NEMA EEA Webinar

23 February 2021



Ajay Makhija – Principal Advisor, Infrastructure Resilience

### **Today**

- NEMA overview
- CDEM Context
- Lifeline Utilities sectors
- 4Rs of Emergency Management
- Response structures

### **NEMA** Role

- Leadership & Stewardship of Emergency Management System
- Lead agency for Natural Hazard and Infrastructure emergency response (SoE)
- Support Agency for all other hazards
- Warnings Earthquakes & Tsunami
- Emergency Mobile Alert (EMA)
- National Crisis Management Centre (NCMC)

### **CDEM Context**

R as at 1



### Civil Defence Emerger

Public Act
Date of assent
Commencement

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Title
Commencement

### Prelimina

- Purpose
   Interpretation
- 4A Transitional, savings, and relate
- 5 Act to bind the Crown 6 Act not to affect functions, duti general law
- 7 Precautionary approach

### Appointment, functions, an civil defence em

Director of Civil Defen

8 Appointment and functions of I Emergency Management

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Changes authorised by subpart 2 of Part 2 of the Le<sub>i</sub> Note 4 at the end of this reprint provides a list of the This Act is administered by the Ministry of Civil

### National Civ

The Guide to the National Civi Emergency N

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2002, His Excellency t

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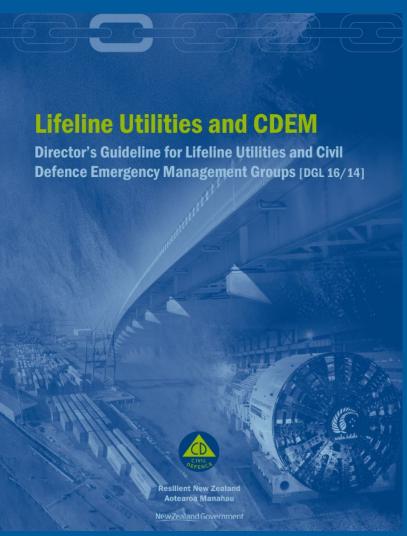
(b) on the recomme

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- 1 Title
  2 Commencem
  3 National civil
  4 Publication is
  5 Revocation
- Note
  Changes authorised by subpa
  Note 4 at the end of this repri

This order is administered

New Zea



### **CDEM Context**

Schedule 1

Civil Defence Emergency Management Act 2002

Reprinted as at 1 June 2018

### Schedule 1 Lifeline utilities

s <del>4</del>

### Part A Specific entities

- Radio New Zealand Limited and Television New Zealand Limited.
- 2 The company (as defined in section 2 of the Auckland Airport Act 1987) that operates Auckland international airport.
- 3 The company (as defined in section 2 of the Wellington Airport Act 1990) that operates Wellington international airport.
- 4 The airport company (as defined in section 2 of the Airport Authorities Act 1966) that operates Christchurch international airport.
- 5 The entity (being an airport authority as defined in section 2 of the Airport Authorities Act 1966, whether or not it is also an airport company as defined in that section) that operates the primary airport at Bay of Islands, Blenheim, Dunedin, Gisborne, Hamilton, Hokitika, Invercargill, Napier, Nelson, New Plymouth, Palmerston North, Queenstown, Rotorua, Tauranga, Wanganui, Westport, Whakatane, or Whangarei.
- 6 The port company (as defined in section 2(1) of the Port Companies Act 1988) that carries out port-related commercial activities at Auckland, Bluff, Port Chalmers, Gisborne, Lyttelton, Napier, Nelson, Picton, Port Taranaki, Tauranga, Timaru, Wellington, Westport, or Whangarei.
  - Schedule 1 Part A clause 6: amended, on 25 March 2012, by section 10 of the Civil Defence Emergency Management Amendment Act 2012 (2012 No 6).
- 7 The Grey District Council, acting as the Greymouth harbour authority and owner and operator of the Port of Greymouth under Parts 4 and 6 of the Local Government (West Coast Region) Reorganisation Order 1989, Part 39A of the Local Government Act 1974, and section 16 of the Local Government Amendment Act (No 2) 1999.

### Part B Entities carrying on certain businesses

An entity that produces, supplies, or distributes manufactured gas or natural gas (whether it is supplied or distributed through a network or in bottles of more than 20 kg of gas). ed or s de ial ar ial a Reprinted as at 1 June 2018

Civil Defence Emergency Management Act 2002

Schedule 1

- 2 An entity that generates electricity for distribution through a network or distributes electricity through a network.
- 3 An entity that supplies or distributes water to the inhabitants of a city, district, or other place.
- 4 An entity that provides a waste water or sewerage network or that disposes of sewage or storm water.
- 5 An entity that provides a telecommunications network (within the meaning of the Telecommunications Act 1987).
- 6 An entity that provides a road network (including State highways).
- 7 An entity that produces, processes, or distributes to retail outlets and bulk customers any petroleum products used as an energy source or an essential lubricant or additive for motors for machinery.
- 8 An entity that provides a rail network or service.

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### Lifeline Utilities Obligations

Part 3 s 59

Civil Defence Emergency Management Act 2002

Reprinted as at 1 June 2018

- ensure that it is able to function to the fullest possible extent, even though this may be at a reduced level, during and after an emergency:
- (b) make available to the Director in writing, on request, its plan for functioning during and after an emergency.

Compare: 1983 No 46 s 43

### 59 Departments and others to undertake civil defence emergency management functions and responsibilities

Every department, Civil Defence Emergency Management Group, local authority, emergency service, and lifeline utility, and any other person required by this Act or any regulations made under this Act, or any civil defence emergency management plan, to undertake civil defence emergency management or to perform any flunctions or duties, must take all necessary steps to undertake civil defence emergency management or to perform those functions and duties.

Compare: 1983 No 46 s 44

Duties of lifeline utilities

### 60 Duties of lifeline utilities

Every lifeline utility must-

- ensure that it is able to function to the fullest possible extent, even though this may be at a reduced level, during and after an emergency;
- (b) make available to the Director in writing, on request, its plan for functioning during and after an emergency:
- participate in the development of the national civil defence emergency management strategy and civil defence emergency management plans;
- (d) provide, free of charge, any technical advice to any Civil Defence Emergency Management Group or the Director that may be reasonably required by that Group or the Director:
- (e) ensure that any information that is disclosed to the lifeline utility is used by the lifeline utility, or disclosed to another person, only for the purposes of this Act.

### 61 Schedule 1 may be amended by Order in Council

- The Governor-General may, by Order in Council made on the recommendation of the Minister.—
  - add the name of an entity or description of an entity to Part A of Schedule 1; or
  - (b) omit the name of an entity or description of an entity from Part A of Schedule 1; or
  - amend the name of an entity or the description of an entity in Part A of Schedule 1; or

Reprinted as at 14 July 2017 National Civil Defence Emergency Management Plan Order 2015

Schedule

- ations by the New Zealand Defence Force and provide updates on the progress of any tasks that the New Zealand Defence Force is conducting in the respective areas or levels; however, the liaison officers are not authorised to accept tasks); and
- (b) can utilise certain forces assigned at short notice to support emergencies (forces are held ready for response at the regional and national levels and include land, air, and sea assets as necessary); and
- (c) will co-ordinate New Zealand Defence Force assets at either the local level (ECC) or national level (the NCMC), depending on the type and scale of the emergency and the mode of operation of the NCMC.
- (2) Requests for the support of the New Zealand Defence Force beyond local levels of commitment must be made by the CDEM Groups through the National Controller.

### Lifeline utilities

### 57 Introduction

- Lifeline utilities, as described in the Act, provide essential and enabling infrastructure and services that support commercial and domestic activity.
- (2) Lifeline utilities deliver services (for example, water supply, wastewater and stormwater collection, electricity, gas, and petroleum distribution, telecommunications, broadcasting, and transportation networks, including roads, railways, airports, and ports).
- (3) Lifeline utilities have duties under section 60 of the Act.

### 58 Objective

The main duty of lifeline utilities during and after an emergency is to be able to deliver the services they normally provide to the fullest possible extent (even though this may be at a reduced level).

### 59 Principles

The principles underlying the role of lifeline utilities are to-

- identify and understand the full range of hazards and risks and implement reduction strategies; and
- (b) prioritise the continuity of operations and supply of services in accordance with response priorities set by the Local Controller, Group Controller, or National Controller (even though this may be at a reduced level); and
- (c) plan co-operatively with local authorities, CDEM Groups, emergency services, and other lifeline utilities; and

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### Lifeline Utilities sectors

- Energy
- Transport
- Water

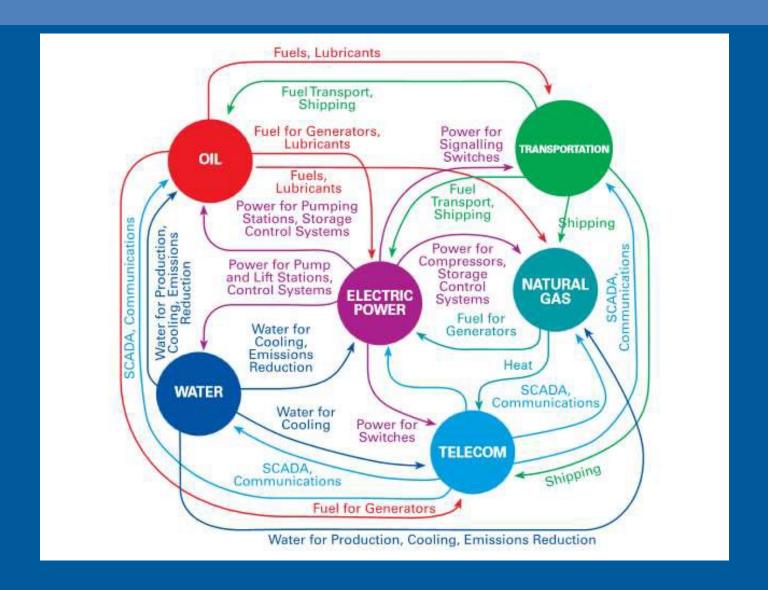
Telecommunications

Broadcasting





### Interdependencies – NVA Stg 1



### Interdependencies

The degree to which the utilities listed to the right	Roads	Rail	Transport	Air Transport	Supply	Wastewater	Stormwater	Electricity	Gas	Fuel Supply	Broadcasting	Radio	Telecomms	Total Dependency		
are dependent on the utilities listed below	Š	Ro	Ro	a	Sea Tr	Air Tr	Water	Wast	Storn	Elect	9	Fuel	Broad	VHF	Telec	Te
Electricity	1	2	3	3	3	3	2		2	2	3	3	3	30		
Roads		3	3	3	2	2	2	2	2	3	2	2	2	28		
Fuel	2	3	3	3	2	2	2	2	2		2	2	2	27		
Tele-comms	2	2	2	2	2	2	2	2	2	2	2	3		25		
Water Supply	1	1	1	2		3	1	1	1	1	1	1	2	16		
VHF Radio	2	2	2	2	1	1	1	1	1	1	1		1	16		
Stormwater	2	1	1	2	1	1		1	1	1	1	1	1	14		
Wastewater	1	1	1	2	1		1	1	1	1	1	1	1	13		
Rail	1		1	1	1	1	1	1	1	1	1	1	1	12		
Sea Transport	1	1		1	1	1	1	1	1	1	1	1	1	12		
Air Transport	1	1	1		1	1	1	1	1	1	1	1	1	12		
Gas	1	1	1	1	1	1	1	1		1	1	1	1	12		
Broadcasting	1	1	1	1	1	1	1	1	1	1		1	1	12		

Figure 4-1: Interdependency Matrix – Business As Usual

## Interdependencies

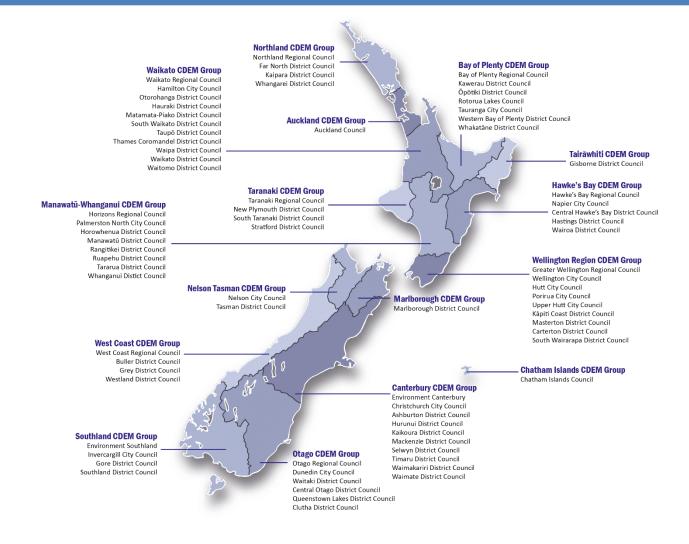
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Fuel	3	3	3	3	3	3	3	3	3		3	3	3	36			
Roads		3	3	3	3	3	3	3	3	3	2	2	3	34			
Tele-comms	3	2	2	2	3	3	3	3	3	2	2	3		31			
Electricity	1	2	3	3	3	3	2		2	2	3	3	3	30			
VHF Radio	2	2	3	3	2	2	2	2	2	2	2		2	26			
Broadcasting	2	2	2	2	2	2	2	2	2	2		2	2	24			
Air Transport	2	1	1		2	2	2	2	2	2	2	2	2	22			
Water Supply	1	1	1	2		3	1	1	1	1	1	1	2	16			
Stormwater	2	1	1	2	1	1		1	1	1	1	1	1	14			
Wastewater	1	1	1	2	1		1	1	1	1	1	1	1	13			
Rail	1		1	1	1	1	1	1	1	1	1	1	1	12			
Sea Transport	1	1		1	1	1	1	1	1	1	1	1	1	12			
Gas	1	1	1	1	1	1	1	1		1	1	1	1	12			

Figure 4-2: Interdependency Matrix – During / Post Disaster Event

# Lifeline Groups – Reduction & Readiness

- Lifeline Groups regional:
  - Include lifeline utilities, scientists, regional CDEM group staff.
  - Focus to reduce the risk of damage from hazards; and
  - Readiness for response and recovery.
  - Emphasis on individual lifeline utility performance and collaboration.
- New Zealand Lifelines Council (NZLC) national:
  - Advise Lifeline Groups on best practice and encourage projects;
  - Provide a link between Lifeline Groups and government;
  - Promote research on infrastructure resilience; and
  - Organise the annual National Lifelines Forum.

### **CDEM Groups**



# Sector Coordinating Entities (SCEs) – Response & Response

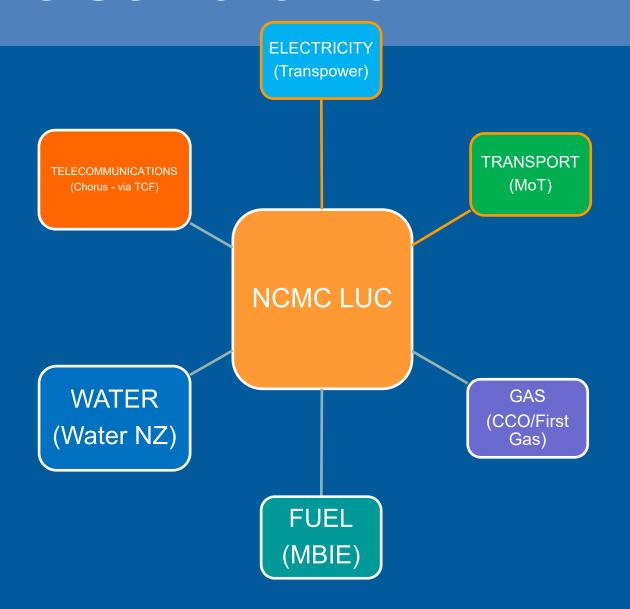
A sector co-ordinating entity that is:

- an organisation,
- a group of sector representatives, or
- an individual

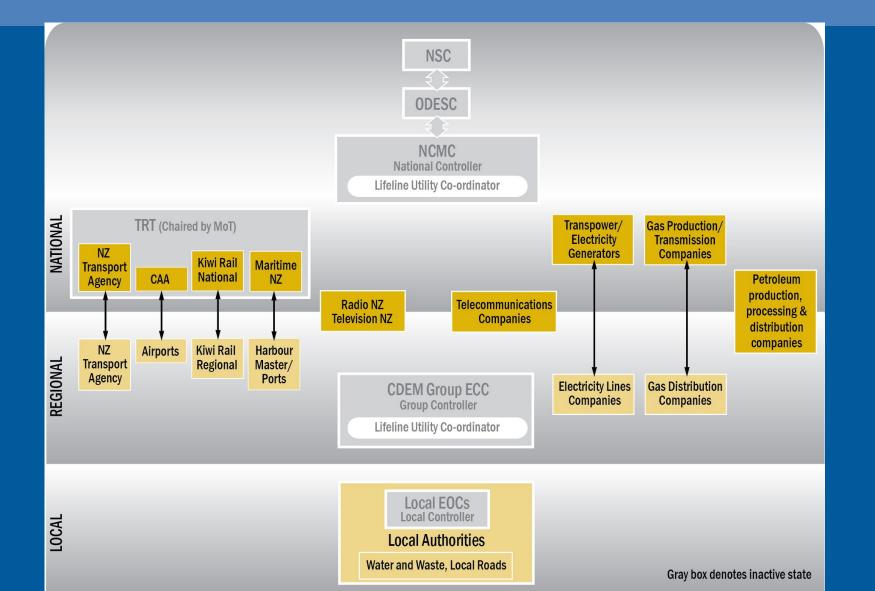
agreed by a utility sector to provide a single point of contact to the NCMC.

(Clause 2(1) of the National Civil Defence Emergency Management Plan 2015)

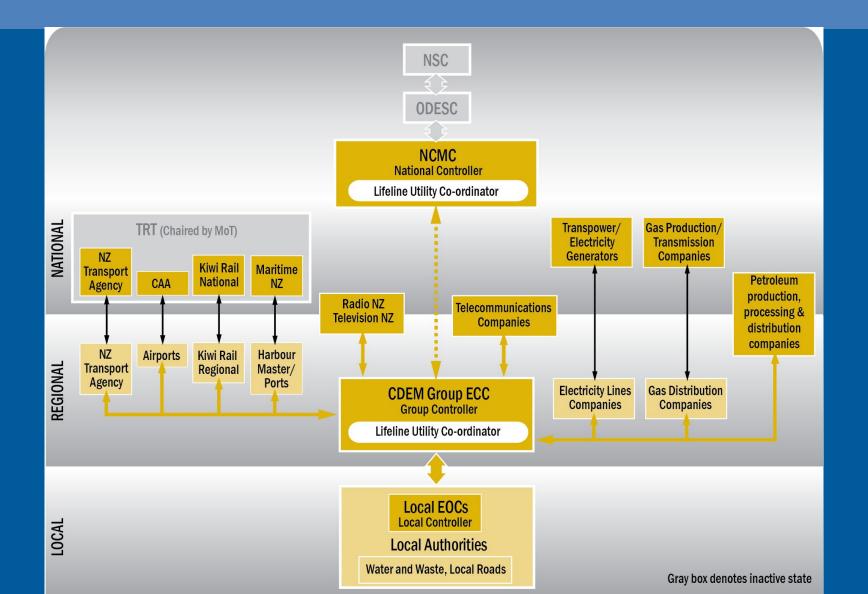
### NCMC SCE overview



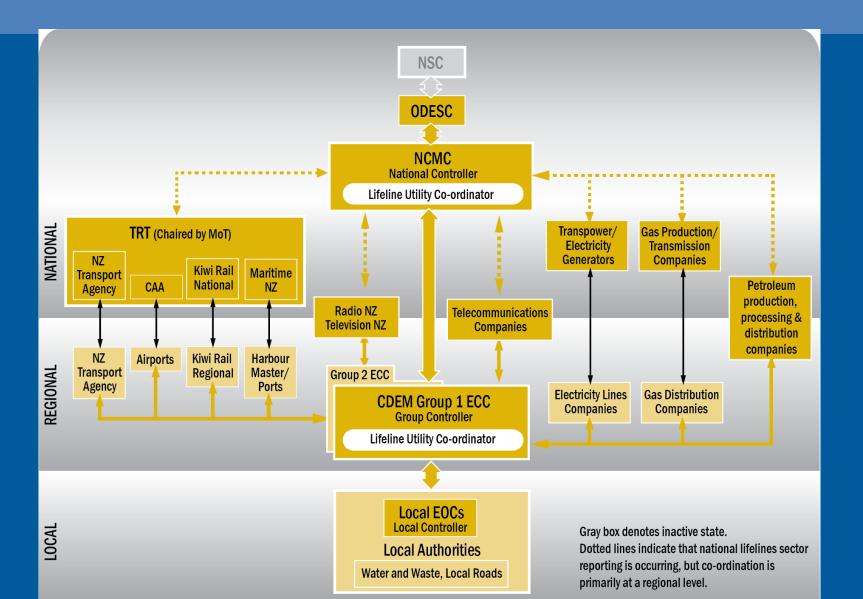
### **Business-as-usual**



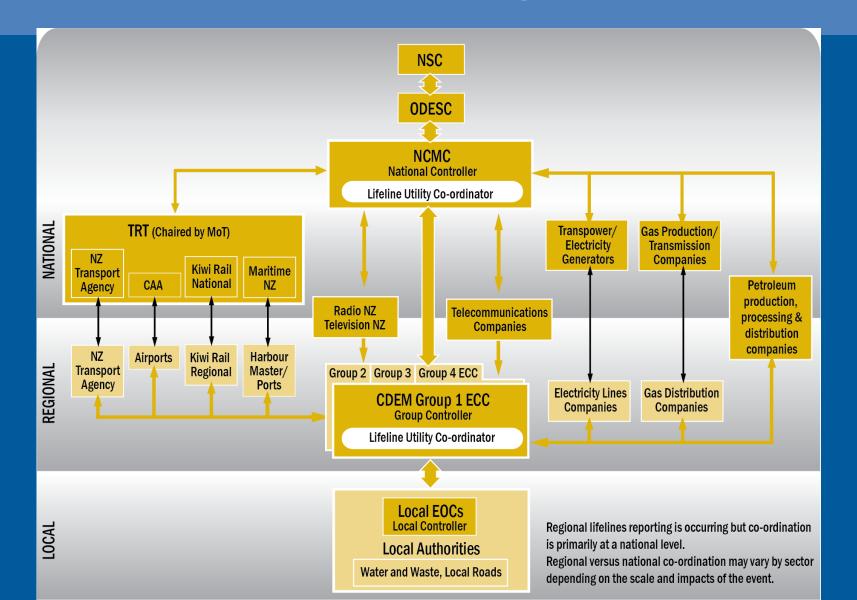
## Single CDEM Group



### Multiple CDEM Groups



### **Event of National Significance**



### Lifeline Utilities expectations

- Understand obligations under the CDEM Act 2002
- Understand hazards and risks
- Invest in infrastructure resilience
- Business continuity and response plans
- Share information situational awareness
- Participate in Regional and National Planning
- Understand interdependencies

# Questions

