
  - Lifeline reporting tools
  - Mapping
  - Document libraries
- Liaisons should register *once* at their highest portal

# National CDEM Fuel Plan

## Overview





# Fuel Planning

- Collaborative process
  - MCDEM, CDEM Groups, MBIE, Fuel Sector
- Supporting Plan [SP03/12]
  - To National CDEM Plan
- Context: CDEM emergency affecting fuel distribution

# The Guide

**Basis for National CDEM Fuel Plan is:**

***...a CDEM petroleum contingency plan should cover the following:***

- confirmation of status of facilities, major assets and transport networks;***
- confirmation of stockholding by type and location;***
- an estimation of emergency demand levels;***
- liaison between the oil industry and the CDEM sector;***
- priority allocation to CDEM critical customers (e.g. emergency services, lifeline utilities and critical facilities/industries); and***
- CDEM support to the oil industry and consumers for distribution.***

# National CDEM Fuel Plan

- Provides a structure for local planning with fuel sector
- Nationally applicable prioritisation model
- Mechanism for accessing rationing
- Operational communications & coordination arrangements
  - (NCMC & ECC)
- National CDEM Support to fuel sector



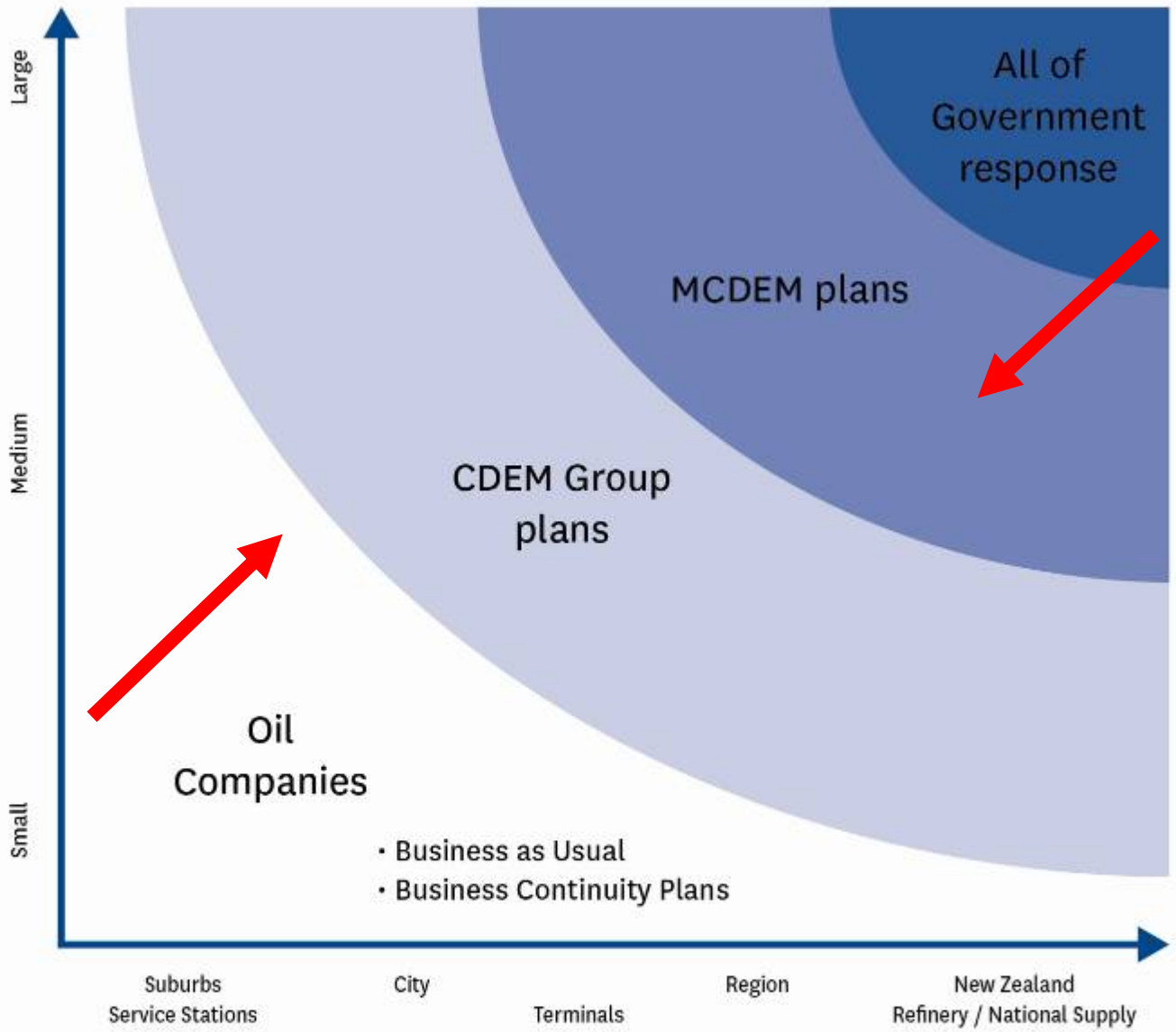
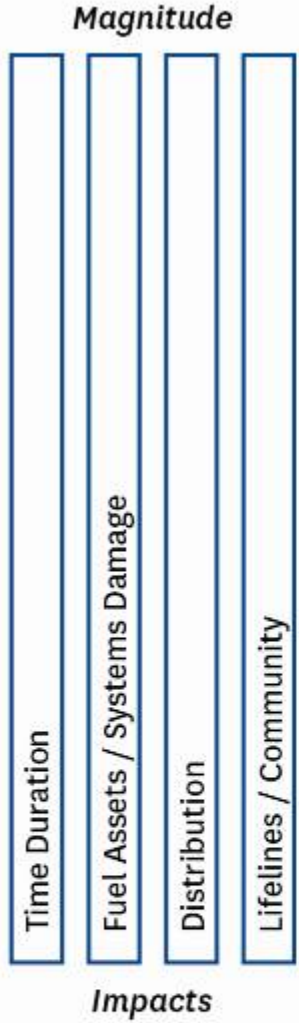
Resilient New Zealand

Aotearoa Mānahaū

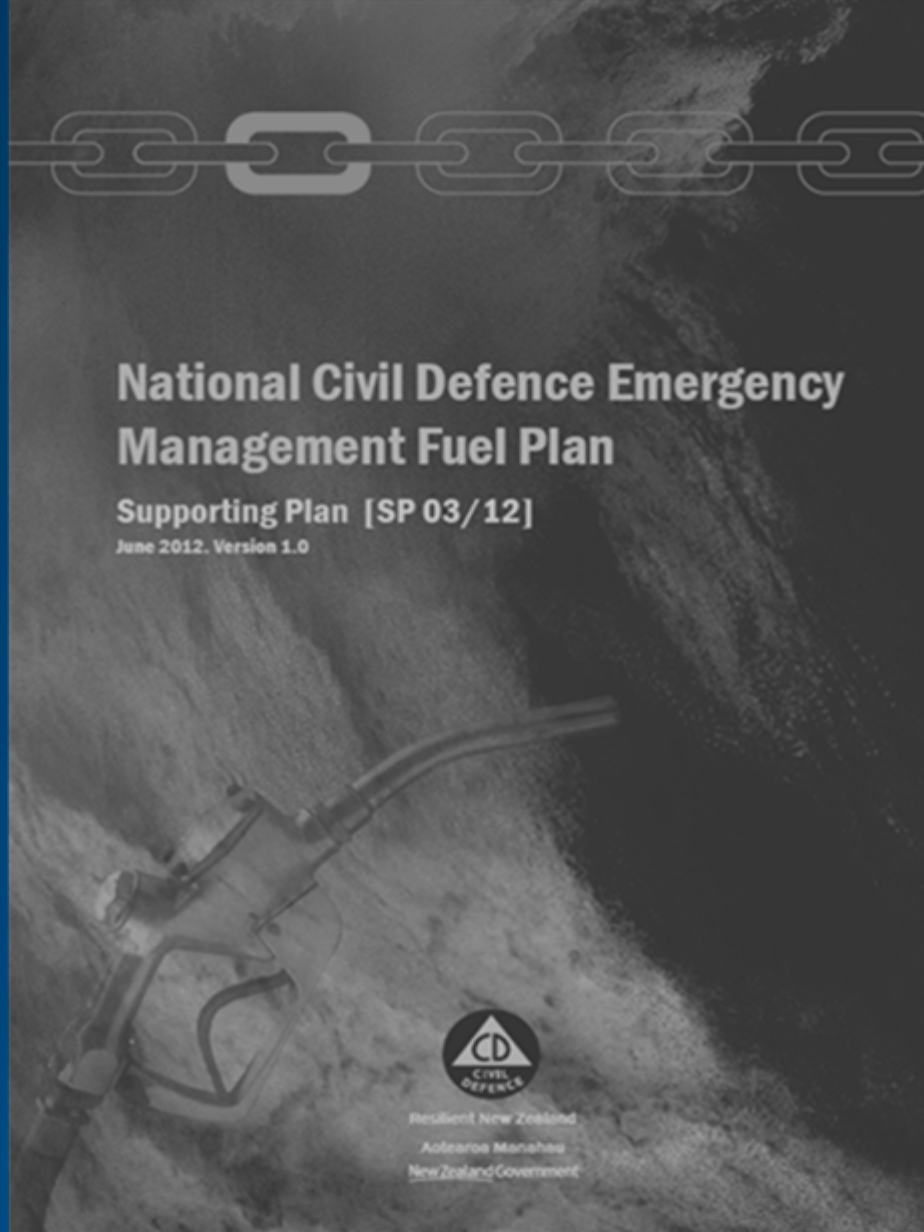
New Zealand Government

## Exclusions

- The plan does not:
  - Deal with petroleum 'supply' issues into New Zealand
  - Explicitly define CDEM/Petroleum sector responses on a region-by-region basis



# Fuel Plan Contents

A grayscale image of a fuel pump nozzle, positioned diagonally from the bottom left towards the center. The nozzle is set against a dark, textured background that resembles a close-up of a fuel pump's internal components or a similar industrial setting. A horizontal chain-link graphic is visible near the top of the page.

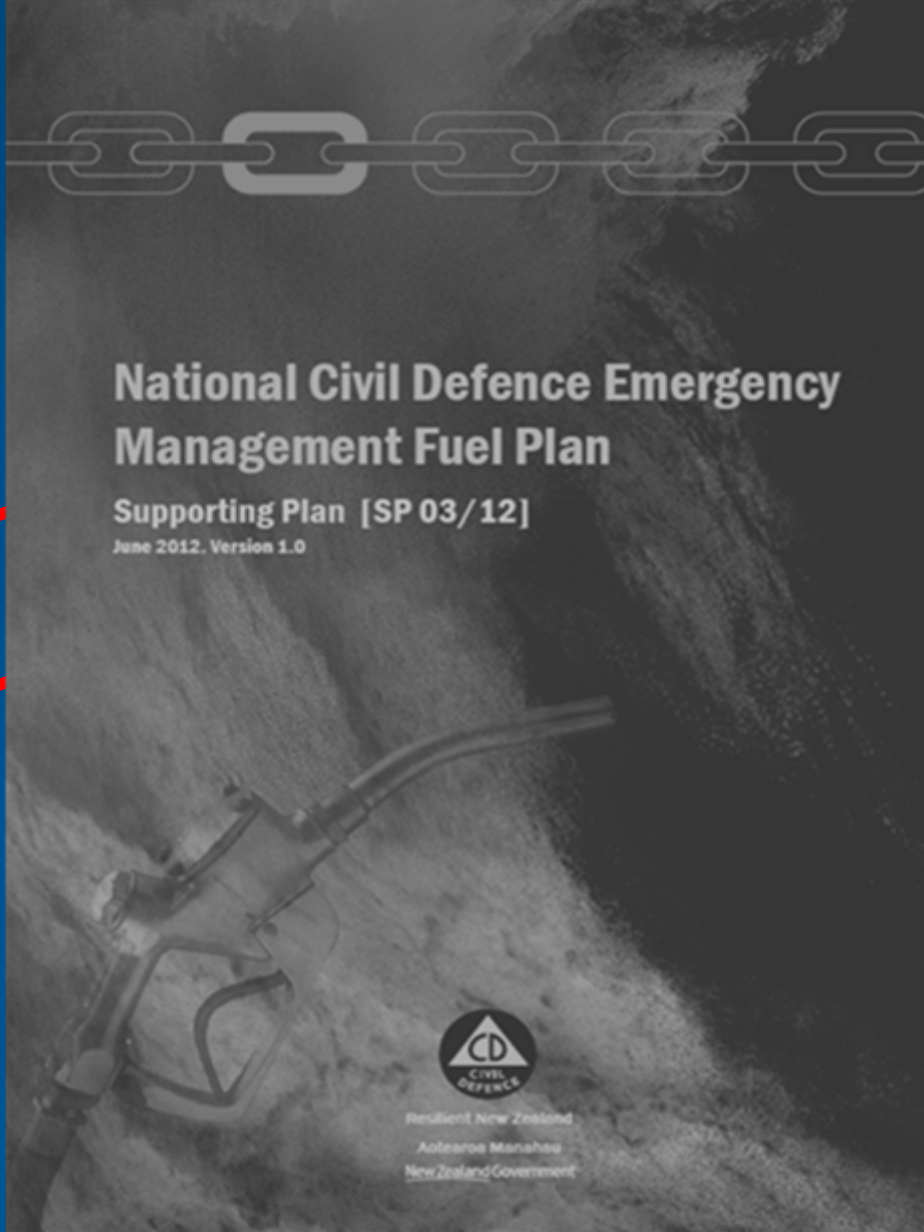
## National Civil Defence Emergency Management Fuel Plan

Supporting Plan [SP 03/12]

June 2012, Version 1.0



Resilient New Zealand  
Aotearoa Manahau  
New Zealand Government

A grayscale image of a fuel pump nozzle, positioned diagonally from the bottom left towards the center. The nozzle is set against a dark, textured background that resembles a close-up of a fuel pump's internal components or a similar industrial setting. A horizontal chain-link graphic is visible near the top of the page.

## National Civil Defence Emergency Management Fuel Plan

Supporting Plan [SP 03/12]

June 2012, Version 1.0



Resilient New Zealand  
Aotearoa Manahau  
New Zealand Government

# Regional Planning Considerations

A line of tanker trucks is shown on a road, receding into the distance. The truck in the foreground is a large white tanker with a green stripe and a red diamond hazard symbol. The background shows a cloudy sky and a dirt shoulder.

- Specific impact / consequence based planning
  - Hazards, risks, vulnerabilities
  - Consequences of outages (down-stream)
- Regional CDEM critical fuel customer list
- CDEM Group support to regional fuel distribution networks
  - Such as logistics, consents, etc.

# Local Planning Arrangements



- **Priority Local routes / roads**
  - Because they have service stations
  - Because they are supply routes
- **Service stations continuity**
  - Working in conjunction with service station managers
  - Assisting with planning
- **Service station security**
  - May need to be considered (though this is a BCM issue)
- **Identifying local bulk distributors**
  - May be appropriate to have arrangements to access fuel in emergencies
- **Local CDEM critical fuel customer list**
  - Including service stations (due to priority route location or continuity)
- **Local CDEM support to local fuel sector**
  - Such as logistics, consents, etc.

# Fuel Assessment & Planning Options

- Hazards & vulnerabilities
  - to fuel infrastructure & distribution networks
- Downstream impacts of network disruptions (ie – user based)
  - Leading to BCP for those affected and CDEM support plans
- [Impact based] Contingency planning (cause agnostic)
  - assessment of work-arounds and responsibilities in the event of regional disruptions \*
  - matrix of responsibilities

\* Identify limit of CDEM Group & regional industry capacity for support (escalate these MCDEM/MBIE)



# What and who?

- CDEM vs Lifelines Groups
- Studies vs plans
  - Ensure practicality and usefulness
- Expectations of minimum fuel planning?
  - CDEM Critical Fuel Customers List



# Ministry of Civil Defence & Emergency Management

Te Rākau Whakamarumarū