

# Exercise Tangaroa Coordinating Instruction

31 August, 14 September, 28 September 2016

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# Section 1 Introduction

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## 1.1 Introduction

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This Coordinating Instruction provides detailed guidance on participating in Exercise Tangaroa.

This plan should be read in conjunction with the *Exercise Evaluation Plan*, which provides detailed instructions for how the exercise will be carried out and the *Exercise Communications Plan*, which provides detailed instructions on how communication will be conducted about the exercise, and within the exercise itself.

Further detail may be added to this document as the exercise is developed.

## 1.2 Audience

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This instruction provides guidance to all exercise participants, in particular:

- National Planning Group
- Exercise Writers/Planning Teams
- Evaluators

## 1.3 National CDEM and Inter-Agency (AOG) Exercise Programmes

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The National CDEM Exercise Programme was established in 2006 to provide a formal framework to exercising in New Zealand.

The programme is owned collectively by the 16 CDEM Groups and managed through a representative governance group. The Ministry of Civil Defence & Emergency Management (MCDEM) is the overall National Exercise Programme sponsor.

The programme recognises that exercising needs to occur at all levels of the CDEM structure. A four-tier approach to exercising has been adopted. Each tier is expected to be based on and informed by a consistent regime of planning, observation, evaluation, feedback, and continuous improvements.

The National CDEM Exercise Programme comprises a 10-year schedule of CDEM exercises based on a four-tier approach (refer to Table 1).

Table 1: The National CDEM Exercise Programme tier structure

Tier	Description
1	Local exercise (individual organisation)
2	Group exercise (within a CDEM Group)
3	Inter-Group exercise (across CDEM Groups, may include MCDEM)
4	National exercise (New Zealand or part thereof, including central government)

In addition, Exercise Tangaroa is the first full-scale exercise to be held as part of the Interagency (All-of-Government) National Exercise Programme. The Interagency National Exercise Programme was established in 2013 and is chaired by the Department of the Prime Minister and Cabinet. It was established to provide better coordination across government and to help ensure that New Zealand is prepared to effectively respond to national security (all hazard) events. The Interagency NEP builds capability through a coordinated series of interagency exercises and these are measured against a set of national objectives.

Exercise Tangaroa will test tsunami responses at all levels of the CDEM structure and responses at a Government level.

## 1.4 Background

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Exercise Tangaroa 2016 is based on a regional source tsunami that impacts the New Zealand coastline and builds on Exercise Tangaroa 2010.

The original Exercise Tangaroa (2010) was based on a distant source tsunami originating from South America, and focused on the lead-up to a tsunami arrival. The 2016 exercise will test the sector's response to a regional source tsunami generated less than three hours (travel time) away from the nearest New Zealand coastline.

The exercise will also serve as a preliminary test for post-impact recovery plans. Since 2010, amendments have been made to the national welfare and recovery arrangements and CDEM Groups have continued to develop their capabilities.<sup>1</sup> Exercise Tangaroa 2016 will be the first test of these national recovery arrangements.

The Exercise will be led by the Ministry of Civil Defence & Emergency Management (MCDEM) and supported by all 16 CDEM groups, central government agencies, emergency services, lifeline utilities, and other agencies and organisations as appropriate.

## 1.5 Exercise Tangaroa 2016

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Exercise Tangaroa 2016 aims to test New Zealand's arrangements for preparing for, responding to, and recovering from a national tsunami impact.

As the first full-scale exercise to be held as part of the Interagency National Exercise Programme, Exercise Tangaroa 2016 represents the 'first step' in assessing and planning for one of New Zealand's largest life safety risks (according to expected casualties and damage to infrastructure).<sup>2</sup> The exercise aims to address and evaluate the current state of national responses when faced with a large-scale and time critical event.

Any gaps identified during the exercise will assist in the creation of a more-informed forward plan for future CDEM and Government work programmes and will assist in shaping future exercises.

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<sup>1</sup> See Guide to the National Civil Defence Emergency Management Plan 2015 which can be found [here](#).

<sup>2</sup> For more information regarding the risks posed by regionally sourced tsunamis to New Zealand see the 2013 Review of Tsunami Hazards in New Zealand [here](#).

## 1.6 New Zealand's tsunami risk

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New Zealand's tsunami risk is comparable to or larger than its earthquake risk. Large tsunamis have occurred in New Zealand within written history, but have resulted in few deaths and only modest damage. However, Maori tradition records several large tsunami killing many people within the last 1000 years. Archaeological evidence indicates that several coastal settlements around New Zealand were abandoned for higher ground in the mid-1400s and there is also geological evidence of tsunami with up to 60m run-ups affecting the New Zealand coast within the last 6000 years.

New Zealand's location astride a plate boundary means that it experiences many large earthquakes. Some cause large tsunamis. New Zealand's coasts are also exposed to tsunami from submarine and coastal landslides, and from island and submarine volcanoes. In addition, tsunami generated by large earthquake at distant locations, such as South America, or western North America and the Aleutians in the north Pacific Ocean, can also be damaging in New Zealand.

Tsunami with run-up heights of a metre or more have occurred about once every 10 years on average somewhere around New Zealand, a similar frequency to Hawaii and Indonesia, but about one third that in Japan. Smaller tsunami occur more frequently, the smallest of which are only detectable on sea-level recorders.

With intensification of coastal development over the last few decades, a large tsunami today is likely to be very damaging. One of the most significant threats comes from tsunami generated within one-two hours travel time from the nearest New Zealand coastline.

New Zealand can expect tsunami in the future. Some coasts are more at risk than others because of their proximity to areas of high local seismic activity, or exposure to tsunami from more distant sources. No part of the New Zealand coastline is completely free from tsunami hazard.<sup>3</sup>

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<sup>3</sup> For more on New Zealand's tsunami hazard, see Power, W. L. (compiler). 2013. Review of Tsunami Hazard in New Zealand (2013 Update), *GNS Science Consultancy Report 2013/131*.

## Section 2 Exercise concept

### 2.1 Aim

The aim of Exercise Tangaroa is to test New Zealand's arrangements for preparing for, responding to, and recovering from a national tsunami impact.

### 2.2 Objectives and Key Performance Indicators (KPIs)

There are nine overall exercise objectives described in the table below.

In addition to this, participating agencies should also consider setting their own (optional) agency-level objectives and key performance indicators in order to exercise any specific areas of interest.

Exercise Objectives	Sub-objectives	Key Performance Indicators
<b>1.0</b> Lead a coordinated interagency response.	<b>1.1</b> Identify threat of major incident.	<b>1.1.1</b> Incident identified as a major incident requiring the activation of the National Security System
		<b>1.1.2</b> Incident identified as a threat according to the MCDEM thresholds
		<b>1.1.3</b> Incident identified as a threat according to CDEM Group and local authority thresholds
	<b>1.2</b> Processes for considering and declaring states of emergency are followed at all levels.	<b>1.2.1</b> Identify criteria for making a declaration and apply this criteria to the decision making process
		<b>1.2.2</b> If making a declaration, the correct process is followed (gazetting, current forms, etc.)
	<b>1.3 Activate</b> coordination centres at all required levels in accordance with standard operating procedures.	<b>1.3.1</b> Lead agency activates a coordination centre in accordance with standard operating procedures.
		<b>1.3.2</b> Key stakeholders are identified and informed of the activation(s).
		<b>1.3.3</b> Liaison arrangements are activated in accordance with standard operating procedures.
		<b>1.3.4</b> Welfare arrangements are activated in accordance with standard operating procedures.

		<p><b>1.3.5</b> Lifelines arrangements are activated in accordance with standard operating procedures.</p>
	<p><b>1.4 Develop</b> an effective action plan in accordance with standard operating procedures.</p>	<p><b>1.4.1</b> Planning processes are followed by the lead agency as established in standard operating procedures.</p> <p><b>1.4.2</b> The systems, processes and resources are appropriate for developing the action plan.</p> <p><b>1.4.3</b> Options, analysis of threats and associated risks are embedded in the development of the action plan.</p>
	<p><b>1.5</b> Coordinate a tsunami response in accordance with the lead agency's emergency plan, the action plan, CIMS, and legal/policy frameworks.</p>	<p><b>1.5.1</b> Liaison arrangements are established and maintained as required throughout the duration of the response.</p> <p><b>1.5.2</b> Response is managed in accordance with plans and within mandated frameworks.</p> <p><b>1.5.3</b> The systems, processes and resources are appropriate for implementing the action plan.</p> <p><b>1.5.4</b> Lead agency is able to delegate tasks to support agencies within legal frameworks.</p> <p><b>1.5.5</b> Agencies confirm their ability to carry out the delegated tasks in a timely manner in accordance with standard operating procedures.</p> <p><b>1.5.6</b> As appropriate, implement site, local, regional and national levels of coordination.</p> <p><b>1.5.7</b> Establish welfare arrangements that demonstrate an understanding of current frameworks and processes.</p>

	<p><b>1.6</b> Lead coordination centres in accordance with standard operating procedures.</p>	<p><b>1.6.1</b> Lead agency manages an interagency coordination centre.</p> <p><b>1.6.2</b> Lead agency is able to sustain an operational response for the length of time required.</p> <p><b>1.6.3</b> Lead agency can demonstrate there is a process in place to be able to return to business as usual following a response to a major incident.</p>
<p><b>2.0</b> Support a coordinated interagency response.</p>	<p><b>2.1</b> Support identification of threat of major incident.</p>	<p><b>2.1.1</b> Agency supports the identification of a threat as a major incident requiring the activation of the National Security System</p>
	<p><b>2.2</b> Activate coordination centres at all required levels in accordance with standard operating procedures.</p>	<p><b>2.2.1</b> Support agency activates a coordination centre, where required, in accordance with standard operating procedures.</p> <p><b>2.2.2</b> Lead agency and other key stakeholders are identified and informed of the activation(s).</p> <p><b>2.2.3</b> Liaison arrangements are activated in accordance with standard operating procedures.</p> <p><b>2.2.4</b> Welfare arrangements are activated in accordance with standard operating procedures.</p> <p><b>2.2.5</b> Lifelines arrangements are activated in accordance with standard operating procedures.</p>
	<p><b>2.3</b> Support the development of an action plan in accordance with standard operating procedures.</p>	<p><b>2.3.1</b> Support agency contributes to the lead agency planning processes as established in standard operating procedures.</p> <p><b>2.3.2</b> Threats and associated risks identified by the support agency are considered in the development of the action plan.</p> <p><b>2.3.3</b> Support agency develops an action plan to detail the tasks assigned to it by the lead agency.</p>

	<p><b>2.4</b> Support a tsunami response in accordance with the lead agency's emergency plan, the action plan, CIMS, and legal/policy frameworks.</p>	<p><b>2.4.1</b> Liaison arrangements are maintained as required throughout the duration of the response.</p>
		<p><b>2.4.2</b> Response is supported in accordance with plans and within mandated frameworks.</p>
		<p><b>2.4.3</b> The systems, processes and resources are appropriate for implementing the action plan.</p>
		<p><b>2.4.4</b> Agencies confirm their ability to carry out the delegated tasks in a timely manner in accordance with standard operating procedures.</p>
		<p><b>2.4.5</b> As appropriate, implement site, local, regional and national levels of support.</p>
		<p><b>2.4.6</b> Establish welfare arrangements that demonstrate an understanding of current frameworks and processes</p>
	<p><b>2.5</b> Support coordination centres in accordance with standard operating procedures.</p>	<p><b>2.5.1</b> Support agencies are able to support the inter-agency coordination centre as required by the lead agency.</p>
		<p><b>2.5.2</b> Support agencies are able to sustain an operational response for the length of time required.</p>
		<p><b>2.5.3</b> Support agencies can demonstrate there is a process in place to be able to return to business as usual following a response to a major incident.</p>
<p><b>3.0</b> Conduct effective high level All of Government decision making.</p>	<p><b>3.1</b> National Security System activated and effective within acceptable period of time.</p>	<p><b>3.1.1</b> NSC, ODESC and Watch Groups (National Security System) established as appropriate in a timely manner in accordance with standard operating procedures.</p>
		<p><b>3.1.2</b> Relevant National Security System Groups provide strategic direction to relevant agencies, allowing comprehensive operational planning as required.</p>

		<p><b>3.1.3</b> Decisions are communicated to key stakeholders in a timely manner in accordance with standard operating procedures.</p> <p><b>3.1.4</b> Relevant National Security System groups monitor and evaluate decisions throughout the incident.</p>
	<b>3.2</b> Effective communication with key stakeholders	<b>3.2.1</b> Coordination of domestic and international stakeholders as appropriate in accordance with standard operating procedures.
<b>4.0</b> Initiate the transition of response to recovery including planning and arrangements.	<b>4.1</b> Effective integration of response and recovery planning	<b>4.1.1</b> Demonstrate that consideration of early recovery is incorporated into response planning
		<b>4.1.2</b> Planning documents demonstrate an awareness of likely medium and long term impacts of response actions and decisions
	<b>4.2</b> Develop an appropriate recovery plan	<b>4.2.1</b> Establish recovery arrangements that demonstrate an understanding of current frameworks and processes
		<b>4.2.2</b> Conduct a transition from response to recovery in accordance with established recovery arrangements.
		<b>4.2.3</b> The systems, processes and resources are appropriate for developing the recovery plan.
		<b>4.2.4</b> Options analysis of threats and associated risks is embedded in the development of the recovery plan.
<b>4.2.5</b> Lifeline utilities communicate restoration and recovery plans and priorities.		
<b>5.0</b> Effectively manage information horizontally and vertically	<b>5.1</b> Incident information is effectively managed and communicated by all agencies involved in the response.	<b>5.1.1</b> A strategic communication plan is developed.
		<b>5.1.2</b> A strategic communication plan is implemented.

		<p><b>5.1.3</b> Accurate information is communicated internally in a timely manner in accordance with standard operating procedures.</p>
		<p><b>5.1.4</b> Information is communicated across appropriate internal and external stakeholders in a timely manner to create a common operating picture.</p>
		<p><b>5.1.5</b> Information is appropriately stored in accordance with standard operating procedures.</p>
		<p><b>5.1.6</b> Each agency has the appropriate equipment and resources to share and manage information effectively.</p>
		<p><b>5.1.7</b> Lifeline utilities make contact with CDEM and provide status reports and establish an appropriate line of contact.</p>
	<p><b>5.2</b> Support requirements are effectively communicated.</p>	<p><b>5.2.1</b> Domestic support requests are effectively managed in accordance with standard operating procedures.</p>
		<p><b>5.2.2</b> International support requests are effectively managed in accordance with standard operating procedures.</p>
	<p><b>5.3</b> Situation reports effectively fused from various sources and promulgated in a timely manner to relevant stakeholders.</p>	<p><b>5.3.1</b> Situation reports accurately disseminated to key stakeholders in accordance with standard operating procedures.</p>
<p><b>6.0</b> Deliver effective public information management</p>	<p><b>6.1</b> Public communications reinforce confidence in the response and provide appropriate levels of public assurance</p>	<p><b>6.1.1</b> Provide timely, accurate, and clear information to those who need it in accordance with standard operating procedures.</p>
		<p><b>6.1.2</b> Messages align with and support the operational response and government priorities.</p>
		<p><b>6.1.3</b> Proactive messaging across the full range of platforms meets the demand for accurate information.</p>

		<b>6.1.4</b> Public information/messaging is coordinated and consistent across agencies.
<b>7.0</b> Implement business continuity arrangements.	<b>7.1</b> Agency is able to continue to effectively meet essential business as usual outputs.	<b>7.1.1</b> Essential and non-essential business outputs are identified.
		<b>7.1.2</b> Agency has, or is able to acquire from other agencies, the capacity needed to meet essential business requirements whilst simultaneously meeting response requirements.
		<b>7.1.3</b> Each agency's business activities are adjusted and communicated in accordance with business continuity plans.
<b>8.0</b> Integrate lessons identified from previous events and exercises in order to engender a culture of continuous improvement.	<b>8.1</b> Evaluation and post activity reporting of the inter agency outcomes is undertaken.	<b>8.1.1</b> Evaluation is coordinated by the lead agency against relevant national objectives.
		<b>8.1.2</b> Supporting agencies provide relevant information to the post activity reporting.
	<b>8.2</b> Continuous improvement processes are implemented.	<b>8.2.1</b> Inter agency capability building Information is collected and shared with relevant agencies by the lead agency to allow continuous improvement across government.
		<b>8.2.2</b> During the development of inter-agency exercises, previous lessons identified are integrated by the lead agency.
		<b>8.2.3</b> Best practices are discussed and shared across agencies.
<b>9.0</b> Further develop collaborative relationships, to enhance interagency knowledge; creating capability and resilience.	<b>9.1</b> Agencies share information to engender an all hazards, all of government approach to response management.	<b>9.1.1</b> Information is shared and utilised across agencies to assist in relationship and resilience building.
		<b>9.1.2</b> Best practices are discussed and shared across agencies.

## 2.3 Scenario

The scenario for Exercise Tangaroa will be a regional source tsunami originating in the Kermadec Trench region and affecting the entire New Zealand coastline.

## 2.4 Exercise dates and phases

The exercise will be conducted in three phases, as follows:

	Phase 1	Phase 2	Phase 3
<b>Date</b>	31 August 2016	14 September 2016	28 September 2016
<b>Theme</b>	<b>Warning and impact:</b> From initial notification through to tsunami impact.	<b>Post impact:</b> Response elements with a welfare focus.	<b>Recovery:</b> Early elements of recovery.
<b>Exercise type</b>	<b>Full scale:</b> Activation of NCMC, ECCs, and EOCs.	<b>Table top:</b> Discussion exercises across Groups, partner agencies, MCDEM, and national agencies.	<b>Table top:</b> Discussion exercises across Groups, partner agencies, MCDEM, and national agencies.
<b>Phase length</b>	1 full day (extended hours)	1 full day (business hours)	1 full day (business hours)
	If required, exercise activities can take place outside of the three main days of exercise play, for example, if a Group wishes to exercise other activities, such as a Community Response Plan, this can be done on any day that suits between 31 August and 14 September 2016.		
<b>Examples of what may be tested</b>	<ul style="list-style-type: none"> <li>National Crisis Management Centre (NCMC), Emergency Coordination Centre (ECC) and Emergency Operations Centre (EOC) activations</li> <li>Emergency Management Information System (EMIS)</li> <li>Public Information Management</li> <li>Evacuations</li> <li>National Warning System</li> <li>Declarations</li> <li>Business continuity</li> <li>Welfare arrangements</li> <li>Alerting mechanisms</li> <li>Rapid Impact Assessment</li> <li>Lifeline utilities</li> </ul>	<ul style="list-style-type: none"> <li>Welfare arrangements</li> <li>Impact and needs assessments</li> <li>Post-impact response arrangements</li> <li>Community response plans (optional)</li> <li>Evacuations (optional)</li> </ul>	<ul style="list-style-type: none"> <li>Transition to recovery</li> <li>Recovery arrangements</li> </ul>
<b>Participants</b>	NCMC, CDEM Groups, and partner agencies together.	Individual CDEM Groups with appropriate partner agencies.	NCMC, CDEM Groups, and partner agencies together.
<b>Exercise time</b>	Played in real-time and there will be no compression of timelines or artificial times/dates for this phase of exercise play.	Played in real time, but for exercise purposes it will be the day after the tsunami impact (i.e. notionally 1 September 2016).	Played in real time, but for exercise purposes it will be notionally two weeks after the tsunami's impact (i.e. notionally 14 September 2016).

## 2.5 Scope and type

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Exercise Tangaroa is a joint local government and central government exercise with an emphasis on strategic coordination and decision-making across agency interfaces, with activities occurring at various venues across New Zealand. The exercise will test both pre-impact response (from PTWC notification through to tsunami impact) as well as post-impact response, including the transition from response to recovery.

Day one of the exercise will be a full scale functional exercise; days two and three will be undertaken as table-top discussion exercises.

The exercise will not include mandatory physical field activities. CDEM Groups may exercise field activities as an optional activity and is for individual agencies to arrange.

## 2.6 Assumptions

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The following assumptions apply to exercise planning and play:

- There will be no, or minimal, building and infrastructure damage resulting from the earthquake that generates the tsunami.
- The exercise is a learning activity designed to educate agencies on the assembly of appropriate management groups, the application of available information and decision-making on the issuance of appropriate warning, public alerting, evacuation and other response actions.
- All participating sectors and agencies are expected to exercise according to their own arrangements and plans, and use the exercise to evaluate their response capability.
- To prevent alarming the public, communication with broadcasters/other media will be simulated. Local public warning systems are not expected to be triggered as part of this exercise, however, exercising of such activities is optional and for individual participants to arrange. Such agencies will take special care to identify messages as “Exercise Only” if communicating with public/media.
- For the purposes of this exercise, ‘national agencies’ will include national clusters.

## 2.7 Participation

Agencies wishing to participate in the exercise must consider their level of commitment to the exercise and communicate this with the Exercise Planning Team.

The following table outlines the four broad levels of participation for Exercise Tangaroa.

Category	Description	Example
<b>Full</b>	Agency commits to participating in all exercise activities.	Your agency will fully activate its emergency operations centre on day 1 and hold table top workshops on days 2 and 3.
<b>Partial</b>	Agency participates in a specific part of the exercise.	Your agency may partially activate its agency emergency operations centre and only participate on day 1 or have limited staffing on days 2 and 3.
<b>Facilitation</b>	Agency personnel are made available to facilitate exercise injects or enquiries (i.e. a control function).	Your agency will not activate its agency emergency operations centre, but instead have one or more people simulating exercise activities.
<b>Not engaged</b>	Agency not involved in exercise play.	Your agency inputs and outputs will be notional if required (i.e. exercise writers will make up your agency's input if required). Note: No communication or contact is made with your agency during the exercise.

It is vital that all agencies inform the Exercise Tangaroa Planning Team of their expected level of participation. This will allow the Exercise Planning Team to give those who participate in the exercise an accurate list of contact details, with Exercise Control substituting for any agency that is not taking part.

All agencies must confirm their participation in the exercise to the exercise planning team as soon as possible, and **no later than 30 April 2016**. A copy of the participation form is attached as Appendix 1.

### 2.7.1 CDEM Groups

All 16 CDEM Groups will participate. They are:

CDEM Groups	
Northland CDEM Group	Wellington CDEM Group
Auckland CDEM Group	Nelson-Tasman CDEM Group
Waikato CDEM Group	Marlborough CDEM Group
Bay of Plenty CDEM Group	West Coast CDEM Group
Gisborne CDEM Group	Canterbury CDEM Group
Manawatu-Wanganui CDEM Group	Otago CDEM Group
Hawke's Bay CDEM Group	Southland CDEM Group
Taranaki CDEM Group	Chatham Islands CDEM Group

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## 2.7.2 National agencies

Effective response to a major tsunami event requires an all-of-government approach. It is anticipated that a number of national agencies will participate in the exercise.

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## 2.7.3 Observer agencies

Agencies may wish to participate in the exercise in an observer capacity. We have invited our CDEM bilateral partners at the Federal Emergency Management Agency (FEMA) in the United States and at Emergency Management Australia to participate as observers.

An observer programme will be further discussed and developed as part of exercise planning.

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## 2.8 Exercise General Instructions

Exercise General Instructions define the aims and objectives of each sector or 'cluster' (in addition to the overall exercise aim and objectives), how they will be achieved, and the role of each agency within those sectors or 'clusters'. They also outline how the exercise will be coordinated at each sector/'cluster' or agency level, an explanation of how tasks are initiated and what sort of response or outputs are expected from participants. It also provides staff with all the information they need to know about the exercise such as roster details and meal break times.

Exercise General Instructions are expected to be prepared for each sector/'cluster' by the respective lead agencies (and in some cases for individual agencies). A template for this document will be posted to the MCDEM website when developed.

Other agencies may also find it useful to prepare Exercise General Instructions to inform their participants about the exercise. They should be provided to all sector/'cluster' participants by the sector/'cluster' lead agencies and outline all the information that the "players" need to know to get started.

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## 2.9 Documentation

The following documents or websites support planning and participating in Exercise Tangaroa:

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### 2.9.1 Exercise Tangaroa planning documents

- [Exercise Tangaroa 2016 Warning Order](#)
- Exercise Coordinating Instruction (*this document*)
- Communications Plan (*to be developed*)
- Evaluation Plan
- Exercise Control and Evaluator Rules of Play (*to be developed*)
- Evaluation form(s) (*to be developed*)

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### 2.9.2 Exercise Tangaroa website and newsletters

- [Exercise Tangaroa 2016 webpage](#) (*including regular Exercise Tangaroa e-newsletters*)

### 2.9.3 Tsunami context

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- [National Tsunami Advisory and Warning Plan](#)
- [Review of Tsunami Hazard in New Zealand](#)

### 2.9.4 Exercise Programmes

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- [National CDEM Exercise Programme](#)
- [National Interagency Exercise Programme](#)

### 2.9.5 Exercise Writing Guidance

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- [CDEM Exercises guideline](#)

### 2.9.6 Emergency Management Director's Guidelines

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- [Response Planning in CDEM](#)
- [Welfare Services in an Emergency](#)
- [Response Management](#)
- [Lifeline Utilities and CDEM Groups](#)

Further Director's Guidelines are available on the [MCDEM website](#).

### 2.9.7 Other

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- Own agency plans and SOPs

## Section 3 Evaluation and reporting

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### 3.1 Evaluation Plan

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A separate Evaluation Plan for Exercise Tangaroa will provide guidance to participating agencies on how to plan for their exercise evaluation. This document will be available on the MCDEM website.

### 3.2 Evaluation criteria

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Post-exercise evaluations will be based on both national and agency-level criteria. The national criteria will be based on the overall exercise objectives, while the agency-level criteria will be determined by individual agencies. Individual agency objectives are over and above the national objectives and are optional for all participating agencies.

Evaluation forms for the exercise will be developed by the lead evaluator appointed by MCDEM and will be issued separately.

The Exercise Planning Team will complete an evaluation report, which will inform the overall end of exercise report.

### 3.3 Evaluators

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Due to the size and complexity of Exercise Tangaroa, it is recommended that a CDEM Group or 'Cluster' (eg. National Welfare Coordination Group) evaluation coordinator be appointed to coordinate and guide local authority and/or individual agency evaluators.

Given the breadth of this exercise and the number of participating agencies, agencies are required to appoint their own evaluators for the exercise.

### 3.4 Debriefs

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Each venue will conduct its own hot debrief (on each of the exercise days), with each agency conducting its own cold debrief in the weeks following the last exercise day (28 September 2016). The focus of this structured debrief is to be on the standard evaluation forms which are to be based on the overall exercise objectives, plus any additional evaluation forms developed by each participating agency. Other specific agency learnings are also to be identified through this process.

## Section 4 Exercise delivery

### 4.1 Exercise format

Exercise Tangaroa is a national exercise, however, the format of the exercise, and involvement in it, will vary considerably across the country due to the varying impacts the scenario will have on communities around the country.

### 4.2 Exercise hours

The exercise will be run over three full days:

- Wednesday 31 August 2016
- Wednesday 14 September 2016
- Wednesday 28 September 2016

Day one of the exercise will require a full day's engagement. Exercise-related activities may be held in between each of the main days of the exercise. There may also be some exercise-related work required in between each of these days to prepare for each day's activities.

Agencies should make their own decisions about operating hours.

### 4.3 Types of Injects

The injects for Exercise Tangaroa will be either common to all functions/venues or function or venue specific and can be characterised in the table below:

Nature of Inject	Example
Scientific	PTWC Threat Message
	GeoNet analysis
	Tsunami Expert Panel (TEP) advice
	Other reports or statements
General	Incidents/discoveries
	News bulletins
	Media statements
	Media questions
	Field reports to operations centres
	Situation reports
	Requests for information
Meeting Summaries (produced "in exercise")	Summaries of key actions and/or decisions resulting from meetings
Public Information (produced "in exercise")	Media statements

Scientific injects will be developed by GNS Science. These will contain detailed data about the earthquake location and magnitude along with the tsunami propagation (times and wave heights).

The scientific aspects of the scenario are being kept 'secret' from all but the Exercise Planning Team so that decision making of all agencies can take place in a realistic environment of uncertainty.

Other generic and function-specific injects are to be developed by the Exercise Planning Team in conjunction with CDEM Group Exercise Writers/Planners, having due regard to both:

- direct physical and agency impacts; and
- associated demands from other sectors and agencies.

### 4.3.1 Inject process

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Not all exercise participants will see all injects, particularly in the case of the more technical injects. Instead, as in reality, participants may see the product of subsequent analyses and discussion by second and third parties. This section describes the process by which injects will be disseminated to exercise participants.

Science injects will be received, interpreted and analysed initially by the MCDEM Duty Team. After discussion with the GeoNet Duty Officer, any significant results will be fed into the Tsunami Experts Panel for further analysis and advice about possible impacts. The results of this discussion (best advice about where, when, how, etc.) will form injects to the wider exercise participants (particularly the CDEM Groups and MCDEM).

Other 'general' injects will be disseminated to all participants, or to specific functions/agencies, as appropriate. These may lead to actions and decisions from key agencies (recorded as meeting summaries), and public information messages.

## 4.4 Communication

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A separate Communications Plan for Exercise Tangaroa will provide detailed guidance for how communication about and within the exercise will be conducted. This document will be available on the MCDEM website.

### 4.4.1 Operational communication during exercise

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Information about a simulated destructive tsunami generated in the Pacific will be communicated through Tsunami Threat Messages issued (notionally) by the Pacific Tsunami Warning Centre (PTWC) to MCDEM (as the 24/7 designated national communication point responsible for tsunami warning in New Zealand) and to other agencies that would normally subscribe to PTWC messages.

For the purposes of this exercise, most normal means of communication are functioning for the majority of the exercise duration. Real communication will take place between the NCMC and all the participant organisations during the exercise. Communication between the NCMC and participants/ECC's will be in electronic and telephone format. Teleconferencing may be used.

All phone numbers to be used in the main exercise phase will be requested by the Exercise Planning Team in July 2016 for the purposes of compiling the Participant and Venue List.

#### 4.4.2 Exercise cancellation

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The exercise will be put on hold or postponed in the event of significant seismic activity occurring in the Pacific in the period immediately prior to or on 31 August 2016, or in the event of a significant emergency occurring in New Zealand close to or on the exercise dates.

If a real event occurs, or for whatever reason the exercise is to be stopped, such a message will be preceded with “No Duff”. A clear communication will be sent to all participants by MCDEM, if the exercise is put on hold or postponed.

#### 4.4.3 Media information

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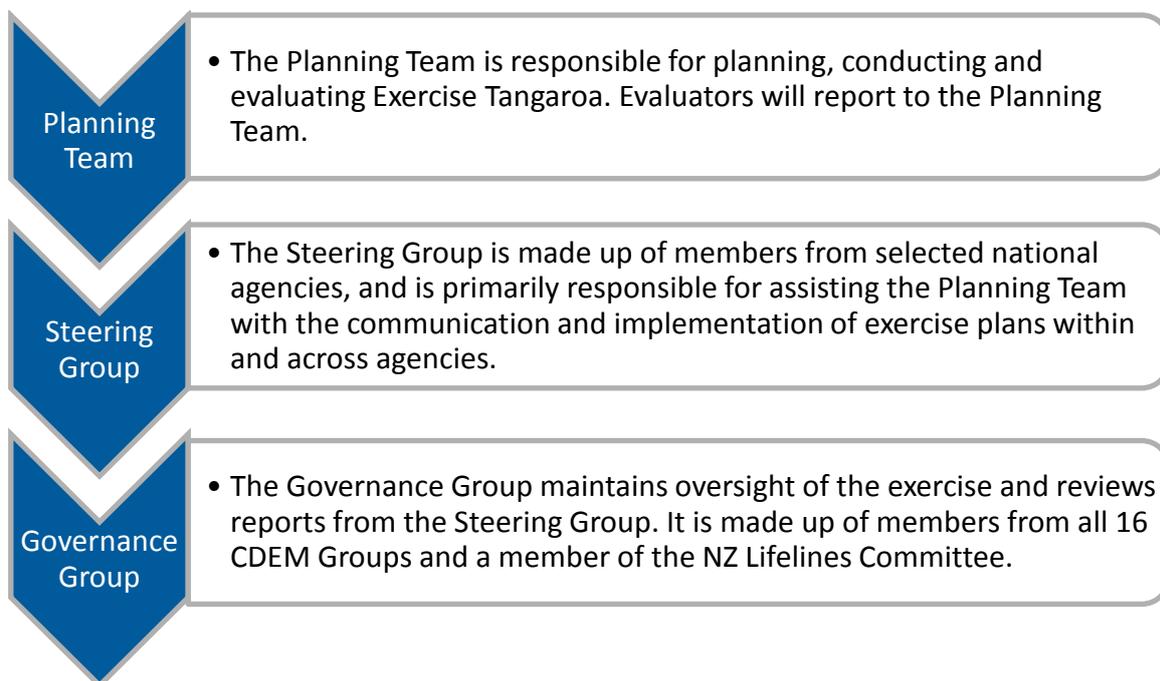
MCDEM is responsible for the coordination of national media communication while CDEM Groups may issue local news releases. MCDEM will share its news releases with participants to support consistency.

Participating agencies/CDEM Groups may respond to individual approaches by the media concerning the exercise.

## Section 5 Responsibilities and administration

### 5.1 Governance

Exercise Tangaroa is an all-of-government exercise coordinated by MCDEM. Three levels of governance have been established for Exercise Tangaroa.



### 5.2 Exercise coordination and control arrangements

The role of the Steering Group is to determine the functions and arrangements to be exercised, along with agencies required to participate in the exercise. The Exercise Planning Team will assist in development, and engage with agencies whose participation is required.

The Steering Group and Exercise Planning Team will also review and approve key documentation including the Exercise Coordinating Instruction, the Communications Plan and the master schedule of events, in addition to delivery arrangements.

An Exercise Control and Evaluator Arrangements and Rules of Play document will be prepared and issued separately.

Participating agencies will need to appoint their own Exercise Control (EXCON) staff. Ideally EXCON staff will be those staff members involved in planning and writing the exercise within their agency. Participating agencies will be asked to provide EXCON staff contact details to the Exercise Coordinators and a form will be provided for submitting this information. CDEM Groups and national agencies will be briefed by the Exercise Coordinators prior to the exercise and will be provided with appropriate exercise documentation and exercise control details. Local EXCON staff will be briefed by the relevant CDEM Group.

## 5.3 Organisational responsibilities

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Each CDEM Group/national agency or 'cluster' will be responsible for:

- During the initial phase of the exercise – participating in planning meetings as appropriate and determining their level of participation.
- Prior to the exercise – developing their own Exercise General Instruction and planning their aspects of the exercise (dependant of the level of participation) and forwarding exercise planner/writer and EXCON staff details to the Exercise Coordinators.
- During the exercise – responding as necessary to fulfil their all-of-government and National CDEM or CDEM Group plan obligations.
- After the exercise – debriefing and evaluating their own performance and contributing this to the overall evaluation.

## 5.4 Finance

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Participating agencies and local authorities will fund their own costs.

## 5.5 Contact details

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Should questions arise, please direct them to the Exercise Coordinators:

[CDEMexercises@dpmc.govt.nz](mailto:CDEMexercises@dpmc.govt.nz)

or

### **Jo Guard**

Exercise Coordinator/Director

Ministry of Civil Defence & Emergency Management

Direct Dial: +64 4 817 8582 ext. 8582

Jo.Guard@dpmc.govt.nz

Level 4, Bowen House, Parliament Buildings PO Box 5010, Wellington 6145

### **Sara Leighton**

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Further detail about the exercise, including exercise documentation can be found on the MCDEM website: [www.civildefence.govt.nz/cdem-sector/exercises/exercisetangaroa2016/](http://www.civildefence.govt.nz/cdem-sector/exercises/exercisetangaroa2016/)



## Appendix 1: Exercise Tangaroa 2016 Agency Participation Form

The Exercise Planning Team needs to know the level of commitment your agency is giving to Exercise Tangaroa 2016. This will help to ensure that each sector/agency gets the most out of the exercise and that we can tailor exercise activities to best effect.

The Exercise Planning Team also needs to know who to contact at each agency to ensure that exercise planning information goes to the right person/people.

**This form must be returned to the Exercise Coordinators at the Ministry of Civil Defence & Emergency Management  
no later than 30 April 2016 to confirm your agency's participation in Exercise Tangaroa 2016:**

Send to: [CDEMexercises@dpmc.govt.nz](mailto:CDEMexercises@dpmc.govt.nz)

Agency name:

**Point of Contact:** This person will be the point of contact in your agency/organisation for exercise correspondence, e.g. for forwarding on the Exercise Instructions or newsletters to relevant staff.

Point of Contact Name:

Position Title:

Phone:

Mobile:

Email:

**Exercise Writer/Planner:** This person will be privy to the detailed scenario and will be required to develop the exercise at the CDEM Group/Agency level, including liaising with partner agencies and local authorities as relevant. This person will be best suited to an Exercise Control role during exercise play.

Exercise Writer/Planner Name:

Position Title:

Phone:

Mobile:

Email:



**Confirming your agency participation level**

The following table defines the levels of participation in exercise planning and exercise play. Please indicate which category relates to your agency. You may select different categories of participation for the different days of the exercise.

Category	Description	Example	Day 1 (31 Aug)	Day 2 (14 Sep)	Day 3 (28 Sep)
<b>Full</b>	Agency commits to participating in all exercise activities.	Your agency will fully activate it's emergency operations centre on day 1 and hold table top workshops on days 2 and 3.			
<b>Partial</b>	Agency participates in a specific part of the exercise.	Your agency may partially activate its agency emergency operations centre and may only participate on day 1 or have limited staffing on days 2 and 3.			
<b>Facilitation</b>	Agency personnel are made available to facilitate exercise injects or enquiries (i.e. a control function). <b>Note:</b> Any contact person nominated must be contactable for exercise related matters or enquiries.	Your agency will not activate its agency emergency operations centre, but instead have one or more people simulating exercise activities.			
<b>Not engaged</b>	Agency not involved in exercise play.	Your agency inputs and outputs will be notional if required (i.e. exercise writers will make up your agency's input if required). <b>Note:</b> No communication or contact is made with your agency during the exercise.			

<b>What is / are the main thing(s) your agency wants to test in Exercise Tangaroa 2016?</b>	<i>Provide a brief description of what your agency wants to get out of this exercise.</i>
<b>If required, please provide any further explanation about your expected participation.</b>	
<b>Comments:</b>	

## Appendix 2: Exercise Tangaroa: Project Timeline

Milestones/Deliverables	Planned start	Planned finish
Check multi-year training and exercise programme	Aug 2014	Aug 2014
Conduct a needs assessment	Sep 2014	Jan 2015
Determine the type of exercise	Sep 2014	Sep 2014
Select an exercise name	May 2015	May 2015
Develop Project Plan	Jan 2015	Jun 2015
Develop Exercise Concept and obtain high level signoff	Sep 2014	Aug 2015
Determine the scope of the exercise	Sep 2014	Sep 2015
Establish Steering Group and Planning Group <ol style="list-style-type: none"> <li>1. Appoint Exercise Coordinators</li> <li>2. Appoint personnel to the Governance, Steering and Planning Groups</li> <li>3. Establish a Terms of Reference for the Governance, Steering and Planning Groups</li> <li>4. Appoint exercise control roles</li> <li>5. Establish event timeline (include planning meetings)</li> </ol>	Jan 2014	Jul 2015
Establish the exercise aim	Apr 2015	Aug 2015
Define the exercise objectives	Apr 2015	Oct 2015
Define the key performance indicators (KPIs)	May 2015	Oct 2015
Develop the outline scenario	Jul 2015	Aug 2015
Announce the exercise (Warning Order)	Aug 2015	Late-Aug 2015
Develop the detailed scenario	Sep 2015	Jan 2016
Confirm agency participation	Feb 2016	May 2016
Determine the risks	Jul 2015	Dec 2015
Develop and issue exercise documentation <ol style="list-style-type: none"> <li>1. Coordinating Instruction</li> <li>2. Communications plan</li> <li>3. Evaluation Plan</li> <li>4. Control staff instruction (including evaluation form)</li> </ol>	<ol style="list-style-type: none"> <li>1. Sep 2015</li> <li>2. Feb 2016</li> <li>3. Jan 2016</li> <li>4. Feb 2016</li> </ol>	<ol style="list-style-type: none"> <li>1. Feb 2016</li> <li>2. Mar 2016</li> <li>3. Feb 2016</li> <li>4. Aug 2016</li> </ol>
Develop major and detailed events	Feb 2016	Aug 2016
Develop control documents (messages and injects)	Feb 2016	Aug 2016
Develop evaluation plan, forms and checklists	Feb 2016	Aug 2016

Milestones/Deliverables	Planned start	Planned finish
Develop master schedule of events	Feb 2016	Aug 2016
Exercise set-up	1. Jun 2016	1. Sep 2016
1. Logistics and administration	2. Aug 2016	2. Sep 2016
2. Physical room/field set up	3. Feb 2016	3. Aug 2016
3. Simulators (if required)	4. Feb 2016	4. Aug 2016
4. Casualty simulation	5. Jul 2016	5. Aug 2016
5. Evaluator training	6. Feb 2016	6. Jul 2016
6. Observer programme		
Conduct control staff and evaluator briefing	Jul 2016	Aug 2016
Conduct briefings to staff, evaluators, other agency personnel and media	Jul 2016	Sep 2016
Start the exercise; introduce problems; sustain and control exercise activity; end the exercise	Aug 2016	Sep 2016
Conduct hot debrief(s)	Aug 2016	Sep 2016
Conduct cold debrief	Sep 2016	Sep 2016
Compile umpire, evaluator reports and participant feedback forms	Sep 2016	Oct 2016
Complete post exercise report	Sep 2016	Apr 2017
Exercise follow up (implementation of the corrective action plan)	Sep 2016	Apr 2017