

**Infrastructure Emergency Management**  
- structural arrangements and learnings from Cruickshank

**Presentation to National Lifelines Forum**

**17 October 2007**

Ministry of Economic Development  
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## Outline

- MED's role in emergency management (Pip Blunden)
- National Lifelines Co-ordination (Pip Blunden)
  - Cruickshank
  - Ruauoko
- Priorities for access and delivery (Tony Fenwick)
- Learnings from Exercise Cruickshank (Tony Fenwick)
  - Internal Boundaries
  - Telecommunications Demand and Supply

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## Key drivers / themes

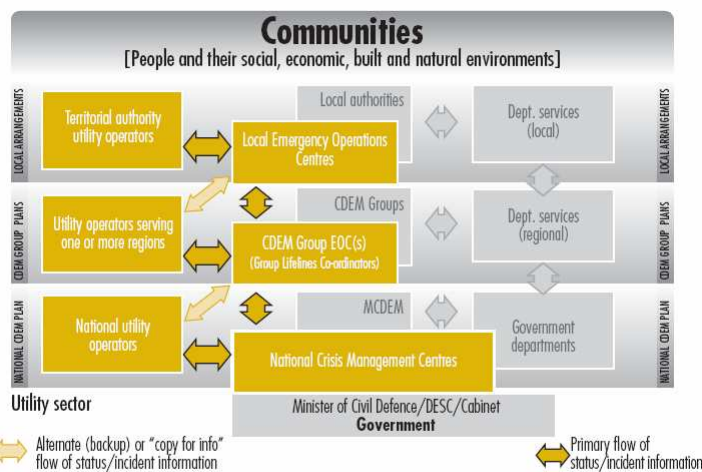
- Consistent model for all emergencies (across all 4 R's)
- Leverage off existing arrangements
- Plans scaled and adapted according to the nature of the emergency - flexibility
- Decisions need to be made as close to the action as possible
- Significant reliance on businesses and infrastructure providers

## MED – Reduction and Readiness

- Factoring resilience into energy and telecommunication policy
- Support MCDEM in -
  - contingency planning across energy and telecommunication sectors
  - coordinating planning across infrastructure
  - development/clarity of national lifeline communication mechanisms, including sector co-ordinating entities
- Specific projects as appropriate, e.g. promoting business continuity planning, oil security arrangements
- Participating in national exercises, i.e. Capital Quake, Cruickshank, Ruaumoko

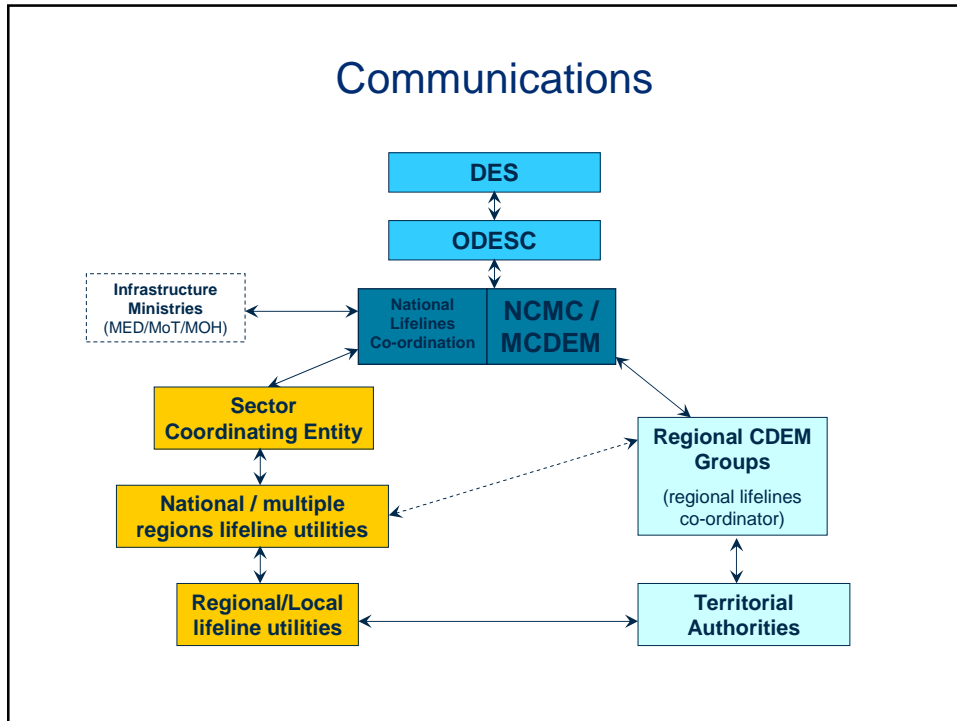
## MED - Response and Recovery

- Response
  - Liaison with national lifelines co-ordination (in NCMC) - provide support if necessary (expertise and/or resources)
    - » Not in direct line of communications / decision-making
    - » Redeployment of resources as appropriate to the event
    - » Facilitate solutions if necessary
  - Analysis of specific issues and policy advice to Ministers
- Recovery
  - Continue to provide analysis and policy advice on energy and telecommunications
    - » Policies for speeding up response
    - » Mitigating long-term impacts



**Figure 10.1** The elements of lifeline utility co-ordination from local to Group to national level. National lifeline utilities are to liaise with the CDEM Group(s) and with the National Controller via the National Crisis Management Centre.

## Communications



## Exercise Cruickshank

- Opportunity to exercise lifeline utilities co-ordination
  - link between infrastructure providers and national lifelines co-ordination (i.e. MCDEM emergency operations centre)
    - » Directly or via sector co-ordinating entities (SCE's)
  - did not exercise link between regional lifelines co-ordinator and -
    - » National lifeline utilities or those covering >1 region
    - » National lifelines co-ordination
  - long response timeline and national cf. natural hazards.
- Participating infrastructure providers exercised their own BCP's
  - some common themes emerged.

## Sector Co-ordinating Entities

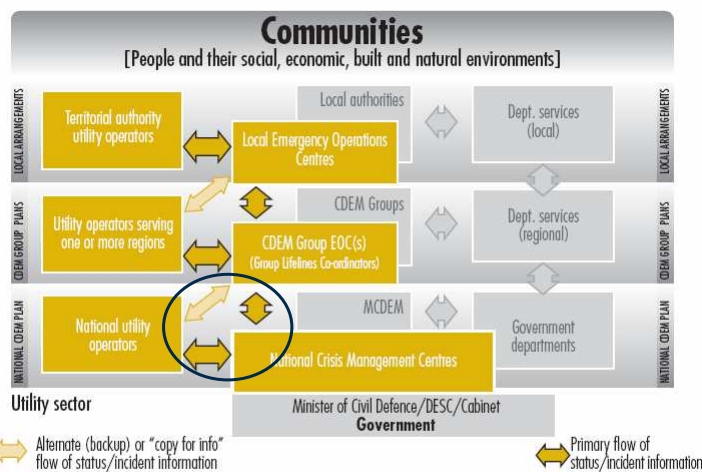
- National level sector 'clusters' (refer CDEM Guide) that have a role in the response phase (cf. regional lifelines groups)
  - events that affect more than one region and/or more than one sector
  - co-ordination to improve effectiveness of response activities
  - flexibility – adapt to the event
- Each sector - different characteristics and emergency co-ordination arrangements
- Exercise Cruickshank
  - Transport Response Team (led by MoT)
  - Transpower (electricity)
  - GANZ (gas)
- Role in the reduction / readiness phases
  - e.g. Telecommunications Emergency Planning Forum

## Cruickshank: Lessons Learnt...

- SCE's generally worked well
  - improved consistency of information across sectors
- SCE's should be in active communication with each other, particularly where there are key interdependencies e.g. electricity/telecommunications
- Roles and responsibilities need to be clearly defined before an event and have broad consensus

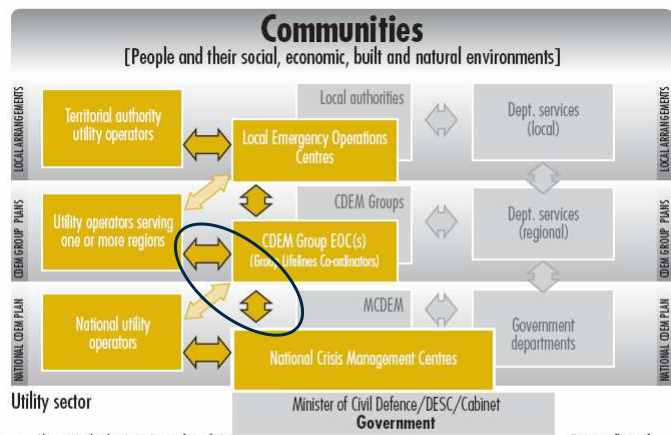
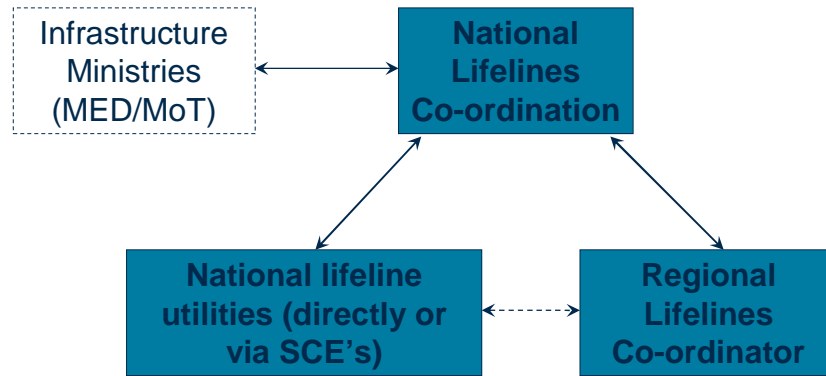
## Looking forward...

- Challenges in national or multiple region events:
  - Relationship of national lifelines co-ordination (in NCMC) and regional lifelines co-ordination (in CDEM group EOC's)
  - National (or >1 regions) lifeline utility communications with regional lifelines co-ordinators and vice versus
  - Scope (breadth) and activation of SCE's – triggers?
  - Finding the balance between clarity of response arrangements and flexibility of response arrangements
- Ruaumoko – an opportunity
  - Business Theme - Lifelines Working Group (amongst other objectives) aim to clarify and exercise the co-ordination arrangements at both regional and national levels



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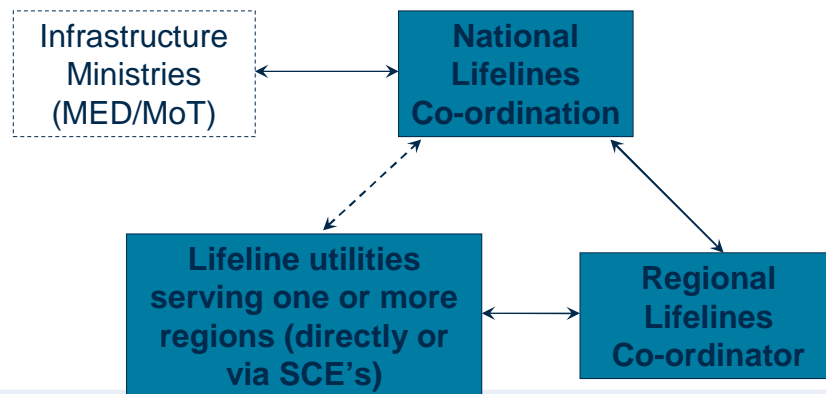
Objective: clarify and exercise the co-ordination arrangements – regional and national



Alternate (backup) or "copy for info" flow of status/incident information
 Primary flow of status/incident information

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Objective: clarify and exercise the co-ordination arrangements – regional and national



## Prioritisation – Who Gets Their Needs Met?

- All consumers want their needs met - for good social and economic reasons
- There are two issues
  - Infrastructure providers want priority recognition of input needs
  - They also want output advice on customers to be supplied first
- But ....
  - There are no simple answers
  - Government has no master plan .....
  - .... and its ability to intervene is limited in most sectors (partial exception: significant legal powers in petroleum)
- Position paper on MED's website soon



## Prioritisation – Accessing Resources

- Lifelines to function during emergency, albeit at reduced level (s60 CDEMA)
  - So they need to ensure access to needed supplies, incl infrastructure (ICT, electricity, diesel etc)
  - Options include investing in back-up, contracting etc
  - Key point: It's largely over to Lifelines to make own planning arrangements
- Don't rely on CDEM Groups to ensure supplies
  - No formal powers prior to a declaration
  - Requisitioning powers etc exist after a declaration, but very high threshold and not designed to meet infrastructure's needs
- Nevertheless, infrastructure providers and others should make priority needs known to CDEM Groups where they are unable to make satisfactory arrangements

## Prioritisation – Meeting Customer Needs

- Many infrastructure providers also want advice on prioritising customers
- There is no silver bullet
  - CD documents (Plan and Guide) set out some emergency response objectives and restoration priorities
  - these offer rough guidance only
- A range of contractual, regulatory, technological and situational issues will impact
- Infrastructure providers know their customers best
  - Clarify demand expectations and supply options with customers in advance

## Pandemic - Internal Boundaries

- Internal boundaries possible, especially in “Stamp it Out”
  - Decisions most likely by national vis-à-vis local authorities
- There are two issues
  - Will infrastructure providers be able to cross boundaries to maintain equipment etc?
  - Will transport operators be able to cross boundaries to deliver goods?
- These issues are subject to final clearance with Ministry of Health
- Position paper expected on MED's website soon

## Crossing Boundaries to Maintain Equipment

- MoH advice: plan for, and use best endeavours to implement, arrangements that avoid need for boundary crossings
- If necessary, entering a pandemic-affected area may be permitted
  - If needed to maintain a lifeline service
  - Subject to health-related conditions
  - Main message – plan to avoid entering pandemic-affected areas
- Exiting a pandemic-affected area is however not likely to be permitted
  - Except to meet extreme emergency needs
  - Case by case consideration
  - Main message – don't expect to be able to exit

## Will Transport Operators be Able to Cross?

- MoH advice: Crossings to deliver / transport needed goods will generally be permitted, subject to conditions
- Deliveries to and from affected areas
  - Driver substitution at boundaries likely to be required
  - Exiting and replacement drivers should wipe cabs clean and dry (cab doors to be left open)
- Transporting through affected areas
  - Subject to health-related conditions

## Health Guidelines for Entering Affected Areas

- MoH advice: Don't travel if you are ill
- If you need to enter a pandemic-affected area to maintain equipment or deliver goods
  - Maintain social distancing
  - Minimise use of vehicle ventilation
  - Use PPEs
  - Avoid touching hard surfaces in locations used by others
  - Cover coughs and sneezes
- This advice attached to website material

## Pandemic – Telecommunications Demand

- Issue – will telecommunications be able to cope in a pandemic?
- Many sectors will be looking for reliable communications
  - Shift in location of business demand
  - Meeting the needs of the health services
  - New / changed social needs
- Telecommunications Carriers' Forum (TCF) report April 2006 - link on MED's website
  - Based on stated assumptions (e.g. 30 % increases in residential traffic)
  - Likely to be some / scattered congestion – how serious?
  - Businesses should plan – contact telecommunication service providers
- Exercise Cruickshank
  - Another look at the assumptions and analysis in the TCF report

## Telecommunications in a Pandemic - Process

- Assessing demand
  - Seeking advice from major users – Health, MSD, Police, Education
- Testing supply
  - Questions to major telecommunications companies, including
    - What data available on normal use?
    - To what extent does technology permit prioritisation?
    - Are major customers actively planning?
    - Is there a role for planning demand-management messages?
- Next steps
  - Reviewing the demand and supply information, and
  - .... testing understandings / peer reviewing, in order to
  - .... reach a view on whether the TCF Report should be updated at this stage