# GUIDANCE 🧲

# Section 4: Readiness – prepare for managing buildings in an emergency

This section is for territorial authorities to help you get – and stay – ready for managing buildings in an emergency.

It contains readiness steps to help you develop a building assessment plan, identify key people, check these people have the right training, and assemble resources.

Helpful tools include:

- readiness checklist Appendix 2
- equipment and resource checklists Appendix 3
- memorandum of understanding for engaging rapid building assessors Appendix 7.

#### Readiness – what is required

Under the National CDEM Plan each territorial authority is to:

"develop and maintain arrangements, in accordance with national guidelines and procedures, for assessments, evaluations, and steps to be undertaken for managing risks to and uncertainties as to the safety of buildings in response to and recovery from an emergency".

National CDEM Plan, section 79(3)(c)

#### Steps to achieve this

To prepare for managing buildings in an emergency, territorial authorities need to:

- have a plan for rapid building assessments that links with their CDEM Group plan
- identify key staff and assessors, and make sure they have the right training
- have resources at the ready, including up-to-date building information and field maps.

MBIE supports this by:

- developing and maintaining a three-tier system of people to help manage and assess buildings in emergencies – this includes engineers, building officials and architects
- keeping an up-to-date register of rapid building assessors that territorial authorities can access
- coordinating skills training for Tier 1 and Tier 2, and awareness training for Tier 3
- providing relevant guidance and resources, including field guides for different types of emergency (earthquake, flood, geotechnical) and standard placards.

Preparing well makes sure the right people and resources are available, and procedures are in place, to meet the objective of managing buildings in an emergency. This is described in the National CDEM Plan (section 77) as to:

- · protect life and promote safety within and in the vicinity of each building
- minimise damage to and loss of property
- restore building functions as soon as possible to minimise social and economic consequences of the emergency, and
- minimise losses or disruption of lifeline utility services that are in or near any building.

#### **Key point**

Territorial authorities should consult the CDEM Group Plan and subordinate local plans when preparing their own plans for building management in emergencies. Good communication among all parties involved in emergency planning – especially operations, logistics and welfare – is essential to make sure these are aligned.

DATE: JUNE 2018 VERSION: 1	
SECTION 4: READINESS	
PAGE 24	

#### Key steps to readiness follow:

Readiness step	Reasons
1. Understand the legal context	Makes sure legal obligations and requirements are understood
2. Develop an operating structure	Makes sure key staff know what they need to do, and are trained and capable of fulfilling roles
3. Identify an operational base and other facilities	Ensures a more immediate response Identifies alternative locations for resilience
4. Gather information about buildings, critical infrastructure and the environment	Supports planning and operational activities – including development of the technology platform to enable access to property information and recording field data
5. Develop a building assessment plan	Supports planning and operational activities Identifies what policy decisions are needed upfront
6. Gather resources	Makes sure the response is adequately resourced and equipped Makes sure essential resources can be easily accessed
7. Identify people with specialist skills	Makes sure there is a process for assembling the people needed in a building assessment operation (local people are identified, and there is a plan for mobilising additional people from outside the region if required)

# 4.1 Readiness step one: understand the legal context

Make sure key people within the territorial authority have a practical understanding of the core legislation that helps govern actions during an emergency response. This includes:

- Civil Defence Emergency Management Act 2002
- National Civil Defence Emergency Management Plan Order 2015 and the Guide to the National CDEM Plan
- Building Act 2004
- Local Government Act 2002
- Health and Safety at Work Act 2015
- Fire and Emergency New Zealand Act 2017
- Fire Safety and Evacuation of Buildings Regulations 2006
- Heritage New Zealand Pouhere Taonga Act 2014
- Resource Management Act 1991.

Managing buildings in an emergency

DATE: JUNE 2018	VERSION: 1
SECTION 4	READINESS
	PAGE 25

Refer to section 3 and Appendix 1 for details.

New Zealand Police and New Zealand Defence Force may be tasked by the Controller to assist in managing access to buildings and areas, depending on the type and extent of the emergency.

# 4.2 Readiness step two: develop an operating structure

### 4.2.1 Building Response Manager takes the lead

A Building Response Manager should lead the building assessment operation in an emergency on behalf of the territorial authority. The Building Response Manager will typically be the territorial authority's Building Control Manager. He or she will report to either the Controller or the Operations Manager of the Emergency Operations Centre (EOC).

Figure 4-1 shows an example of a recommended reporting structure, based on the standard Coordinated Incident Management System (CIMS) structure. It shows the relationship between the CIMS functions and the territorial authority's Building Response Manager.

#### Key point

New Zealand uses CIMS<sup>4</sup> to manage emergencies. Its purpose is to achieve effective coordinated incident management across responding agencies by:

- establishing common structures, functions and terminology used by agencies in incident management; yet within a framework that is flexible, modular and scalable so that it can be tailored to circumstances specific to any level or type of incident
- enabling agencies to develop their own processes, procedures and training for the execution of CIMS.

4 http://www.civildefence.govt.nz/assets/Uploads/publications/CIMS-2nd-edition.pdf

DATE: JUNE 2018 VERSION: 1
SECTION 4: READINESS
PAGE 26



# 4.2.2 Keep it flexible

Plan a Building Management operating structure and outline key roles to be ready when an emergency occurs. This structure will depend upon the size and scale of the emergency response operation, in line with the CIMS principle of being scalable and modular.

Figure 4-2 shows an example structure where the scale and complexity of the emergency require subdivision of technical roles. This is generic guidance only: the actual operating structure will need to be altered to suit the particular event.

Functions within the EOC may be able to support the Building Management sub-function (eg the Planning, Intelligence and Logistics functions). The Building Management sub-function should coordinate closely with other CDEM functions, such as Public Information Management and the Lifeline Utilities Coordinator (eg to restore lifeline utilities that are co-located with, or compromised by, damaged buildings).

Ma	ana	ging	buildings
in	an	eme	rgency

DATE: JUNE 2018	VERSION: 1
SECTION 4	: READINESS
	PAGE 27



## 4.2.3 Define roles and responsibilities

Develop position descriptions for the key roles that set out their responsibilities.

Table 4-1 gives an example of the Building Response Manager's main operational responsibilities.

DATE: JUNE 2018 VERSION: 1
SECTION 4: READINESS
PAGE 28

#### Table 4-1: Building Response Manager responsibilities

Responsibility	Description and/or rationale
Actively communicate with the Controller	Brief and receive information from the EOC to ensure a coordinated emergency response.
Establish and normalise response routine, shift work and handover protocol	In an emergency, staff may be reluctant to stop working. Set a daily routine that normalises shift work and a handover protocol to prevent staff burnout.
Chair team meetings	This allows for overall building management and coordination.
Manage risk	Identify, assess and prioritise any risk that the building assessment operation is dealing with, or that may pose wider implications for managing the response. Communicate these to the Operations Manager.
Manage conflict and stress within the organisation	This is necessary because a degree of conflict is inevitable: people have varying perspectives and experience.
Manage communications	Make sure the field data is collected and presented in a form that supports further assessment and the wider incident management. Establish a daily assessor briefing and debriefing process. Ensure that the correct authoritative information is available to the person in charge of public information management.
Establish a rapid building assessment team	Understand the contracting arrangements for volunteers and contractors. Know how to work with MBIE to expand the resource if a greater response is required.

# 4.2.4 Identify people (and alternates) for key roles

Identify and train primaries and alternates for all roles.

As it is crucial that you can staff the building assessment operation in an emergency:

- establish a contact system for key people in advance, such as a telephone tree
- review assigned staff every six months and update their contact details
- liaise with neighbouring territorial authorities in case you need to call on extra help.

Table 4-2 describes the people needed for a rapid building assessment team and where to find them (also refer to Figure 4-2 earlier).

Field personnel who will be deployed with assessment teams – team leaders and team members who will carry out rapid building assessments – should be selected from the MBIE register of trained rapid building assessors. Step seven below explains how to identify people with specialist skills and make sure they have the right training.

Managing buildings in an emergency

DATE:	JUNE	201	8	VERS	ON	: 1
	SECT	ION	4:	READ	INE	SS
				PA	GE	29

Building Response Manager of Controller (and a deputy manager)Lead and manage the building assessment responseLocal or other consultancy, or from the MBIE register of rapid building assessorsSenior building control personnel trained in Tier 1 or 2 rapid building assessorsInduction and technical coordinators/advisers: • technical and process advisor• Coordination, review and support • Liaison with external agencies relating to building, performance and assessment based on scopeLocal council staff in conjunction with MBIEOperational experience and trained in Tier 1 or 2 rapid building assessmentHazard advisor (for external agencies relating to building, performance and assessment based on scopeGNS Science or subject matter expert (via the CDEM Group ECC)Senior building control or advisorHazard advisor (for external agencies relating to building, performance and assessment based on scopeGNS Science or subject matter expert (via the CDEM Group ECC)Senior building control or gingineering personnel trained in Tier 2 rapid building assessment other functions, such as cordoning and barricadingSenior building control or regional coundi staff and then the MBIE registerSenior building control or personnel trained in Tier 2 relating control or subject matter personnel trained in Tier 2 relating personnel trained in Tier 2 relating control staff registerKey/essential socialist for industrial • commeticial/ commeticial/ • commeticial/ septiding assessorsMalge teams of specialist cordinators for	Role	Function Source		Skills
Induction and technical cordinators/advisers: • technical and process advisor• Coordination, review and support • Liaison with external agencies relating to building, performance and assessment based on scopeLocal council staff in conjunction with MBIEOperational experime and trained in Tier 1 or 2 rapid building assessmentHazard advisor for example, seismologist for earthquake)Provide specialist technical advice about the hazardGNS Science or subject matter expert (via the CDEM Group ECC)Sector coordinators: expert (via the CDEM facilitiesSenior building control or engineering personnel trained then the MBIE registerSenior building control or engineering personnel trained then the MBIE registerSenior building control or engineering personnel trained then the MBIE registerSenior building control or engineering personnel trained then the MBIE registerRapid building assessors geotechnical as assessments, but such as cordoning and barricading mother areasMBIE register of trained rapid building assessment building assessors from the assessment and then the control staff, and architet trained in Tier 2 (tead) or Tier 3 (support) rapid building assessmentFechnical staff not gassessments, but supporting technical coloring rapid building assessments, but supporting technical industrial engineering or other to specific engineering or other technical inputStructural engineers and heritage professionalsStructural engineers and heritage professionalsRapid building assessment supporting technical doing rapid building	Building Response Manager or Controller (and a deputy manager)	Lead and manage the building assessment response	Local or other council staff, consultancy, or from the MBIE register of rapid building assessors	Senior building control personnel trained in Tier 1 or 2 rapid building assessment
Hazard advisor (for example, seismologist for earthquake)Provide specialist technical advice about the hazardGNS Science or subject matter expert (via the CDEM Group ECC)Sector coordinators: • key/essential facilities • domestic/residential · commercial/ industrial • geotechnical as appropriate (area wide and site specific)Manage teams of specialist assessors There may also be specialist coordinators for other functions, such as cordoning and barricadingLocal or regional council staff and then the MBIE registerSenior building control or engineering personnel trained in Tier 2 rapid building assessmentRapid building assessors rapid building assessments, building assessments, building assessments, building assessments, building assessments, building assessments, building assessments, building assessments, building assessment, building assessment, building assessment, building assessment, building 	<ul> <li>Induction and technical coordinators/advisers:</li> <li>technical and process advisor</li> <li>regulatory process advisor</li> </ul>	<ul> <li>Coordination, review and support</li> <li>Liaison with external agencies relating to building, performance and assessment based on scope</li> </ul>	Local council staff in conjunction with MBIE	Operational experience and trained in Tier 1 or 2 rapid building assessment
Sector coordinators: • key/essential facilitiesManage teams of specialist assessors There may also be specialist coordinators for other functions, such as cordoning and barricadingLocal or regional council staff and then the MBIE registerSenior building ontrol or engineering personnel trained in Tier 2 rapid building assessmentRapid building assessors abuilding assessorsRapid assessment of buildingsMBIE register of trained rapid building assessors from the local area and from other areasEngineers, building architects trained in Tier 2 (lead) or Tier 3 (support) rapid building assessmentFechnical staff not doing rapid building assessments, but supporting technical decisionsAdditional expertise for specific engineering or other technical inputStructural engineers and heritage professionalsStructural engineers and heritage professionalsGeotechnical engineersGeotechnical engineersGeotechnical engineersGeotechnical specialists for land 	Hazard advisor (for example, seismologist for earthquake)	Provide specialist technical advice about the hazard	GNS Science or subject matter expert (via the CDEM Group ECC)	
Rapid building assessorsRapid assessment of buildingsMBIE register of trained rapid building assessors from the local area and from other areasEngineers, building control staff, and architects trained in Tier 2 (lead) or Tier 3 (support) rapid building assessments, building assessments, but supporting technical decisionsAdditional expertise engineering or other technical inputStructural engineers and heritage professionalsStructural engineers and heritage professionalsStructural engineers and heritage professionals for 	Sector coordinators: • key/essential facilities • domestic/residential • commercial/ industrial • geotechnical as appropriate (area wide and site specific)	Manage teams of specialist assessors There may also be specialist coordinators for other functions, such as cordoning and barricading	Local or regional council staff and then the MBIE register	Senior building control or engineering personnel trained in Tier 2 rapid building assessment
Technical staff not doing rapid building assessments, but supporting technical decisionsAdditional expertise for specific engineering or other technical inputStructural engineers and heritage professionalsStructural engineers and heritage professionalsStructural engineers and heritage professionals for shoring, barricading and remediation adviceGeotechnical engineersGeotechnical engineersGeotechnical specialists for land stability advice	Rapid building assessors	Rapid assessment of buildings	MBIE register of trained rapid building assessors from the local area and from other areas	Engineers, building control staff, and architects trained in Tier 2 (lead) or Tier 3 (support) rapid building assessment
Geotechnical Geotechnical Specialists for land stability advice	Technical staff not doing rapid building assessments, but supporting technical decisions	Additional expertise for specific engineering or other technical input	Structural engineers and heritage professionals	Structural engineers and heritage professionals for shoring, barricading and remediation advice
			Geotechnical engineers	Geotechnical specialists for land stability advice

#### **Table 4-2:** Building assessment management team and sources

DATE: JUNE 2018 VERSION: 1
SECTION 4: READINESS
PAGE 30

Information management	Transferring field data into appropriate database, either manually or digitally	Council staff	Linking event data with territorial authority information systems with a focus on map generation
Support staff	Administrative tasks IT support if appropriate	Council staff or contractor	Ability to find way around property records, support communication or field data collation.

# 4.3 Readiness step three: identify an operational base and other facilities

# 4.3.1 Choose a suitable location for coordinating the building assessments

Identify the most suitable place in your district for coordinating building assessments and processing information.

This should be a central building that you expect to be usable after an emergency. It should have suitable rooms and spaces for all operations, including areas for briefing and debriefing large groups of field staff. It must have access for vehicles and supplies.

This may be in the same building as the EOC if there are facilities to accommodate both functions. Ideally, both the EOC and the building assessment coordination centre will share communications that link back to the territorial authority's information management systems.

### 4.3.2 Identify an alternate site

Identify a second building as an alternative building assessment coordination centre in case your first building choice cannot be used. Suitable sites should be evaluated on a case-by-case basis.

### Key point

Following a seismic event certain types of building (which may include territorial authority office buildings) may be unsuitable as building assessment coordination centres. These could include multi-storey buildings, as necessary services such as lifts or water may not be available.

# 4.3.3 Establish an assembly point

Choose an assembly point that can be used immediately following an emergency. This might also be the coordination centre. Make sure everyone who will be part of the building assessment operation knows where it is.

Ma	ana	ging	buildings
in	an	emer	rgency

DATE:	JUNE	201	8	VERSION	<b>1:</b> 1
	SECT	ION	4:	READINE	SS
				PAGE	31

# 4.4 Readiness step four: gather information about buildings, critical infrastructure and the environment

### 4.4.1 Provide a suitable technology platform

Establish a system that provides remote access to relevant building information in the territorial authority's files. This should also allow assessors and others to enter field data once an assessment operation is underway.

This system should be appropriate for the scale of the local built environment. For example, a small territorial authority may decide that a paper-based system and slower information gathering is suitable. A larger territorial authority may want to support assessors in the field by making its property information accessible through mobile devices.

When deciding the type of IT system or other interface to provide, consider:

- the potential for a large building assessment operation because of a known hazard/scenario
- the usefulness of this system for other purposes
- its capability to provide a reliable information source (for building address details, building type, building use and owner details)
- ease of access to all information collected during the assessment operation
- the ability to update the authority's database when buildings are repaired, shored up, cordoned, strengthened or demolished.

It is important to consider any privacy issues that may arise from storing and distributing this information. Check your authority's information management policy for guidance.

DATE: JUNE 2018 VERSION: 1
SECTION 4: READINESS
PAGE 32

#### Consider using a rapid building assessment app

Instead of completing printed assessment forms (available at <u>www.building.govt.</u> <u>nz/managing-buildings/post-emergency-building-assessment</u>) assessors could use an app on a tablet or mobile phone to record assessment details while they are in the field. This information is recorded and transmitted in real time if power and communications systems are operating. Otherwise, it can be uploaded at the end of each day.

Contact MBIE at <u>buildingactemergencymanagement@mbie.govt.nz</u> for more details, including a data specification for a rapid building assessment app. Territorial authorities will need to discuss this app with their software provider.

#### Key point:

The increasing use of cloud-based digital storage and the ability to access this from remote centres offers options for back-up – which can be useful in case computer/telecommunication systems and workplaces are unavailable in an emergency – and buddying with a remote territorial authority to provide emergency operational support.

This also increases the attractiveness of moving to an IT based system that allows rapid building assessors to enter assessment details in the field via an app. This saves laborious data entry later in the day, provides higher quality data, and supports faster decision making in an emergency.

### 4.4.2 Keep detailed building information

Keep an inventory of building information that addresses all aspects of the area's building stock that could be relevant for completing building assessments. This includes the location of key facilities, and any earthquake-prone buildings or heritage-listed buildings (discussed below).

A detailed inventory will help you determine the best match of skills and the number of people needed to complete rapid building assessments when an emergency strikes. Documenting any known vulnerabilities will also help you evaluate any damage more effectively and direct efforts where they are most needed.

Pre-event LiDAR datasets will be very valuable to understand ground differential movement when compared against post-event LiDAR. Liaise with Land Information New Zealand (LINZ) for national coverage.

Information sources include:

- building compliance schedules and annual warrant of fitness information, for base data about commercial buildings
- the national EPB register for information on earthquake-prone buildings and their ratings, at <u>https://epbr.building.govt.nz</u>
- Heritage New Zealand Pouhere Taonga's website (<u>www.heritage.org.nz/the-list</u>) for a list of heritage buildings use the website's property search feature.

#### Identify key buildings that may need early assessment

Your inventory should also identify buildings that may be a priority for assessment. These include:

- buildings that provide essential community services; eg hospitals, medical centres, emergency services buildings (fire, police, ambulance), community facilities (Civil Defence Centres<sup>5</sup>, supermarkets)
- lifeline utility infrastructure (water supply buildings, petrol stations, electricity substations, ports, airports, and telecommunication facilities).

To support the building assessment operation, record the location and relevant contact details for each building. The CDEM Group Lifeline Utility Coordinator should be able to provide contact details.

#### Key point

The owners or operators of facilities needing priority asessment are responsible for arranging their own assessment following an emergency. This is usually done through a priority response agreement with professional parties, such as local engineers and architects, who are trained in rapid building assessments. Note these agreements in your inventory. Professionals contracted to complete assessments should be advised to use the standard assessment forms (available at www.building.govt.nz/managing-buildings/post-emergency-buildingassessment) and give the completed forms to the territorial authority.

#### Identify potential indicator buildings

Indicator buildings are a set of buildings that are reassessed regularly during an emergency response to check for any further damage; eg from large aftershocks following a major earthquake. This systematic monitoring can help you decide whether to review, or even restart, a rapid building assessment operation.

While the set of indicator buildings is not chosen until after the first day of assessments, there are some building types you are likely to include and can identify ahead of time in your database. Using buildings with detailed seismic assessments and building plans will also be helpful.

Indicator buildings are discussed further in section 5.9.3.

5 Includes buildings that can be used for short term emergency shelter

DATE: JUNE 2018 VERSION: 1
SECTION 4: READINESS
PAGE 34

#### Use of indicator buildings in previous earthquakes

An indicator building procedure was developed during the 2010-11 Canterbury earthquakes to guide the rapid assessment operation after a significant aftershock.

Indicator buildings were also identified in Wellington following the 2016 Hurunui/ Kaikōura earthquake, reducing the amount of rapid assessment required. This was possible because the earthquake shaking frequency affected one specific group of buildings and quickly established the characteristics that made this smaller set of buildings more prone to damage. This reduced the need for a large team of building assessors, and instead moved the operation on to Detailed Damage Evaluations (or Targeted Damage Evaluations where appropriate) arranged by the building owners.

# 4.5 Readiness step five: develop a building assessment plan

### 4.5.1 Align with the CDEM Group Plan

The designated Building Response Manager should lead the development of a building assessment plan (refer Appendix 2 for a checklist). This should be done together with the CDEM Group and CDEM team at the territorial authority to identify interface points such as resourcing (planned transport and operating space), information management, and communication/computer equipment needs.

The territorial authority's building assessment plan (the plan) should align with the CDEM Group Plan and related local civil defence emergency management plans and procedures, but not duplicate them.

#### Key point

A well-considered, pre-prepared plan will help when mobilising and deploying people in an emergency. It also makes sure building assessment teams are effective and efficient. The planning process helps to build strong relationships in readiness that are valuable in the response.

The plan should be as flexible as possible to respond to:

- unexpected distribution of building damage
- varying degrees of geotechnical impact
- needs of the emergency services, such as Fire and Emergency New Zealand and the New Zealand Police
- requests from building owners and occupiers.

When developing the plan, use the information from Step four to help set priorities for early assessment. As discussed in that step, key buildings and infrastructure should be the first priority.

Managing buildings in an emergency

If a government agency, private lifeline utility or key infrastructure operator does not have suitable arrangements in place, the territorial authority's plan should provide for rapid building assessments of these facilities. Include council-owned facilities in the plan.

Also consider how to collect information that could help build resilience against future emergencies. For example, understanding how buildings perform in an event could help inform future building policy decisions such as zoning. Information from rapid building assessments and Detailed Damage Evaluations will also support the authority's longer-term resilience objectives.

The plan should address related follow-up and supporting activities, such as identifying when and how to communicate with building owners and the community about building use and management.

### 4.5.2 Test the assessment plan by modelling emergency scenarios

Test your building assessment plan and supporting resources by modelling one or more emergency scenarios (such as flooding, tsunami, or earthquake). This will help with estimating the severity and possible extent and location of building damage. Use this information to develop your requirements for resources and operational planning.

Ideally, these scenarios should cover small, medium and large scale events. Exercises should draw on work completed on hazard risk awareness.

It is important to understand local geotechnical risks associated with weatherrelated and seismic hazards. Reliable information is needed to support the predictive capability of scenario modelling. The coordinated collection of accurate building infrastructure and geotechnical, geomorphological, and Light Detection and Ranging (LiDAR) information will support the modelling of likely scenarios. GNS Science or NIWA may be useful sources for information (refer to www.gns.cri.nz and www.niwa.co.nz).

# **4.6 Readiness step six: gather resources**

### 4.6.1 Assemble equipment and resources

Appendix 3 has checklists for resourcing the operations centre, equipment to supply to assessment teams, and equipment that building assessors should provide themselves. The field guides also contain equipment checklists for assessors.

When preparing maps, create block-by-block street maps. Mark aerial photographs of each block with:

- priority areas based on expected damage for different types and scales of emergency that might occur eg earthquakes, flooding, tidal inundation, volcanic eruption
- key buildings and infrastructure
- official street identification and legal descriptions for each block
- other information that may be relevant to an emergency response eg heritage listings, known earthquake-prone structures, flood-prone and low lying areas, known landslips and areas of instability (debris flows, cliff collapse, boulder roll).

DATE: JUNE 2018 VERSION: 1		
SECTION 4: READINESS		
PAGE 36		

For commercial areas, store single building aerial photographs with the map for the relevant block.

Use dedicated, recognisable and easily accessible cabinets to store copies of these maps, hazard map checklists, response plans, lists, field guides, placards, other printed building reference information, and all assessment equipment. Set up a system of updates so mapping, photographic and other information remains current.

Also keep information electronically, and make sure you can access this in an emergency by keeping copies on:

- the territorial authority's computer network, and
- other storage media such as external storage devices, optical disks, or cloud storage services.

#### Key point

When deciding how many placards to print ahead, bear in mind that you may need to amend these in an emergency to include specific information about the event. They should also include an appropriate point of contact for the territorial authority, such as a 24/7 call centre.

### 4.6.2 Prepare information ahead where possible

Consider pre-preparing some hard copy factsheets for building owners and the public following an emergency. Check MBIE and MCDEM websites for information that is already available.

MCDEM's websites <u>www.civildefence.govt.nz</u> and <u>www.happens.nz</u> have useful public information resources, including *Working from the same page: consistent messages for CDEM and Response Management: Director's Guideline for CDEM Group and Local Controllers.* These documents are intended to help those responsible for developing and providing CDEM information to the general public. They provide nationally agreed information on:

- · specific hazards and their impact on the community, and
- the actions that individuals, families, and communities can take to reduce, prepare for, and protect themselves from, the effects of major emergencies.

Refer to section 5.10 for more about managing communications during the emergency response.

DATE: JUNE 2018	ERSION: 1
SECTION 4:	READINESS
	PAGE 37

## 4.6.3 Consider transport and communications

Determine transport needs to get people to and around operational areas. Vehicles must be able to navigate damaged roads. It is likely that many council pool vehicles will be required for other emergency response tasks, such as monitoring hazards and maintaining emergency communications. Consider how to get hold of additional 4x4 vehicles if needed. Helicopters may be required depending on access constraints and terrain.

Also make sure you have adequate means of communication, such as temporary telephones or radios.

# 4.6.4 Consider accommodation and support for people outside the district

If you have to bring in rapid building assessors from outside your district they will have extra requirements for accommodation, meals and wellbeing. Establish a policy for this in coordination with the logistics function lead that can be easily implemented following an emergency.

# 4.6.5 Maintain key alliances and understand roles played by others

The effectiveness of the building management response will largely depend on mutual agreement and cooperation among all affected parties. Maintain good relationships with key people in all the agencies and organisations that need to work together during and after an event. This will minimise inefficiencies; especially any unnecessary duplication of technical and administrative resources.

Similarly, where possible, collect raw data that is useful to multiple agencies. Engage early with the lifeline utilities providers.

Other interested stakeholders include:

- MBIE's Temporary Accommodation Service, for emergency housing
- Fire and Emergency New Zealand, which undertakes rapid impact assessments but not rapid building assessments
- GNS Science, NIWA and academics working in the hazard area, for assessing aftershock and tsunami risk and for collecting scientific data
- Infrastructure representatives such as NZTA and KiwiRail, who will be assessing infrastructure damage
- building insurers and the Earthquake Commission's (EQC's) assessors and their advisors, who will be looking at land and building damage for insurance compensation/repair.

All may play a crucial role in the recovery phase.

For damaged heritage buildings, Heritage New Zealand Pouhere Taonga expertise may be required (refer Appendix 1 for more about its role).

DATE: JUNE 2018 \	/ERSION: 1
SECTION 4: READIN	ESS
PAGE 38	

# 4.7 Readiness step seven: identify people with specialist skills

## 4.7.1 Check for trained assessors in your area

MBIE maintains a three-tiered capability system of people trained in rapid building assessment (refer Figure 2-2 in section 2):

- **Tier 1:** national resources capable of leading an assessment operation. These people should be used if complex building damage is suspected or evident, or if the rapid building assessment management needs reinforcing.
- **Tier 2:** these people should be the first ones called on to help with a large scale building assessment operation. They include building professionals such as senior building officials, engineers (structural and geotechnical) and some architects. Tier 2 assessors are trained to lead building assessment teams in the field and are familiar with the field guides and related resources (eg placards, checklists, and health and safety information).
- **Tier 3:** these people should be used to support Tier 2 in the field if necessary. This tier receives general awareness training. It also includes building professionals.

### Key point

Training promotes consistency by making sure that building assessors work to established criteria and procedures. This reduces the induction time before building assessments can begin in an emergency.

Most emergencies for which building assessors are needed will be local or regional events. During a state of emergency or transition period MBIE may support the Controller using the national register to carry out resource availability/skill matching and provide contact details through the EOC. The mechanism for getting assessor support in these circumstances needs to be established at regional and local level.

Help MBIE to maintain national capability by checking there are enough assessors in your area with Tier 2 rapid building assessment training to initiate local assessments. MBIE keeps a national register that includes details of these assessors' location, level of training and specialist expertise (eg in structural engineering) to help you check this. Where appropriate, encourage more of your staff to complete this training.

Note that although MBIE has registered these assessors, in an emergency they will need to be:

- mobilised and warranted by the territorial authority (by having them sign a memorandum of understanding or contract)
- deployed through the Building Response Manager to carry out assessments.

Appendix 7 includes a memorandum of understanding for building assessors. This addresses the liability issues for volunteers involved in rapid building assessments.

Contact MBIE at <u>buildingactemergencymanagement@mbie.govt.nz</u> regarding the national register of assessors and further training.

#### Key point

In areas where geotechnical risk is prominent, the territorial authority should also hold discussions on mobilisation mechanisms and coordination structures with local geotechnical engineering representatives.

#### 4.7.2 Getting assessors from outside the district

A major event can occur across multiple districts and lead to more than one state of local emergency, or even a state of national emergency. If this occurs, the territorial authorities in the affected districts are still expected to organise rapid building assessors using their pre-existing arrangements and resources ahead of national coordination led by the National Controller through the National Crisis Management Centre (NCMC). Support will be provided as needs are understood, available external resource is identified, and logistics to deploy them are worked through.

A major event may require many trained building assessors. This is likely to involve mobilising all the trained building assessors available locally as well as arranging for assessors from outside the affected area. If requested by a CDEM Group Controller, the National Controller, in partnership with MBIE, will facilitate out-of-region mobilisation of building assessors.

This also applies if a CDEM Group were to request additional support, via the NCMC, in any lesser scale emergency and whether or not a state of local emergency is in force. Similar requests can also be made to MCDEM (or the National Recovery Manager) by a Local Recovery Manager during a transition period.

#### 4.7.3 Keep assessors upskilled

Assessors need to be given the opportunity to consolidate and maintain their skills after completing the initial MBIE-led building assessment training. Suitable activities could include completing further training, attending seminars, participating in exercises, and helping other territorial authorities respond to emergencies. Supporting other territorial authorities in an emergency provides staff with experience and maintains their interest.

### 4.7.4 Engage with consulting engineers

As well as training staff, actively engage with local consulting engineers contracted to your territorial authority, or ones you work closely with on an ongoing basis, to help prepare for emergencies. This is particularly important for geotechnical matters, where local knowledge is essential. The three relevant technical societies (NZSEE, SESOC and NZGS) and the professional body Engineering New Zealand (ENZ) can assist.

DATE: JUNE 2018	VERSION: 1
SECTION 4: READIN	IESS
PAGE 40	

# 4.7.5 Consider any specialist building knowledge that may be required

As well as making contingency plans to mobilise registered building assessors, consider the nature of the district's building stock and whether additional specialist building knowledge could be needed. For example, this could be necessary for high-rise buildings, special infrastructure such as dams, or if there are particular geotechnical considerations in your area. There may be suitable specialists locally or you may need to enlist outside expertise.

# 4.7.6 Consider contracting for emergency response services

Territorial authorities typically maintain a list of civil works/building contractors for general purposes. These contractors may be needed for emergency building repairs (such as cordoning, shoring, or securing buildings, or making them weathertight), or demolition. Consider including the provision of emergency response services in existing service and maintenance contracts.

You may also need to contract to:

- provide storage locations for debris arising from demolition
- secure storage for assets that may be vulnerable as a result of damaged buildings or demolition
- secure areas for debris subject to forensic testing and investigation.

Work closely with the Lifeline Utility Coordinator in the local CDEM Group, who will maintain links with lifeline utilities servicing the local area.

# 4.7.7 Consider availability of legal, financial, procurement and communications advice

A number of additional functions are important for supporting the response to an emergency, as listed below. The building assessment plan should address how and who to call on for support for each of these functions when an emergency occurs, and also for preparing processes beforehand.

- Procurement it will be necessary to enter into contracts during the emergency response; for example, with assessors who are needed for more than three days. Have template contracts available that comply with council policies.
- Legal consider whether there are suitably experienced in-house resources or whether you need to have an arrangement with an external legal firm.
- Financial consider how costs incurred during the emergency response will be accounted for.
- Communications check if there are suitably experienced in-house resources. (Refer to the previous readiness step, section 4.6.2, and to the communications response, section 5.10, for what is likely to be required.)