CDEM Exercises

Director's Guideline for Civil Defence Emergency Management Groups [DGL 10/19]

Resilient New Zealand
Aotearoa Manahau

New Zealand Government

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Authority
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Foreword

Exercises are defined as activities that consider or simulate a real life situation so that an agency is able to review or validate procedures and provide opportunities for participants to practice in defined roles. They are an integral part of training and preparing agencies to carry out their functions in real emergencies.

Aside from real emergencies or events, exercising is a good way to measure the effectiveness of plans and allow staff an opportunity to practice their skills against a scenario or in a simulated emergency environment.

Exercising is a core part of readiness and assists in identifying gaps and issues. The lessons identified are integrated into updated plans and procedures that improve the ability to respond to and recover from an emergency.

The original guidance was published in 2009 and is still generally accurate and relevant, but we have made some minor revisions to update references where required, and to better reflect current commonly used terminology and best practice.

This guideline is aimed at emergency management personnel in New Zealand who develop and manage exercises.

This guideline has been informed by the practices and experiences of a national working group representative of emergency management personnel from national and CDEM Group levels.

Sarah Stuart-Black

Director of Civil Defence Emergency Management

Contents

Section 1 Introduction **1**
1.1 About this guideline 1
1.2 Key terms 2

Section 2 Introduction to exercising **7**
2.1 Overview 7
2.2 Exercise development cycle 8
2.3 CDEM exercising in New Zealand 8
2.4 Analyse the need 11
2.5 Types of exercises 13
2.5.1 Purpose and characteristics of exercise types 15
2.6 Select an exercise name 17
2.7 Exercise purpose statement 17

Section 3 Design the exercise **19**
3.1 Determine the scope 19
3.2 Establish a planning team 21
3.3 General exercise roles 25
3.4 Exercise timeline 28
3.5 Exercise planning meetings 28
3.6 Establish the exercise aim 31
3.7 Define exercise objectives 32
3.8 Define key performance indicators 34
3.9 Develop the scenario 34
3.10 Detailed scenario 35
3.11 Announce the exercise 36
3.12 Levels of participation 37
3.13 Risk management 38
3.14 Exercise documentation 39
3.14.1 Coordinating Instruction 39
3.14.2 General Instruction 41
3.14.3 Communications and Media Management Plan 41
3.15 Developing major and detailed events 43
3.16 Developing messages and injects 44
3.17 Evaluation planning 46
3.18 Master schedule of events 48
3.19 Exercise setup 51

Section 4 Conduct the exercise **54**
4.1 Exercise briefings 54
4.2 Control the exercise 56

Section 5 Evaluate the exercise **59**
5.1 The evaluation process 59
5.2 Exercise debriefing 59

5.3 Exercise validation 61
5.4 End of exercise report 62
5.5 Exercise follow up 63

Section 6 Appendices 64
Appendix A Exercise concept (purpose statement) template.....65
Appendix B Exercise development checklist 67
Appendix C Exercise warning order template.....69
Appendix D Exercise Coordinating Instruction template 70
Appendix E Exercise General Instruction template.....72
Appendix F Communications and media management plan template 74
Appendix G Standard message/inject template.....75
Appendix H Evaluation Plan template 76
Appendix I Exercise control and evaluator rules of play template.....78
Appendix J Sample master schedule of events 79
Appendix K Sample evaluation tool.....80
Appendix L End of exercise report template.....81
Appendix M Bibliography and references 82

Section 1 Introduction

This guideline is for use by personnel tasked with developing and managing Civil Defence Emergency Management exercises, to assist them in meeting the requirements of the National CDEM Plan 2015 and the Guide to the National CDEM Plan. It may also be of use to those performing similar roles and functions within other agencies.

This guideline provides practical advice and templates for exercise developers to:

- analyse the need for an exercise
- design an exercise
- conduct an exercise, and
- evaluate an exercise.

The purpose of the guideline is to provide general advice when designing either large, multi-agency or small, single agency exercises. Because this document provides general advice only it must be read in conjunction with CDEM Group and local authority plans, policies, and procedures.

1.1 About this guideline

Purpose of this guideline

Exercises are an integral part of developing capability and preparing agencies to carry out their functions in real emergencies. The purpose of this guideline is to support personnel tasked with developing and managing Civil Defence Emergency Management exercises.

The guideline outlines a practical framework that can be applied to simple or complex exercises in a variety of settings by either a single agency or by a group of agencies. Exercise developers are provided with a series of processes and templates that can be modified to suit local needs.

Whilst this guideline has a CDEM focus the principles of exercise development and management are generic and may be used in other areas.

Structure

This guideline has the following main sections:

- Section 1 *Introduction* – an introduction to this guideline, including a clarification of the key terms used
- Section 2 *Introduction to exercising* – an introduction to exercising in New Zealand and how to analyse the need for an exercise.
- Section 3 *Design the exercise* – exercise planning and roles, establishing an exercise aim, defining exercise objectives and key performance indicators, developing a scenario, risk management, exercise documentation and setup, and planning for exercise evaluation.
- Section 4 *Conduct the exercise* – exercise briefings and controlling an exercise.

- Section 5 *Evaluate the exercise* – evaluating, debriefing, reporting and exercise follow-up.
- Section 6 *Appendices* – information, templates, and forms that support the development and conduct of exercises.

How to use this guideline

This guideline is written so that whenever possible information is not duplicated. In order to achieve this, other documents have been referenced throughout.

This guideline provides a range of practical advice and templates, along with references for further reading.

Use of icons

The following icons are used in this guideline:

Indicates a template is provided in the appendices

Indicates more information is available in another document or website

1.2 Key terms

This section provides clarification for some of the key terms used in this guideline.

Agencies

Agencies are government agencies (including public service departments, non-public service departments, Crown entities, and Offices of Parliament), non-governmental organisations, local government bodies, emergency services, and lifeline utilities.

Capability

Capability means that an organisation is able to undertake functions, such as provide a service or fulfil a task. This implies that it has the required staff, equipment, funding, systems and resources to do this. Organisations are likely to have a number of capabilities.

Capacity

Capacity means the adequacy of resources in terms of quantity, and suitability of personnel, equipment, facilities and finances.

CDEM

In this document, **Civil Defence Emergency Management (CDEM)** has the same meaning as in the *CDEM Act 2002*:

> **4 Interpretation…**
>
> **civil defence emergency management**—
>
> (a) means the application of knowledge, measures, and practices that—
>
> (i) are necessary or desirable for the safety of the public or property; and
>
> (ii) are designed to guard against, prevent, reduce, or overcome any hazard or harm or loss that may be associated with any emergency; and
>
> (iii) includes, without limitation, the planning, organisation, co-ordination, and implementation of those measures, knowledge, and practices.

A full description of CDEM (including a full glossary of terms and abbreviations) is provided in the *Guide to the National CDEM Plan*, available at www.civildefence.govt.nz by searching the document name.

CDEM Act 2002

The **Civil Defence Emergency Management Act 2002 (*CDEM Act 2002*)** provides the legislative framework for CDEM in New Zealand across the 4Rs (reduction, readiness, response and recovery). It describes the functions and responsibilities of the Director of CDEM, as well as those of government departments, local authorities, emergency services, and lifeline utilities.

The *CDEM Act 2002* sets the requirement for CDEM Groups, and defines their statutory functions, duties, and responsibilities. It also provides for local authority elected representatives, mayors, or the Minister of Civil Defence to declare a state of local emergency (the Minister may also declare a state of national emergency), and defines the powers that CDEM Groups and Controllers may exercise during a state of emergency.

The *CDEM Act 2002* requires there to be a *National CDEM Strategy* and a *National CDEM Plan*, and enables the Director of CDEM to issue Director's Guidelines.

CDEM Group

In this guideline, **CDEM Group** refers to the collective of local authorities, emergency services, and other agencies that work together to implement CDEM in their area. **CDEM Group** may also refer to the committee of elected officials that are accountable for CDEM in their area.

CDEM Groups are required under the *CDEM Act 2002*; every local authority is required to be a member of a CDEM Group.

CIMS

The **Coordinated Incident Management System (CIMS)** is the primary reference for incident management in New Zealand. The purpose of CIMS is to achieve effective coordinated incident management across responding agencies for all emergencies regardless of hazard, size and complexity.

CIMS is described in detail in the *2nd edition CIMS Manual*, available at www.civildefence.govt.nz by searching for the document name.

Cold debrief	**Cold debrief** means a briefing held to review the exercise four to six weeks following the exercise. All exercise players should be invited to attend.
Control documents	**Control documents** are exercise tools that create an artificial environment and framework for an incident.
Coordinating Instruction	A **Coordinating Instruction** is a high level document that outlines the aim, objectives, scenario overview, date and time of the exercise, and sets the scene for how the exercise will play out.
Discussion	A **discussion** is a conversation involving several players.
Decision	A **decision** occurs when an individual or group arrives at a conclusion or makes a specific determination.
Directive	A **directive** is a specific order or direction given to one or more players.
ECC	An **ECC (Emergency Coordination Centre)** is a coordination centre that operates at the CDEM Group level to coordinate and support one or more activated EOCs.
EOC	An **EOC (Emergency Operations Centre)** is a coordination centre that operates at a local level to manage a response.
Exercise	An **exercise** is an activity that simulates a situation in order to test procedures and practice participants in defined roles.
Exercise aim	An **exercise aim** is a broad statement of intent.
Exercise control staff	**Exercise control staff** means a group or person responsible for the overall conduct of an exercise.
Exercise Coordinator	An **exercise coordinator** is a person responsible for the exercise throughout its entire development process, including management of administration and logistical matters.
Exercise Director	An **Exercise Director** is a person responsible for supervising the speed and flow of an exercise and addressing any issues during the exercise.
Exercise governance group	An **exercise governance group** is a group of senior officials from the agencies taking part in the exercise. This group is responsible for signing off the exercise purpose statement and commits resources to the exercise (this role may be fulfilled by an exercise sponsor in a small exercise).
Exercise planning team	An **exercise planning team** is a group of people responsible for the successful execution of all aspects of the exercise, including exercise planning, conduct and evaluation.
Exercise programme	An **exercise programme** is a series of 'linked' exercises.

Exercise sponsor	An **exercise sponsor** is a senior person responsible for signing off the exercise purpose statement and commits resources to the exercise. (This role may be fulfilled by an exercise governance group in a large exercise).
Evaluator	An **evaluator** is a person assigned to observe and evaluate selected objectives during an exercise.
General Instruction	A **General Instruction** is a detailed document that outlines the administrative arrangements for an exercise specific to a particular agency.
Guide to the National CDEM Plan	The **Guide to the National CDEM Plan** explains the *National CDEM Plan* in detail.
Hot debrief	A **hot debrief** is a briefing held immediately after an exercise.
Inject	**Inject** means information (including directives, instructions, and decisions) provided by exercise control staff to exercise players in order to drive exercise play towards the achievement of objectives.
Key performance indicator (KPI)	A **key performance indicator (KPI)** is a tool used to help an agency define and measure progress toward objectives.
Master schedule of events	A **master schedule of events** is a detailed list of events that are scheduled to occur during the exercise.
MCDEM	**Ministry of Civil Defence & Emergency Management (MCDEM)** is the central government agency responsible for providing leadership, strategic guidance, national coordination, and the facilitation and promotion of various key activities across the 4Rs. It is the lead agency at a national level responsible for coordinating the management of the emergencies listed in Appendix 1 of the *National CDEM Plan 2015*. MCDEM may act as a support agency by coordinating the CDEM response to any given emergency managed by another lead agency. MCDEM is responsible for maintaining the National Crisis Management Centre (NCMC), and the National Warning System.
National CDEM Plan	The **National CDEM Plan** is a regulation that sets out the roles and responsibilities of all agencies involved in reducing risks from hazards, and preparing for, responding to, and recovering from emergencies.
Needs assessment	A **needs assessment** is a process used to quantify an agency's development needs.
No duff	**No duff** is a term used to describe a real event that occurs simultaneously to an exercise.
Objectives	**Objectives** are a set of measurable actions or outcomes to be realised by conducting an exercise.

Observers	**Observers** are internal or external agency personnel invited to view the exercise but do not participate. External observers report lessons identified and outcomes back to their agency.
Participants	**Participants** means all control staff, players and observers.
Players	**Players** are participants who have to perform for real by receiving and responding to incoming messages or injects supplied by simulators.
Project management	**Project management** is the planning, organisation and management of resources to successfully complete specific project goals and objectives.
Purpose statement	A **purpose statement** is a statement that describes the intent of the exercise and how it will be managed.
Risk	**Risk** means the likelihood and consequences of a hazard.
Scenario	A **scenario** is a narrative that describes an event that exercise participants need to resolve.
Scope	**Scope** is the limitations applied to an exercise.
SOPs	**Standard operating procedures (SOPs)** detail the procedures and other activities used to perform various tasks.
Task	A **task** is achieved when an individual or group performs a specific, clearly definable action or function, such as checking patient status or performing a radio check.
Umpire	An **umpire** is a person who monitors the flow of an exercise.
Warning Order	A **Warning Order** is a document that provides advance warning that an exercise is occurring and that an agency will be formally invited to participate

Section 2 Introduction to exercising

This section provides a description of exercises, including an introduction to exercising in New Zealand and how to analyse the need for an exercise.

2.1 Overview

Introduction

Exercises are defined as activities that consider or simulate a real life situation so that an agency is able to review or test procedures and practice participants in defined roles.

Why exercise?

Agencies use exercises to evaluate their capability to execute one or more components of their response or recovery capability and to contribute to continuous improvement.

Local authorities, emergency services, local utility providers, government agencies and other local partner agencies work, plan, train, exercise and respond together. Research shows that people generally respond to an emergency the way that they have been trained. As real life events do not occur that often, exercising is a good way to measure the effectiveness of plans and allow staff an opportunity to practice their skills against a scenario or in a simulated emergency environment.

Exercises can vary in size and complexity and provide an opportunity to:

- improve operational readiness
- identify planning weaknesses
- identify resource gaps
- improve interagency coordination and communications
- provide training
- clarify roles and responsibilities
- evaluate plans, policies and procedures
- test equipment
- improve individual performance
- demonstrate capability
- develop the knowledge, skills and enthusiasm to participate in emergencies
- increase public understanding of what the effects would be if a disaster struck in their area and encourage people to take action to prepare.

It is important that an agency determine what its needs are and whether an exercise will satisfy those needs, or whether objectives can be met through alternative activities.

2.2 Exercise development cycle

Introduction

Multi-year planning, agency engagement, and resource management are essential ongoing processes that provide the basis for the planning, conduct and evaluation of exercises. The success of individual exercises relies on the execution of four distinct stages, which are collectively known as the exercise development cycle: analyse the need, design the exercise, conduct the exercise, and evaluate the exercise.

Exercise development cycle

The exercise development cycle applies to all types and levels of exercise regardless of an agency's size or budget.

The process is designed to be flexible enough to meet the unique needs of the agency using it. Therefore, each milestone should be designed, tailored and applied in a manner that suits the agency's specific objectives and capabilities. Effective evaluation is critical to success and evaluation should be considered throughout all phases of the exercise planning cycle.

Each stage of the exercise development cycle is discussed in detail in this guideline.

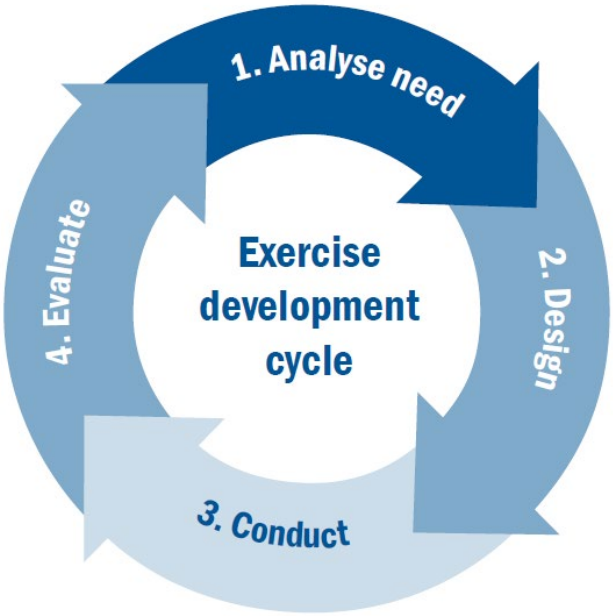

Figure 2-1 Exercise development cycle

2.3 CDEM exercising in New Zealand

Introduction

The delivery of CDEM in New Zealand is based on a devolved accountability approach with CDEM responsibilities at all levels of government, including central and local government, the emergency services and lifeline utilities. The expectation on government agencies, local authorities and others in response to emergencies is contained in the CDEM Act 2002 and the Guide to the National CDEM Plan.

Clause 104 of the National CDEM Plan Order 2015 mandates the establishment of a National Exercise Programme.

104 National CDEM Exercise Programme

(1) The National CDEM Exercise Programme provides the means to co-ordinate exercising of the CDEM operational capability of agencies and CDEM Groups and their local partners (for example, lifeline utilities).

(2) The National CDEM Exercise Programme-

(a) seeks to exercise the operational arrangements within this plan, CDEM Group plans, and agency plans to-

(i) improve response and recovery at local, CDEM Group, and national levels; and

(ii) assess readiness; and

(b) is supplemented by regular agency and local exercises; and

(c) is co-ordinated by the MCDEM; and

(d) is an element of the all-of-government National Exercise Programme (interagency) managed by DPMC.

Section 21, *Exercising and testing* of the Guide to the National CDEM Plan sets out the details of the programme.

National CDEM Exercise Programme

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

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 improvement.

Table 2-1 National CDEM Exercise Programme tier structure

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

National Security System (NSS) National Exercise Programme

The National Security System (NSS) National Exercise Programme has been established to help ensure that New Zealand is prepared to effectively respond to national security (all hazard) emergencies.

The NSS National Exercise Programme is chaired by the Department of the Prime Minister and Cabinet and reports to the Hazard Risk Board, which is the National Security System governance body responsible for building system resilience.

The NSS National Exercise Programme builds capability through a coordinated series of interagency readiness activities that underpin the resilience of the national security system. These activities are measured against a set of national objectives. Capability is also built through the capture and sharing of lessons identified from previous emergencies and exercises.

The NSS National Exercise Programme is supported by a planning team comprised of a professional body of specialists across government agencies. The planning team maintains oversight of nationally significant exercises and supports national exercising consistency through the development of tools and the provision of guidance to agency-led exercise writing and planning groups.

The Programme is designed to be able to adapt to emerging threats and issues.

A full description of the NSS National Exercise Programme and the national exercise schedule is provided at www.dpmc.govt.nz by searching 'National Exercise Programme'.

Exercise programmes

A series of linked exercises can be run simultaneously. These are best managed as individual activities within an exercise programme.

The goal in exercise design is to establish a comprehensive exercise programme where each exercise builds on the previous one to meet specific operational goals.

Exercise programmes are established to provide opportunities for individuals to practice their roles and responsibilities and gain experience in the exercise environment, and to continually improve an agency's systems for managing emergencies. Each exercise should be evaluated and recommendations acted upon for continuous improvement.

Developing and maintaining an exercise programme is a way of managing a variety of exercises scheduled over time and includes project management, multi-year planning, budgeting, funding allocation, and expenditure tracking.

Effective exercise programmes

A well-designed exercise programme ensures exercises are part of a coordinated, integrated approach and focuses on continuous improvement. Different types of exercises should be used to meet agency objectives and exercise programme goals.

Multi-year plans build capabilities by using a step-by-step approach where planning and training are linked to exercise activities that get more complex over time.

Multi-year plans should be reviewed once a year to reconfirm the exercise schedule and to share lessons identified and recommendations for improvement. Representatives from all agencies involved are expected to provide resources and personnel toward the activities scheduled.

For an exercise programme to be effective it needs to be agreed by all agencies involved and these agencies must buy into the programme. This includes financial contributions being determined early in the programme development.

Exercise schedule or calendar

An exercise schedule or calendar illustrates what exercises are planned for an agency or group of agencies over a given period. It should include the following:

- exercise date
- exercise type
- exercise name
- agencies involved
- exercise purpose statement.

MCDEM collates and displays exercises that form part of the National CDEM Exercise Programme. The National CDEM Exercise Programme calendar can be found at www.civildefence.govt.nz by searching for 'CDEM Exercise Calendar'.

2.4 Analyse the need

Introduction

All exercises emerge from an identified need. A needs assessment should be conducted to identify whether an exercise activity is required.

A needs assessment is carried out to:

- understand an agency's requirements
- identify issues
- establish the reasons to do an exercise
- identify the functions to be exercised.

Analysing the need helps to define the aim and objectives and will help to choose the appropriate development activity, which may include an exercise.

How to conduct a needs assessment

Follow these steps to conduct a needs assessment.

Step	Action
1	**Review your agency's emergency management plans, addressing:** • What significant risks will necessitate an agency response and what are the priority of these? Which hazards and risks are prioritised in your CDEM Group Plan? • What area(s) are most exposed? What communities are most vulnerable? • What functions or components in the plan need some practice? • What are the agency's current priorities?
2	**Consider past exercises** • When were particular functions or aspects last exercised and what type of exercise was conducted? • Who (staff/agencies) participated in the previous exercise(s) and who did not? • To what extent were previous exercise objectives achieved? • What lessons were identified? • What problems were identified, and what was needed to resolve them? • What improvements were made following the past exercise(s), and have they been tested?
3	**Identify available resources** • Is there a budget to deliver the exercise? • Does the agency have the resourcing to design the exercise, and what staff and time commitment will be required to do this? • What are the agency's liabilities? (e.g. lack of trained staff) • What limitations could the agency face in developing or delivering the exercise?
4	**Review the findings** – the needs assessment should reveal the following issues if they exist: • key risks that will require the agency to respond • issues that need to be resolved • issues that recur • skills that need to be practiced • functions that are weak or uncertain • improvements made that need to be tested • new facilities, personnel, or equipment that have not been included in an exercise before • weaknesses (such as gaps, conflicting policies, or vague procedures) in the emergency plan or the standard operating procedures • the need to clarify exercise coordination and working with other agencies • the need for a certain type of exercise • budgetary and resourcing issues • risks.

2.5 Types of exercises

Introduction

Exercises vary from simple to very complex. There are five types of exercise and the type of exercise adopted will depend on what an agency's requirements are as identified often through the needs assessment process.

Choosing an exercise type

When deciding on an exercise type, exercise planners should consider the existing level of capability. It may be appropriate to conduct a series of exercises to build capability; starting with simple discussion-style exercises and building up to more complex full-scale exercises.

Exercises also need to be tailored to suit the identified aim and objectives. It may be that a programme of exercises and related activities is required to achieve the aim and objectives rather than one large-scale exercise.

Orientation exercise

An orientation exercise may also be referred to as a **'walk through'**. It puts people in a place where they would work during an event, or uses them as participants in a demonstration of an activity. This type of exercise is used to familiarise the players with the activity.

Example:

Setting up a mock Civil Defence Centre, and walking staff through how it is organised.

Drill exercise

In a drill exercise, staff physically handle specific equipment or perform a specific procedure. The exercise usually has a time frame element and is used to test the procedures.

Example:

Activating an emergency operations centre or using alternative communications (such as radios or satellite phones).

Tabletop exercise

A tabletop exercise may also be referred to as a **'discussion exercise'**, or **'DISCEX'**.

Participants are presented with a situation or problem that they are required to discuss and formulate the appropriate response or solution to. Normally, the exercise requires no simulation other than a scenario and/or prewritten exercise injects. This type of exercise is used to practice problem solving and coordination of services with or without time pressures. There is no deployment or actual use of equipment or resources.

Example:

Participants discuss their response to a tsunami threat to a particular area, where the only injects are the Tsunami Warning messages from the Ministry of Civil Defence & Emergency Management (MCDEM), describing the nature of the threat.

Functional exercise

A functional exercise may also be referred to as an **'operational'** or a **'tactical'** exercise. It takes place in an operational environment and requires participants to actually perform the functions of their roles.

A normally complex response activity is simulated, which lacks only the people "on the ground" to create a full-scale exercise.

Participants interact within a simulated environment through an exercise control group who provide prewritten injects and respond to questions and tasks developing out of the exercise.

Functional exercises normally involve multi-agency participation (real or simulated) and can focus on one or many geographical areas.

This type of exercise is used to practice multiple emergency functions e.g. direction and control, resource management, and communications.

Example:

A multi-agency response to extensive flooding, where evacuation of a settlement is required. Messages and injects are provided by exercise control and are handled by the participants in the way described in appropriate plans and procedures. Outcomes are generated that would be expected in a real situation.

Full scale exercise

A full-scale exercise may also be referred to as a **'practical'** or **'field'** exercise. These include the movement or deployment of people and resources to include physical response 'on the ground' to a simulated situation.

They can be 'ground' focused only or may include the higher-level response structures, and they can be simple (single agency) or complex (multi-agency).

These exercises are typically used to test all aspects of a component of emergency management.

Example of a simple full scale exercise:

Deployment of a small team to a simulated car crash or industrial rescue by a single agency, using real rescue equipment.

Example of a complex full scale exercise:

An airport incident with volunteers portraying 'victims' and the emergency services using real rescue equipment at the scene. Coordinated, multi-agency response to the event is exercised.

2.5.1 Purpose and characteristics of exercise types

Exercise purpose

Table 2-2 gives an overview of the purpose of the different exercise types.

Table 2-2 Purpose of exercise types

Exercise type	Purpose
Orientation	No previous exercise
	No recent operations
	New plan or procedures
	New staff or leadership
	New facility
	New risk
	Personnel training
Drill	Assess equipment capabilities
	Test response time
	Personnel training
	Assess interagency cooperation
	Verify resource and staffing capabilities
Tabletop exercise	Practice group problem solving
	Promote familiarity with plans
	Assess plan coverage for a specific case study
	Assess plan coverage for a specific risk area
	Examine staffing contingencies
	Test group message interpretation
	Assess interagency or interdepartmental coordination
	Observe information sharing
	Personnel training (usually of staff with equal status or functions)
Functional exercise	Evaluate a function
	Evaluate or test physical facilities use
	Reinforce or test established policies and procedures
	Assess preparedness
	Test seldom-used resources
	Measure resource adequacy
	Assess and strengthen inter-jurisdictional or interagency relations
	Support policy formulation
Full scale exercise	Assess and improve and operational activity
	Assess and improve interagency cooperation
	Strengthen interagency relations
	Assess negotiation procedures
	Test resource and personnel allocation
	Manage the public and media
	Assess personnel and equipment locations
	Test equipment capabilities

Exercise characteristics

Table 2-3 provides an overview of the characteristics of each exercise type.

Table 2-3 Characteristics of exercises

	Orientation	Drill	Tabletop	Functional	Full scale
Format	Informal discussion in group setting. Various presentation methods.	Actual field or facility response of a specific element or function. Actual equipment is used or a physical action is performed.	Group discussion or a scenario or problem. Players note or present their solutions or outcomes	Players respond to a scenario in real or condensed time and in a realistic environment. Players are evaluated. Interactive and complex.	Players respond to a simulated enactment in real time. Interactive and simple or complex.
Leaders	Manager, supervisor, department head, or exercise coordinator	Manager, supervisor, department head, or exercise coordinator	Facilitator	Exercise Coordinator	Exercise Coordinator
Players	Single agency / department, or cross-functional staff	Functional staff	Normally staff of the same level with a response role for the type of situation	All staff with response roles for that function	All or specific staff with response roles
Facilities	Conference room	Facility, field, or EOC	Conference room or syndicate rooms	EOC or other operating centre (multiple rooms)	EOC or other operating centre.
Time (typical)	1-2 hours	1-4 hours	2-4 hours or longer, up to 3 days	4 hours up to 1 or more days	2 hours up to 1 or more days
Preparation	Simple preparation, 1 week. No participant preparation.	Simple preparation, 1-2 weeks. Participants need orientation.	Complex but inexpensive preparation, 1-3 months.	Complex and expensive, 6-18 months preparation. Significant allocation of resources.	Expensive due to extensive time, effort, and resources. 6-18 months preparation.

2.6 Select an exercise name

Introduction

Ideally, an exercise should have a name. When naming an exercise consider whether there is a name that reflects the meaning or theme of the exercise.

Select an exercise name

Exercise names may be derived from myths or legends. For example 'Exercise Tangaroa' – a series of large national exercises that were held in 2010 and 2016, were based on tsunami scenarios. According to Māori legend, 'Tangaroa' is the God of the Sea. The Ministry of Health derived their pandemic exercise names from the surnames of various health professionals who had been part of the 1918 pandemic response in New Zealand. For example, 2018's Exercise Pomare was named after Sir Maui Pomare, who in 1918, while serving as Ministry for Native Affairs, led the relief effort for Māori settlements in the North Island which were ravaged by the effects of the influenza pandemic.

Exercise names may also be derived from scenario details. For example, 'Exercise Paradise' was based on an earthquake scenario at the Paradise Valley, west of Lake Wakatipu.

Agencies may have various exercise naming conventions. Whatever the selection process, the exercise name should reflect or complement the exercise theme.

Exercise logo

Large, complex exercises in particular may have a logo developed, which may be used on all exercise documentation.

2.7 Exercise purpose statement

Introduction

Senior agency officials should be briefed in advance of exercises, particularly large complex ones, to gain their support and to ensure that they understand how the exercise will meet their objectives.

An exercise governance group is made up of senior officials from the agencies taking part in an exercise. An exercise sponsor is a senior official from a single agency conducting an exercise. These senior officials or executives often have the ability to encourage participation from potential exercise players and planning team members.

Exercise purpose statement or exercise concept document

Often formal sign off is required from the exercise governance group or sponsor and participating agencies taking part. An exercise purpose statement or exercise concept document can be used as a briefing document because it describes the intent of the exercise and how it will be managed. It provides the focus and direction for the exercise, identifies who will participate and why the exercise is being held.

Once the governance group or sponsor signs off on the concept outlined in the purpose statement, they will make available the required personnel and other resources required to effectively develop and deliver the exercise.

How to write an exercise purpose statement

Follow the steps below to write an exercise purpose statement.

Step	Action
1	**Outline the intent of the exercise.** This should include a summary of the: • aim and scenario • dates and location(s) • exercise type • lead agency and participating agencies • budget commitment(s) towards the exercise
2	**Outline the governance structure** (applicable to the type and complexity of the exercise) including: • **Exercise governance group or sponsor** (the appropriate position(s) to commit budget and resources in the agency leading the exercise) • **Exercise Director** (the person that will have overall responsibility for the exercise) • **Exercise Coordinator** (appointed by the Exercise Director and responsible for the overall management of the exercise, including the planning, conduct, evaluation and post exercise reporting) • **Exercise planning team** (a representative of each participant agency appointed to the planning team) • **Other key appointments**, depending on the type and complexity of the exercise. **Note:** In simpler exercises, the governance structure and resource appointments may be limited to the exercise governance group or sponsor, Exercise Director and Exercise Coordinator. In larger, complex exercises the Exercise Coordinator, the exercise planning team and other key appointments may form an exercise steering committee, chaired by the Exercise Coordinator and reporting to the Exercise Director.
3	**Exercise purpose statement sign-off** The exercise governance group or sponsor, along with the heads of all the participating agencies should sign the purpose statement or exercise concept. This will ensure they commit themselves and their agency to the exercise and create an environment within which the exercise can be designed and conducted.

See Appendix A *Exercise concept (purpose statement) template* on page 65 for a template of an exercise concept document.

Section 3 Design the exercise

This section provides a description of the steps involved in designing an exercise, including determining the scope, establishing a planning team, creating an exercise timeline, establishing an exercise aim and determining the objectives and key performance indicators, developing the scenario, announcing the exercise, creating exercise documentation, and planning for evaluation.

3.1 Determine the scope

Introduction

A key to designing and conducting a successful exercise is to understand from the outset what the purpose and scope of the exercise is. Defining the scope should identify what is to be included, as well as what is not to be included in the exercise.

Determining the scope of an exercise means putting realistic limits on:

- The issues identified in the needs assessment
- The resources available (including finance and personnel) to be used and the functions or agencies that are expected to participate in the exercise.

The type of exercise selected will also have an influence on the scope.

The scope must be broad enough so that the objectives can be achieved and measured, and narrow enough to exclude any unnecessary activities or participation. The scope outlines the parameters and will focus the design of the exercise to meet the needs of the exercise programme.

Determining the scope of the exercise involves analysing seven conditions relating to an agency's emergency management programme.

How to determine the scope

Follow the steps below to determine the scope of the exercise.

Step	Action
1	**Operations** Determine the type of behaviour(s) planned for the players. Will the exercise test notification, communication, resource allocation or participant competency in following procedures?
2	**Agencies involved** Determine which agencies will be involved.
3	**Personnel** Determine which personnel should participate.
4	**Hazard and risk** Select a relevant priority problem.
5	**Geographical area** Select a logical place where the hazard could occur.
6	**Degree of realism** Decide how realistic the exercise will be early in the design phase (such as the amount of stress, complexity and time pressures the exercise will generate. Exercises vary in the amount of realism they provide from none to very realistic).
7	**Date and time** Select a date and time for the exercise. Allow as much lead time as possible for scheduling and design purposes.

Factors to consider

Many factors influence which areas will be included in an exercise and which will not. Sometimes one decision will influence another, for example, the functions selected will determine who participates in the exercise.

Factors to consider when defining the scope of an exercise include:

Factor	Description
Timings	How much planning time is needed or available? How long should the exercise run for? Will the exercise be held during the day or at night?
Size	How complex does the exercise need to be? How many people should be involved to develop and manage it? Which agencies need to be involved?
Location or venue	Where is the exercise being held? What size space is required? Who owns or operates the location or venue? What approvals or permissions are required?
Personnel	Are there people with appropriate skills and experience to develop and manage the exercise? Are the relevant personnel available to develop and manage the exercise? Who should participate in the exercise? What are the performance standards and experience of participants?
Equipment	What equipment is required? Are there any limitations on equipment? What is the availability of equipment?
Logistics	Consider catering, transport, shelter, accommodation, storage and consumables.
Costs	What costs are associated with the exercise? Who pays for what?
Administration	Consider the need for electronic or paper based records, administrative staff support, identification and access control, notification of nearby residents, correspondence management, and insurance issues.
Statutory	Are there any legal considerations?
Cultural	Are there any cultural considerations?
Weather	Especially important in functional and full scale exercises – consider planning for contingencies in the event of adverse weather conditions.

3.2 Establish a planning team

Introduction

Exercises need to be planned and carefully managed. Even the smallest of exercises require a coordinated approach to their design, conduct and evaluation.

There are significant benefits in establishing an exercise planning team. Depending on the type of exercise, some exercises involve long planning and development periods. A team approach shares the workload across a number of staff.

By selecting a planning team with a variety of skill sets, it lessens the impact illness or staff departures can have on an exercise. Establishing a foundation for successful exercising involves:

- selecting participants for the exercise planning team
- developing an exercise planning timeline with milestones
- scheduling planning meetings.

All exercises are a unique undertaking and depending on the type and size can be a disruption to an agency's normal service deliveries, particularly on the day(s) the exercise is conducted. Therefore, an exercise must be managed like any other significant project.

Project management skills (such as planning, organising and managing resources) are essential during the exercise planning process.

The exercise planning team

The exercise planning team is responsible for the successful execution of all aspects of the exercise, including exercise planning, conduct and evaluation.

The planning team determines exercise objectives, tailors the scenario and develops documents used in the simulation, control and evaluation of the exercise.

The exercise planning team must have representatives from each major participating agency but should be kept to a manageable size. Membership of the team should be modified to suit the type and scope of the exercise.

Generally, planning team members are not exercise players, However, due to the planning team's high-level involvement, members are ideal for roles such as umpire, Exercise Director and/or evaluator positions during the exercise.

Planning team structure

An exercise planning team must adhere to an organised structure. The structure can be scaled up or down according to the size of the exercise.

It is important that the planning team has clearly defined roles and responsibilities and that subject matter experts be involved during the planning process where necessary.

In large exercises, there may be a team of people carrying out various roles. In small exercises, it may only be one person performing several roles.

Figure 3-1 outlines a sample planning team structure.

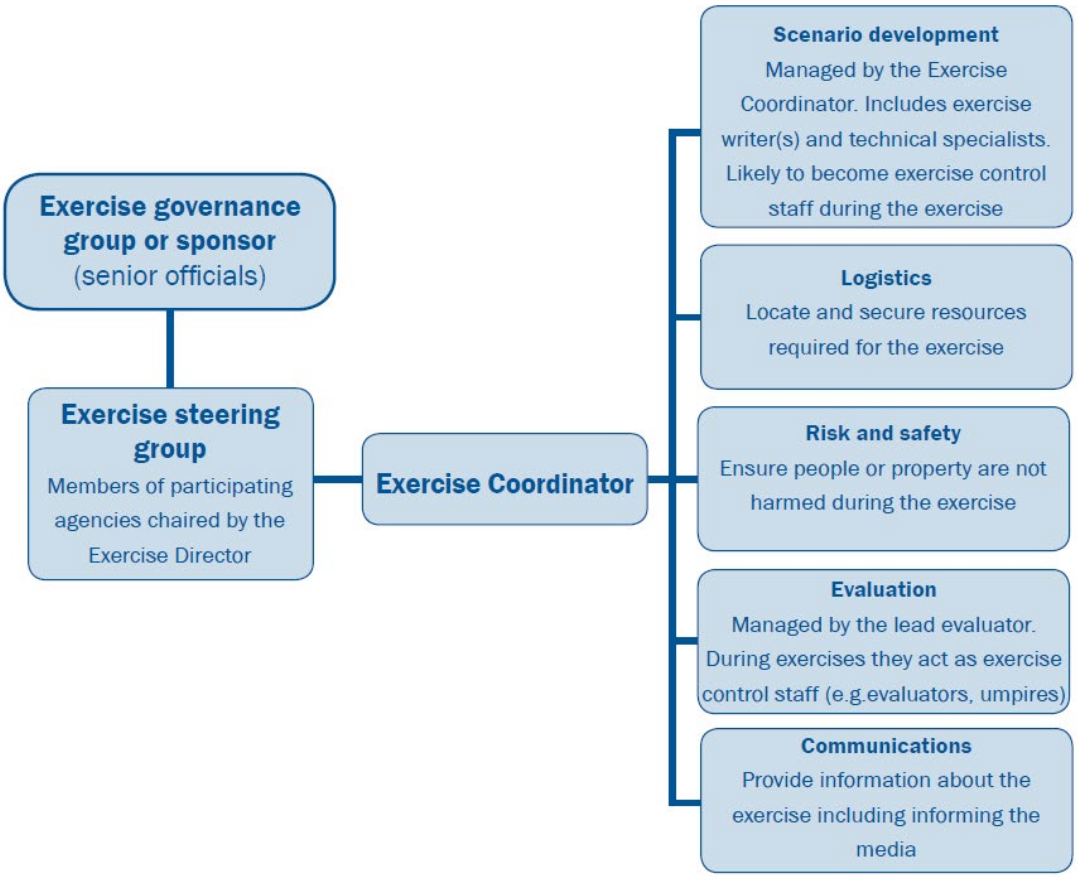

Figure 3-1 Sample planning team structure

Exercise governance group

An exercise governance group is used in multi-agency exercises and is made up of senior officials from the agencies taking part in the exercise. In small, single agency exercises an exercise sponsor is a senior official from the agency conducting the exercise.

The governance group or sponsor often signs off on the exercise purpose statement and provides personnel and other resources required to develop and deliver the exercise.

Steering group

The steering group is made up of members of the agencies that will participate in the exercise.

These members must have the authority to make decisions and commit resources to the exercise on behalf of their agency.

The chair of the steering group should also be the Exercise Director. The steering group is responsible for determining the aim and objectives of the exercise and ensuring the exercise is developed.

Exercise coordinator

The Exercise Coordinator is responsible for the exercise throughout its entire development process, including management of administration and logistical matters.

In large, complex exercises involving multiple agencies the Exercise Coordinator will require assistance from an exercise planning team.

The Exercise Coordinator should be experienced in exercise management and project management, and be capable and able to dedicate a considerable amount of time to the exercise planning cycle.

Scenario development team

The scenario development team (or exercise writing team) is managed by the Exercise Coordinator and is responsible for putting the exercise together and then managing it as the exercise is played out.

In the exercise development phase the main responsibility of the scenario development team is to develop the exercise narrative, master schedule of events list, messages and injects, and a list of expected actions.

The team should include people who know how the exercise should play out. Technical specialists and subject matter experts will also be involved to help provide realistic information to the scenario and messages and injects.

Logistics team

The logistics team locates and secures any resources (including people) required to run the exercise.

They should meet regularly with the scenario development team to ensure the scenario is realistic.

During the exercise the logistics team manages everything from venues, site simulation, stationery and meals.

Risk and safety team

The risk and safety team is used predominantly in larger, more complex exercises to manage the risk of unacceptable harm or damage to people or property.

The team needs to be aware of all aspects of the scenario so that a risk assessment can be carried out and suggestions made to the scenario development team on how the risks can be mitigated.

Evaluation team

The evaluation team uses the exercise aim and objectives to determine the evaluation criteria and evaluation tools for the exercise. The team is responsible for planning and coordinating all aspects of evaluation and documenting the findings in a post-exercise report. Evaluation roles should be identified during the planning process, ensuring that team members have the relevant subject matter expertise. Where possible, staff involved in the exercise evaluation team should not have any other exercise appointments.

The team should use a scenario development overview to check that the exercise can realistically meet the aim and objectives and that the evaluation tool is suitable for the exercise.

Communications team

Depending on the type and size of the exercise, the communications team is responsible for developing a communications plan that outlines how the planning team will communicate about the exercise.

Some exercises may need to be promoted or the public may need to be made aware it is happening. In these situations, the communications team's responsibilities may also include:

- developing appropriate promotion and media strategies prior to the exercise
- establishing and maintaining a list of media contacts
- coordinating real-time media activities both prior to and during the exercise
- liaising with media agencies to ensure effective reporting of the exercise by media spokespeople
- monitoring and reporting media coverage of the exercise
- meeting the media at exercise sites, and
- facilitating interviews with the media.

Some exercises may include a simulated media function. The communications team is responsible for writing media inputs and coordinating the extent of simulated media required for the exercise. Simulated media can add realism and pressure to the exercise scenarios and may include pre-written news reports as well as live footage, social media and/or online reporting.

Community engagement

Depending on the aim and objectives, exercises can benefit from community involvement. Exercise planners should consider whether it is appropriate to include the community in the exercise. Local involvement (e.g. in a community tsunami evacuation exercise) promotes resilience in the community by raising awareness of local plans and encouraging preparedness. Community members or representatives can be involved throughout the exercise management process and can provide invaluable advice about possible exercise needs that exist or plans that the community would like to practice or test.

Media engagement

Depending on the aim and objectives, exercises can benefit from media involvement. Exercise planners should consider whether it is appropriate to invite media to take part in the exercise. The communications team should lead any engagement with the media.

Establish a terms of reference

Once the exercise planning team is established, terms of reference should be drafted. This forms the basis of how the exercise planning team will operate. It includes:

- an outline of the planning team's purpose and accountability
- principles and functions
- membership
- meeting cycle (frequency, who will chair the meetings, standard meeting etiquette, etc.)

3.3 General exercise roles

Introduction

The exercise planning team takes on additional roles and responsibilities during an exercise and these roles are collectively known as exercise control staff. This is the group responsible for ensuring all exercise aims and objectives are achievable during exercise play.

Exercise control staff roles

Exercise control staff roles may include:

- Exercise Director
- Evaluator(s)
- Umpire(s)
- Agency representatives
- Simulators or role players
- Safety officers.

Exercise control staff responsibilities

Exercise control staff are responsible for:

- managing the exercise
- facilitating the progress of the exercise scenario through the controlled flow of information in the control documents
- representing all agencies external to the exercise including non-participating and supporting agencies notionally exercising their arrangements
- controlling and coordinating the actions of role players
- providing corrective advice to agencies to facilitate the flow of events
- ensuring appropriate risk management strategies are undertaken during the exercise
- monitoring the master schedule of events, and
- releasing control documents (when requested by exercise participants and in accordance with the master schedule of events).

Exercise Director

The Exercise Director supervises the speed and flow of the exercise and addresses any issues during the exercise. The Exercise Director does this by monitoring the master schedule of events to ensure the exercise is proceeding according to plan.

Where the exercise has unanticipated actions or resource requirements the Exercise Director determines how to maintain the exercise flow or bring it back in line. The Exercise Director is also responsible for maintaining order and professionalism during the conduct of the exercise and for any observers attending the exercise. Observers could include VIPs, invited guests and new or inexperienced staff.

On completion of the exercise, the Exercise Director will be involved in the production of the end of exercise report and may have responsibilities to implement recommendations made in the report.

Evaluation team

Exercise evaluators are assigned to observe and evaluate selected objectives during an exercise. Evaluators should be subject matter experts in the field they are evaluating.

The exercise evaluators are responsible for:

- evaluating against allocated objectives and/or key performance indicators (KPIs)
- observing and assessing processes, procedures, and techniques
- evaluating and reporting on achievement of outcomes and the extent to which the overall exercise objectives have been met
- evaluating the effectiveness of exercise facilitation and management, and
- providing input into the exercise debrief.

Note: An evaluator does not mentor, coach or act as exercise control.

Umpires

Umpires work on behalf of exercise control, and monitor the flow of the exercise scenario. Umpires are responsible for:

- providing corrective advice to facilitate the flow of the events
- attending briefings, and
- through observation, providing a written report outlining how identified objectives are met, what agency or procedural issues arise and consequently identifying training needs.

External agencies

External agency representatives act on behalf of their agency during both the design and delivery phases of the exercise.

Responsibilities include:

- being the main point of contact for their agency
- providing expert advice and input from the department or agency they represent
- having input into the scenario and providing control documents as required
- ensuring their agency input is consistent with that of other agencies, and the aims and objectives of the exercise, and
- responding to requests from exercise participants through either prepared control documents or the creation of new control documents.

During the delivery of the exercise, agency representatives may become simulators or role players where they will respond to requests from

exercise participants through either prepared control documents or the creation of new control documents.

Simulators and role players

Simulators assist exercise control staff to simulate events during an exercise. Simulators carry out the following roles:

- input the pre-scripted exercise injects and messages at specific times in a specific sequence
- simulate actions taken by groups or individuals such as agencies, members of the public, the media, higher or lower control levels.

Role players are often used in full-scale exercises to add realism in representing media, personnel, hostages or other characters that are physically introduced to the exercise.

It is important that both simulators and role players are well briefed and trained before the exercise commences. They need to know how much they can respond creatively to unanticipated actions by players but also the importance of not introducing free play to the exercise.

Good indexing and layout of reference materials is especially important in functional or full-scale exercises.

Safety officers

A safety officer must be appointed for functional or full-scale exercises. The safety officer is responsible for:

- reviewing the potential for hazards and risks
- conducting site and facility inspections prior to the exercise
- controlling identified hazards and risks
- checking first aid services are available if required
- having authority to stop the exercise for safety reasons, and
- documenting all health issues and events.

The safety officer needs to make sure that all people involved in the exercise can identify when a real emergency occurs during exercise play. This is normally identified by using the phrase ‘No duff’ during conversations about the emergency.

3.4 Exercise timeline

Introduction

An exercise timeline outlines the timeframes for reaching significant milestones. This is particularly important when planning major exercises. The Exercise Coordinator uses a project management approach to ensure all the steps happen in the right order.

A checklist can be useful when designing and managing an exercise. The detail contained in the checklist will differ depending on the type and size of the exercise.

A basic checklist to assist with exercise development is provided at Appendix B (see Appendix B *Exercise development checklist* on page 67).

Exercise timelines

Timelines will vary depending on the size and scope of the exercise and may also depend on the agency's experience in conducting exercises, available resources and exercise planning team size. Timelines can be developed and managed using a variety of tools, most commonly in Microsoft Word or Microsoft Project.

An exercise timeline:

- provides an indication of timings of significant events
- identifies conflict in timings of activities
- allows for activities from a range of agencies to be merged into one timeline, and
- serves as the basis for the master schedule of events.

Simple exercises may be put together in a short time. However, larger, complex exercises will require much more preparation time.

Table 3-1 provides a guide for how long it should take to develop an exercise depending on the exercise type.

Table 3-1 Estimated planning time required for different exercise types

	Type of exercise				
	Orientation	**Drill**	**Tabletop**	**Functional**	**Full Scale**
Duration (typical)	1-2 hours	1-4 hours	2-4 hours or longer, up to 3 days	4 hours up to 1 or more days	2 hours up to 1 or more days
Preparation time	Simple preparation, 1 week. No participant preparation.	Simple preparation, 1-2 weeks. Participants need orientation.	Complex but inexpensive preparation, 1-3 months. Preceded by orientation and potentially 1 or more drills.	Complex and expensive, 6-18 months preparation. Preceded by simpler exercises. Significant allocation of resources.	Expensive due to expensive time, effort, resources. 6-18 months preparation. Preceded by preparatory drills, tabletops, functional exercises.

Compressed or real time

It is also important to consider whether the exercise will run in real time or whether events will be compressed.

For example, a functional exercise requiring participants to apply practical skills may need to run in real time to achieve the agency's objectives. A discussion exercise may require a period of 24 hours to be compressed into 6 hours to achieve its objectives.

3.5 Exercise planning meetings

Introduction

For larger exercises, planning meetings become very important to discuss the development of an exercise. Each meeting should have an agenda to ensure relevant issues are raised and resolved satisfactorily.

Table 3-2 outlines what might typically be discussed in each planning meeting while working through the development of an exercise. The number of planning meetings may vary depending on the size and scope of the exercise.

Table 3-2 Content of planning meetings

Planning meetings	Description	Exercise type	Timing
Concept and objectives meeting	• Identifies the type, scope, objectives and purpose of the exercise, and may include discussion on resources, location, date, duration, planning team and participants, assumptions, etc. • Typically attended by the lead agency, lead exercise planner or Exercise Coordinator and senior officials. • Outcomes should include agreement on exercise type, scenario, capabilities, tasks and objectives.	Functional, full scale or a series of exercises	Prior to, or concurrent with initial planning meeting

Initial planning meeting	• Lays the foundation for exercise development.
	• Gathers input from exercise planning team on the scope, design, objectives, scenario, exercise location, schedule, duration, and other details required to develop exercise documentation.
	• Assigns responsibility to planning team members.
	• Outcomes should include:
	  ○ planning schedule
	  ○ clearly defined, obtainable, measurable capabilities, tasks and objectives
	  ○ identified exercise scenario variable (e.g. threat, scenario, scope of hazard, venue, conditions)
	  ○ participant list
	  ○ outline communications plan for how planning team will communicate
		All	Discussion based exercises: 3 months before exercise
			Operations based: 6 months before exercise

	○ availability of source documents needed to draft the exercise ○ list of established dates for completion of corrective actions and responsibilities ○ list of critical activities for next planning meeting ○ agreed date, time, and location for next planning meeting and actual exercise.		
Mid-term planning meeting	• Resolves logistical and organisational issues that arise during planning such as staffing, scenario and timeline development, scheduling, logistics, administrative requirements, and draft documentation review. • May be held separately or in conjunction with a master schedule of events list meeting. • Outcomes should include: ○ agreement on final exercise details ○ fully reviewed exercise scenario timeline (master schedule of events) ○ fully reviewed exercise documentation ○ well-developed scenario injects ○ agreed date, time, and location of final planning meeting.	Operations based	3 months before exercise
Final planning meeting	• Uses a forum to review the process and procedures for exercise conduct, final drafts of exercise material, and logistical requirements. • Ensures there are no major changes made to the design or scope of the exercise or to any supporting documents. • Outcomes should be: ○ attendees have clear understanding of, and give final approval for exercise processes and procedures ○ exercise documentation approved ○ last minute issues are resolved ○ logistical elements are confirmed.	All	Discussion based: 6 weeks before exercise Operations based: 6 weeks before exercise
Post-exercise meeting	• Completes the exercise and related activities, including the exercise evaluation and any subsequent reporting activities needed. • May also identify issues and suggest focus areas for future exercises. • Outcomes should include confirmation of the end of exercise report.	All	6 weeks post exercise

3.6 Establish the exercise aim

Introduction

The exercise aim is a broad statement of intent. It provides the direction for what is to be achieved by the exercise. The aim should be derived from the needs assessment and is established by the exercise planning team.

A clear aim leads to a series of objectives that will suggest the most appropriate style, size and complexity of the exercise.

Writing an exercise aim

The aim should begin with a verb and should be positive, clear, concise and achievable. It must be broad rather than specific. There should be only one aim for an exercise.

Table 3-3 provides a list of commonly used verbs and their application:

Table 3-3 Exercise verbs, from *Australian Disaster Resilience Handbook 3: Managing Exercises*, 2012, Australian Institute for Disaster Resilience

Verb	Definition/application
Test	To evaluate the abilities, aptitudes, skills or performance of a capability or aspects of that capability in addressing a task or a challenge or combination of both.
Assess	To determine the value, significance or extent of, or to appraise a capability, plan, process or procedure.
Practise	To improve a capability's performance.
Develop	To grow into a more mature or advanced state a capability, plan, process or procedure.
Review	To exercise in the context of going over a plan, process or procedure with a view to improve it, or ensuring that it is contemporary best practice.
Explore	To examine the potential of a capability, plan, process or procedure.
Validate	To establish the soundness of, or to corroborate a plan, process or procedure.
Demonstrate	To display or exhibit the operation or use of a capability, resource, procedure or process.

Exercise aim examples

Exercise aim examples include:

- The aim of Exercise Tangaroa is to test New Zealand's all of nation arrangements for responding to a national tsunami warning.
- The aim of Exercise Te Ripahapa is to assess South Island inter and intra CDEM Group coordination (with national overview) of an Alpine Fault earthquake affecting the whole of the South Island.
- The aim of Exercise Pahu is to test the emergency response arrangements, both across the Taranaki CDEM Group and between nearby CDEM Groups, in the context of a Taranaki volcanic event.

3.7 Define exercise objectives

Introduction

An objective is a statement of what is to be done and should be stated in terms of results. In other words, an objective should state who should do what, under what conditions, and according to what standards.

The objectives are sourced from the needs assessment, scope and purpose statement and define the measurable aspects of the exercise. Objectives go hand in hand with the aim but are more specific and performance based.

Objectives must be expressed in a way that informs participants what they will be working towards, evaluating or observing. They form the basis of the exercise design process and the eventual exercise delivery. Writing the objectives is also the starting point for the evaluation process. During the exercise, the evaluators assess whether the exercise is meeting the objectives.

How many objectives

There can be as few as two to three objectives in a small exercise, or they can number into the hundreds in a large complex exercise that includes multiple agencies. For a standard exercise, no more than ten objectives per agency are recommended.

In multi-agency exercises, each participating agency must be responsible for developing its own specific objectives to serve their specific functions.

Each agency's objectives can then be incorporated into one exercise package by the exercise planning team, or evaluated by each agency on its own.

Examples of good objectives

Objectives must be clear, concise, and focused on participant performance. They should contain:

- an action or behaviour stated in observable terms
- the conditions under which the action will be performed (including any tools or assistance to be provided), and
- standards (or levels) of performance.

Objective examples:

- Prepare and disseminate two situation reports (SitReps) in an accurate and timely manner, in accordance with standard operating procedures.
- Activate the emergency operations centre within 30 minutes of the decision to activate in accordance with standard operating procedures.

SMART objectives

A common approach to writing objectives is the use of the SMART model. This is an acronym for Specific, Measurable, Achievable, Relevant and Task-oriented.

Table 3-4 SMART guidelines for writing objectives

Guideline	Description
Specific	Objectives should specify what they want to achieve – i.e. what results is the agency looking for?
Measurable	How will the objective be measured? The objective should set the level of performance, so that results are observable, and you can identify when the objective has been achieved. Depending on the objective, it can set a quantifiable standard or it can simply be stated in a way so that people can agree on whether they succeeded.
Achievable	The objective should not be too difficult to achieve. For example, achieving it should be within the resources that the agency would reasonably be expected to commit to in a real event.
Relevant	The objective should be relevant to the exercise aim and the needs of participants.
Task oriented or time driven	The objective should focus on a behaviour or procedure. With respect to exercise design, each objective should focus on an individual function. Objectives should also be time driven stating when something should be completed by.

Wording your objectives

Objectives are concerned with knowledge, comprehension, application, analysis or synthesis and evaluation. Table 3-5 provides examples of some useful verbs for writing objectives.

Table 3-5 Suggested verbs to use when writing objectives (From Bloom B.S. et al *Cognitive Domains. Taxonomy of Educational Objectives Handbook 1*)

Area	Verbs applicable
Knowledge *Recalling specifics and universals, methods, patterns, etc.*	Define, state, list, name, write, recall, recognise, label, underline, select, reproduce, measure
Comprehension *Knowing what is communicated by making use of the idea*	Identify, justify, select, indicate, illustrate, represent, name, formulate, explain, judge, contrast, classify
Application *Using abstractions in particular and concrete situations*	Predict, select, indicate, choose, name, formulate, construct, contrast, classify
Analysis / synthesis *Analysis – breaking down communication into its parts so that the relations among them are made explicit. Synthesis – putting together elements and parts to form a whole.*	Analyse, identify, conclude, differentiate, combine, restate, summarise, precise, select, separate, compare, contrast, argue, discuss, organise, derive, justify, resolve, breakdown, critique, select, relate, generalise, conclude
Evaluation *Judge the value of material and methods for given purposes. Judge the value of the knowledge in realising specific objectives.*	Judge, evaluate, determine, recognise, support, defend, attach, critique, identify, avoid, select, choose

3.8 Define key performance indicators

Introduction

Key performance indicators, also known as KPIs, are tools used to help an agency define and measure progress towards exercise objectives.

A KPI may further define an objective, and is helpful when formulating the evaluation tool or measures.

KPI examples

Some examples of KPIs are:

- Establish and maintain contact with lead agency and key partners, in accordance with SOP.
- Demonstrate the provision of preliminary scientific information and advice given to [insert Agency name] within 30 minutes of initial notification receipt.
- Demonstrate delivery of advice, direction and coordination to all responding CDEM Group agencies.
- Develop plan for EOC staff capability for medium to long term response including 24/7 coverage.

3.9 Develop the scenario

Introduction

The scenario is a narrative that describes an event that has occurred that the exercise participants will need to resolve. It provides a brief description of the events that have occurred up to the minute the exercise begins.

The scenario has two important functions.

- It sets the mood for the exercise, captures the participants' attention and motivates them to continue. (It is important participants are motivated to participate in the exercise.)
- It also sets the stage for later action by providing information that the participants will need during the exercise.

There are two types of scenario:

- **Outline scenario:** a high-level scenario that sells the idea of the exercise and facilitates information gathering.
- **Detailed scenario:** developed after the outline scenario and provides greater detail.

Outline scenario

The outline scenario gives the time, date and magnitude of the simulated event and provides a general summary of the damage and disruption to people, property and services that have resulted.

An outline scenario should always contain:

- outline timings
- events leading to, or causing the problem
- major incidents, and
- initial issues.

Outline scenario purpose

The outline scenario has three purposes:

1. **Selling:** Agencies being asked to participate can be shown that the exercise is based on a situation they need to consider.
2. **Information gathering:** Specialist advice on disaster impacts and consequences may be needed to prepare the exercise, e.g. technical staff may need to be shown the context of the question.
3. **Narrative:** Participants can be given this information at the start of the exercise to 'get them into the picture'.

Scenario examples

An example of a scenario for a tsunami exercise follows:

The scenario for Exercise Tangaroa 2016 will be a regional source tsunami originating in the Kermadec Trench region and affecting the entire New Zealand coastline.

3.10 Detailed scenario

Introduction

A detailed scenario contains additional information and is much more comprehensive than an outline scenario. It has a series of parts that describe the event's impact on specific services or sections of the community, and may contain information on effects beyond the immediate impact area, along with a timeline for restoration of key lifeline utilities. It should include a clear definition of the number of dead, injured or displaced persons and the extent of property damage.

The detailed scenario is not normally made available to exercise participants. Instead, it is used by the exercise planning team to write the exercise. The detailed scenario will also help in the writing or the master schedule of events.

Characteristics of the scenario

A good detailed scenario is typically:

- one to five paragraphs long
- very specific
- phrased in the present tense
- written in short sentences
- chronological (such as an event with warning time), and
- emphasises the emergency environment.

Where an emergency has some warning time such as a cyclone or volcanic eruption, the scenario often outlines the developing situation chronologically. For an unexpected event (e.g. earthquake or flash floods), the scenario may be shorter or it may devote more detail to the environment of the emergency.

Writing a detailed scenario

When writing a detailed scenario provide short responses to the following questions:

- What type of event is it?
- How fast, strong, deep, and dangerous?
- How did you find out?
- What response has been made?
- What damage has been reported?
- What is the sequence of events?
- What time did it occur?
- Was there advance warning?
- Where does it take place?
- What are the relevant weather conditions?
- What other factors would influence emergency procedures?
- What is predicted for the future?

Turn each response into a brief sentence.

3.11 Announce the exercise

Introduction

Once you have obtained official approval for your exercise (via the Exercise Purpose Statement or Concept) and drafted an outline scenario, the exercise needs to be announced to prospective participants.

This can be done in many ways. In smaller exercises, the Coordinating Instruction may be the first document used to announce the exercise. Alternatively, a Warning Order can be used, which should be followed up with a Coordinating Instruction.

Warning Order

A Warning Order can be a very brief document that provides advance warning that an exercise is occurring and that an agency (or agencies) will be formally invited to participate.

A template can be found in Appendix C *Exercise warning order template* on page 69.

A covering letter to agency Chief Executives may accompany a Warning Order outlining expected commitment and to request confirmation of participation.

General exercise briefings

General exercise briefings form an important part of pre-exercise preparations. It is important to hold briefings with appropriate government officials, agency representatives, exercise participants and community groups (if appropriate) before an exercise. The Coordinating Instruction can form the basis of these exercise briefings.

General exercise briefings are held well in advance of the exercise to outline what is intended to be achieved and promote participation in the exercise.

3.12 Levels of participation

Introduction

Most exercises require the participation of a number of groups and agencies to succeed.

If an agency's participation is essential:

- discuss dates with them at the earliest opportunity
- alter timings to suit
- explore likely levels of support
- invite a representative to planning meetings.

Note: If the exercise takes place outside of normal business hours, some agencies may have to adjust shifts or schedule overtime for those involved.

Levels of participation

It is important (especially in large, complex exercises) to ascertain the level of commitment an agency will give to an exercise.

Table 3-6 defines the levels of participation in exercise planning and exercise play.

Table 3-6 Assigning levels of participation

Category	Description
Full	Agency commits to all parts of exercise including contributing to exercise development. **Note:** Staff within the agency will participate in response coordination.
Partial	Agency participates in a specific part of the exercise. **Note:** The agency may contribute to exercise development.
Facilitation	Agency not actively involved in exercise development but personnel made available to facilitate exercise injects or enquiries (i.e. a control function). **Note:** Contact person nominated to be contactable for exercise related matters or enquiries.
Not engaged	Agency not involved in exercise development or exercise play. Agency inputs and outputs will be notional if required (i.e. exercise writers will make up that agency's input if required). Exercise planning team will advise agency that the exercise is taking place but no invitation to participate is required. **Note:** No communication or contact during exercise.

3.13 Risk management

Introduction

In the exercise context, a risk is the chance of something happening that will have an impact on the exercise objectives.

A risk is the combination of the likelihood and the consequences of something occurring and the consequences that may flow from it. A risk may have a positive or negative impact on the exercise. A systematic risk management approach will reduce the degree of uncertainty and increase decision-making accuracy and the likelihood of positive outcomes.

Understanding risk

Understanding risk is important for two reasons:

- knowing how risk comes about helps identify ways of reducing it; and
- being able to calculate a value for risk helps with setting priorities for reducing risk.

Reducing risk

Reducing risk requires either reducing the likelihood of the event or reducing its potential consequences, or both.

Risk assessment

Conducting a risk assessment is particularly important in large, complex exercises where there is considerable financial investment and where participants are deployed in tactical or field operations.

Once the risk assessment is conducted an assessment and risk management plan should be produced.

The risk review should be performed by the health and safety team with assistance from the exercise control staff. The review should incorporate a visit to the exercise site(s) and surrounding areas, including out of bound areas.

Risk management process

Figure 3-2 identifies the key steps in the process of managing risk.

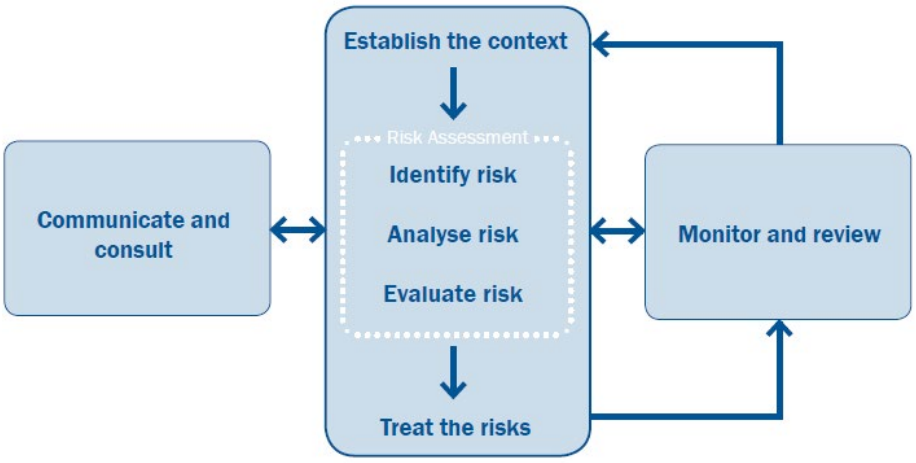

Figure 3-2 Risk management process - overview

Further detailed information on risk analysis can be found in Australian/New Zealand ISO 31000:2009 *Risk Management – Principles and guidelines.*

3.14 Exercise documentation

Introduction

The amount of exercise documentation and the level of detail required will vary considerably depending on the size and complexity of the exercise. Documentation provides information for the people involved in designing, conducting and evaluating the exercise.

Documentation examples

Documentation may include (but is not limited to):

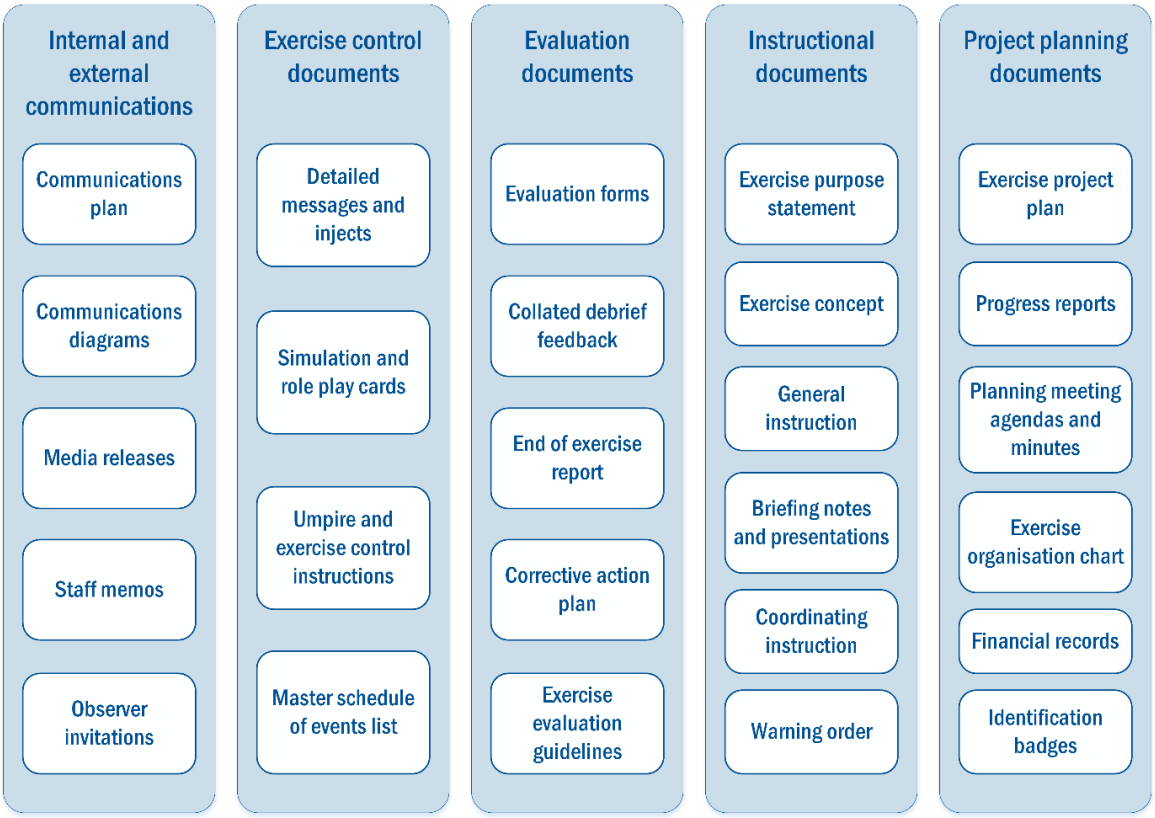

Figure 3-3 Documentation examples

3.14.1 Coordinating Instruction

Introduction

The Coordinating Instruction is usually the first major exercise document produced (or after a Warning Order in larger-scale exercises) and is used to inform all people and agencies involved about the basic details of the exercise.

The amount of documentation and detail required will vary depending on the size and complexity of the exercise. Depending on the nature and scope of the exercise the Coordinating Instruction can be used to:

- provide general information about the exercise for everyone concerned, including an exercise overview, outline scenario, parameters, timelines and participants
- be a guide for developers and participants
- assist participants in preparation for exercise play
- promote the exercise.

While the Coordinating Instruction can be used to announce the exercise, it can also be updated and have more added to it leading up to the actual exercise.

Version control should be used so new and modified material is easily identifiable.

What to include

The Coordinating Instruction is a high-level document sent to all participants well in advance of the exercise activity.

The Coordinating Instruction is designed with two audiences in mind:

- managers of participating agencies who have to allocate staff time and other resources to the proposed activity, and
- the exercise planning team who need clear parameters with which to work.

As a minimum, the Coordinating Instruction should include:

- the purpose and type of the exercise
- the outline scenario
- participating agencies
- scope of the exercise
- date, time and location of the exercise
- who the exercise planning team is and what their responsibilities are.

It may also contain the following:

- references
- assumptions, artificialities, and simulations
- safety and security
- administration and logistics.

Note:

- A brief memo is sufficient if the exercise is only a short, simple activity.
- If the exercise involves a single agency only, a Coordinating Instruction can be combined with a General Instruction so there is only one document produced.

See Appendix D *Exercise Coordinating Instruction template* on page 70.

3.14.2 General Instruction

Introduction

A General Instruction follows a similar structure to the Coordinating Instruction but is a more detailed document that outlines essential information including administrative arrangements specific to each participating agency, such as roster details, communications plans, and meal break times and how the exercise will be controlled. It is distributed to all exercise participants shortly before the exercise.

A General Instruction is usually issued after a Coordinating Instruction and should include:

- Exercise purpose
- Exercise aim
- Exercise objectives and key performance indicators
- Exercise scope
- Exercise appointments
- Methods of communication
- Public information strategies (media arrangements, etc.)
- Evaluation strategy (including umpire appointments if appropriate)
- Observer programme arrangements
- Budget and expenditure.

Template

See also Appendix E *Exercise General Instruction template* on page 72 for an example.

3.14.3 Communications and Media Management Plan

Introduction

A Communications and Media Management Plan is produced to outline how the lead agency will manage communications and media engagement about the exercise, and how communications will be managed within the exercise. For a small exercise, this may be included in the General Instruction. However, for large, complex exercises, a separate, detailed document should be produced.

A Communications and Media Management Plan may include:

- Background to the exercise
- Communications strategy within the exercise
- Communications objectives and key performance indicators
- Participating stakeholders
- Target audience
- Spokespeople
- Roles and responsibilities

- Key messages
- Tools and tactics.

Template

See Appendix F *Communications and media management plan template* on page 74.

3.15 Developing major and detailed events

Introduction

Once developed, the scenario should be extended from the events leading up to the exercise start point to the finish point.

The exercise planning team writes a series of large or small occurrences (called major and detailed events) into the exercise to take place as a result of the emergency described in the scenario. Major and detailed events are problems that require a realistic action to meet exercise objectives.

When developing events, the goal is to provide a structure that will link the simulated event to the actions that people should take and provide control to the exercise.

As the major and detailed events are written, they should be put into a timeline to indicate when they should occur. This helps later on when drawing everything together to form the master schedule of events.

Developing major events

Major events are designed to be big problems resulting from the emergency. They should be likely events, based on case studies or operational plans, which call for realistic action. Follow these steps to identify list of major events:

Step	Action
1	Identify several major occurrences, the high points in a sequence that might follow the storyline events.
2	Decide which of these events might generate situations that would test the objectives.
3	Concentrate on those events that best support the objectives.

As a guide, there should be three to four major events for a tabletop exercise and eight to ten events for every two hours of play for a functional or full scale exercise.

Each major event will have some detailed events written for it that focus the exercise participants on the problem to be solved.

Developing detailed events

Detailed events are specific problem situations to which exercise participants must respond.

As a general rule, each detailed event will result in one or more expected actions from various agencies.

There are four types of actions that participants may carry out:

1. **Verification:** Gather or verify information.
2. **Consideration:** Consider information, discuss among players, negotiate, consult plan.
3. **Deferral:** Defer action to later, put action on priority list.
4. **Decision**: Deploy or deny resources.

Note: In a small exercise, it may not be necessary to distinguish between major and detailed events.

There are several ways of writing detailed events:

- Plan the detailed events and expected actions at the same time.
- Work backwards, first identifying an action that players will perform, then listing a problem (a detailed event related to a major event) that would motivate the action.
- Make a list of specific problems that are likely to occur in connection with each major event, and then identify actions that would be expected as a result.

Whatever method is used, the result should be a list of specific events that are closely linked with actions that the participants are to perform.

As a guide, there should be six to eight detailed events for each major events.

3.16 Developing messages and injects

Introduction

Control documents are exercise tools used to:

- create an artificial environment
- provide a framework to the event
- mimic real life incidents and responses
- test objectives during the exercise.

Control documents can be a:

- **Message or inject:** a document that causes participants to respond in a manner pursuant to their role or function.
- **Response:** a document that provides answers to questions posed by participants.

Note: A response can also be an inject. By receiving a response, another inject is revealed that causes further questions (avenues for investigation) for participants.

Document management

Documents should be versioned and distributed to participants during the exercise in an accurate and timely manner.

Exercise messages and injects

Messages and other injects are used to communicate detailed incidents or developments to exercise participants. One message may represent an event, or several messages may be needed to collectively represent the event.

Messages and injects serve one purpose: to generate a response (i.e. to cause exercise participants to make decisions and take actions that meet the exercise objectives).

It is important in functional and full scale exercises to be aware that not all injects are necessarily a message. They may be an instruction given to an exercise simulator or ‘casualty’ on how to act when approached by exercise players.

Once written, these messages and injects become control documents.

Transmitting messages and injects

Messages can be transmitted in various ways, including:

- landline, cellular or satellite telephone
- radio
- in person
- written note
- social media
- email.

When transmitting messages in functional or full-scale exercise, try to use the method of transmission that would be most likely in a real emergency.

Message and inject format

Exercise planning teams often use a standard form when creating messages and injects. A standard form should include a space for a message number, the time that the message is to be delivered, and the information that will prompt the action to be taken.

There should also be consideration given to providing exercise control staff with the implications of the inject, i.e. what should happen as a result of injecting this information into exercise play.

See also Appendix G *Standard message/inject template* on page 75.

How to write messages and injects

Follow these steps to write a message or inject:

Step	Action
1	Identify an expected action.
2	Consider who could send a message and what that person could say to motivate the expected action.
3	Consider the four message variables: • **Message source** (*Who* would realistically send the message?) • **Transmission method** (*How* will the message be transmitted?) • **Message content** (*What* – does the message provide all of the information needed to make a decision?) • **Recipient** (*Who* will receive the message? If not the decision maker, where would the message best be redirected?)
4	Keep it realistic.
5	Practice with the messages. Read them through with someone who is familiar with the agency involved. Does the message motivate the expected action? If it does, then the message is likely to be more successful.
6	Ensure the messages are numbered and have time of release on them. This may need to be done as the master schedule of events is put together.

Spontaneous messages

The majority of exercise messages in a functional exercise will be pre-established. When designing a functional exercise, it is a good idea to try to anticipate things that might go wrong and to provide the Exercise Director and role players with ideas about ways to handle those situations.

In an actual exercise activity, the participants do not always respond as expected. When this happens, the Exercise Director and role players will need to improvise. Typically, the Exercise Director will decide on an appropriate response.

If the Exercise Director and role players are familiar with the scenario and objectives, their spontaneous messages can still fulfil the purposes of the exercise.

When improvising inputs or details these are made up within the confines of understood capabilities and capacities. Anything that does not fit within the confines of understood capabilities and capacities should be noted by evaluator as 'knowledge gaps' to be addressed after the exercise.

3.17 Evaluation planning

Introduction

Evaluation is a very important part of exercising. It is critical to determine how an exercise meets its aim and objectives. Whilst evaluation happens mainly during the conduct of the exercise, planning for the evaluation process needs to be included as part of the exercise development.

Evaluation plan

To ensure evaluation goes smoothly, an evaluation plan should be developed, which details exactly how the exercise is to be evaluated. When putting this plan together, potential evaluators should also be identified.

The evaluation plan is finalised once exercise requirements have been defined and evaluation planning to meet those requirements has been completed.

In simple discussion-based exercises, the plan can be communicated verbally among evaluators prior to an exercise. For complex exercises, the evaluation plan should be documented in writing and sent to evaluators. Whether formally documented or not, evaluation plans should contain the following:

- **Exercise-specific information:** Exercise scenario, schedule of events, and evaluation schedule.
- **Evaluator team agency, assignments, and location:** A list of evaluator locations, a map of the exercise site(s), and an evaluation team organisational chart.
- **Evaluator instructions:** Step-by-step instructions for evaluators regarding what to do before they arrive (e.g. review exercise materials, wear appropriate clothing for assignment) as well as how to proceed upon arrival, during the exercise, and following its conclusion.

- **Evaluation tools:** Exercise-specific evaluation guidelines and analysis forms, the master schedule of events, blank paper or timeline forms.

Evaluation and exercise control rules of play

In addition to the evaluation plan, specific instructions need to be developed stating how the exercise will be evaluated. This is the Exercise Control and Evaluator Rules of Play document which outlines who is in the Control team, how they will communicate with each other and any rules they need to be aware of.

Exercise Control staff (including evaluators) should be issued an instruction or be provided with a package containing everything they will need for the exercise.

The information needs to explain the procedures, responsibilities, assignments and support arrangements for the exercise control roles, along with communication, logistics and administration arrangements. This document should be made available to exercise evaluators well in advance of the exercise, so they know what is being evaluated and what is expected of them.

One way to put all of this information together is in a deployment pack or folder.

Evaluation tools

Evaluation tools will vary according to the size and scope of the exercise.

An evaluation guideline or form will prompt the evaluator(s) to look for certain actions in the exercise and will allow them to determine whether or not objectives and key performance indicators are met. Evaluation tools differ from exercise to exercise depending on the size and complexity of the project.

The more measurable an exercise's objectives and KPIs are, the easier it will be to assess whether or not they have been achieved. When developing an evaluation tool or form, create measures that will help to assess if participants are meeting the objectives and KPIs.

Templates

See Appendix H *Evaluation Plan template* on page 76. This template can be modified to suit the scale of the exercise.

A template for an Exercise Control and Evaluator Rules of Play document is provided in Appendix I *Exercise control and evaluator rules of play template* on page 78.

Evaluator training

Evaluator training must take place before the exercise and address all aspects of the exercise, including:

- the exercise goals and objectives
- the scenario
- participants' roles
- evaluator roles, responsibilities, and assignments.

Before or during the training, provide evaluators with copies of the following materials to review before the exercise starts:

- exercise documents, such as the Coordinating Instruction, and General Instruction
- evaluation materials, such as exercise evaluation guidelines
- master schedule of events list
- evaluator assignments, and
- relevant plans, policies, procedures, and agreements of the exercising agency.

Evaluator training should also include guidance on observing the exercise discussion or operations, what to look for, what to record, and how to use the exercise evaluation guidelines. To promote effective observation, evaluators must be instructed to do the following:

- be at their designated position when players arrive
- observe player actions (or player discussion) but avoid getting in the way or becoming involved
- focus on observing the activities and tasks in relevant exercise evaluation guidelines to ensure exercise objectives are accomplished
- take legible, detailed notes, including times and sequences of events
- remain at their assigned post at key times, and
- allow players to act and answer questions without prompting.

Evaluator interaction

Evaluators should not interfere with exercise play. However, it may be necessary for an evaluator to interact with players during the exercise if they have a question about something observed. For example, they may wish to clarify the timing of a certain event. If so, they should wait until there is a break in activity to ask questions. These questions must not prompt or lead players in any way, and conversation should remain brief and focused.

3.18 Master schedule of events

Introduction

The master schedule of events is a detailed sequence of events used by exercise control staff to ensure that the exercise runs smoothly. It is also known as a running sheet, programme, script or main event list.

Note: A master schedule of events should only be circulated to exercise control staff, not general exercise participants.

Preparing a master schedule

A master schedule of events list is prepared by the exercise planning team. Contributions will be required from all participating agency exercise management representatives. The complexity of the master schedule of events will depend on the size and scale of the exercise. While a master

schedule of events should be prepared for a discussion exercise, it will be a much simpler document.

The master schedule of events list is used to:

- detail the sequence of events, particularly on the day of the exercise
- indicate the timing of each event
- identify who is responsible for tasks
- provide exercise control staff with a 'script'
- provide guidance for the pace and direction of the exercise.

A master schedule of events is usually a spreadsheet that contains the following items:

Contents	
Serial number	
Day/date	
Time	
Activity of event	
Location	
Desired outcome	
Control documents	
Comments/remarks	
Initiator (who puts the message in)	
Recipient (who receives the message)	Optional
Resources	Optional
Role players	Optional
Monitoring and follow up arrangements	Optional
Critical completion times	Optional
Cross referencing	Optional
Links with the objective	Optional
Expected actions	Optional

See Appendix J *Sample master schedule of events* on page 79.

Links to control documents

A master schedule of events list identifies the events linked to control documents. Exercise Control staff use the schedule to introduce information at appropriate times and help to control the pace of activities.

Timing of events

When determining the timing of events consider the following:

- events should be positioned to keep the exercise at a fairly steady pace, as one problem is resolved, another should appear
- problems closer to the scene will appear before those experienced further away
- communications problems may initially create a lack of information from worst hit areas
- recovery and repair efforts will take considerable time to arrange.

An important consideration is whether the exercise will run in real time or whether events will be compressed or sped up. Compressed time could be used when you are simulating several days' worth of activity in one or two days of exercise play, for example compressing the travel time of a distant source tsunami or exercising a time lag of several months across a pandemic scenario. If considering using compressed time, it is important that it is not confusing to participants and that they will have enough time to make decisions and carry out expected activities.

Anticipating responses

Considering likely reactions to messages and injects helps exercise design by:

- identifying likely questions so the required answer can be made available
- providing time estimates for repair, restoration and regeneration (which can be written into a master schedule of events).

Control of detail

In large functional or full-scale exercises, control of detail is essential. This is achieved by cross-referencing, ensuring facts and figures are accurate (using graphs and tables may help), and checking the frequency and distribution of exercise items.

All documents in large, complex exercises need to be broken into clearly labelled components and given a serial number to assist in tracking and tracing. Unfamiliar abbreviations used in a master schedule of events list or other documents should be provided on a reference card.

Ideally messages and injects should be entered into a database (e.g. Excel) to allow sorting by time, location, subject, etc. Key problems may be mapped to provide a quick visual summary for exercise writers or simulation staff (e.g. road closures, service break locations).

Using a database for messages and injects can assist when determining the frequency and distribution of messages (who is getting them – will they get sufficient work out of the exercise or be overloaded etc.).

3.19 Exercise setup

Introduction

The logistics and administration team will be responsible for the preparation and setup of the exercise. The team is responsible for the coordination of:

Item	Description
Exercise venue(s)	Venues should be organised well in advance with consideration given to: • Site or location selection and suitability • Approval to use site or location • Pre-planning site inspection • Site access • Site control and security • Site realism and detailed staging to suit the scenario • Damage control requirements • Site safety requirement and arrangements • Staging areas • Car parking • Power/gas • On site amenities.
Site simulation	Role players and moulage (make-up)
Communications and information technology	• Telephone, cellular and satellite phone • Broadband access • Fax machines • Computers and printers • Photocopiers • Radio communications • Exercise log • Display boards
Accommodation	Visiting staff and observers
Travel and transport	Flights and transfers
Catering	Meals and refreshments
Visitors and observers	Formal and informal
Maps	• Topographical • Cadastral • Street enlargements
Stationery	Forms, pens and paper, trays and clipboards, marker pens, etc.
Documentation	Plans and procedures
Finance	Authorities and accounts
General administration	• Cleaning • Security • Toilets • Liabilities and insurance

Public relations	Before, during, and after the exercise
Identification	• Provide appropriate identification • Restrict access of non-exercise personnel to all exercise sites

Physical facilities and room setup

It is important to conduct the exercise in the location(s) where normal operations would take place and to set it up as it would be for a real event in order to simulate reality.

The type of setup will vary depending on the size and complexity of the exercise. When using control staff or simulators, a separate exercise control room or facility must be setup where exercise control staff can send, receive, and track messages and other communications with players.

The control room will need to be equipped with the necessary communications equipment as well as display boards and maps or other means to keep a track of exercise progress.

Simulators

Simulators typically role-play representatives from different agencies. As a guide, a simulator should not play more than three different roles. Ensure the simulators are well-trained and briefed on how to perform their role.

Casualty simulation

Simulated casualties add an important element of realism to any field exercise. When preparing an exercise establish the need for casualties (i.e. will casualty simulation support or enhance the overall exercise aim and objectives?).

Casualty simulation staff must work with the exercise planning team to determine the:

- number of casualties required
- type of injuries
- history of injuries from mechanism of injury
- props required (torn clothing, burnt hair, etc.)
- materials to be used (makeup, blood, pre-made wounds, etc.).

Casualties must be well-briefed, made up and rehearsed. After the exercise they will need to debrief and de-role (time to step out of character). It is helpful if casualty simulators have a good understanding of anatomy and physiology so that they know what illnesses and injuries look like.

Observer programme

Many exercises generate interest within the wider sector or local community. Especially in larger more complex exercises, visitors from other agencies (whether local or international) may be invited to observe various exercise activities.

An observer programme is a structured agenda that provides visitors with an overview of the exercise activities. All visitors should be provided with appropriate identification and site access. The programme will identify a

point of contact at each site, and often include a tour of the exercise area and a chance to observe exercise play.

For those visitors who do not live locally, accommodation and transport may be part of the programme.

An Observer Coordinator must be appointed to manage the exercise observer programme. When developing an observer programme, it is important to balance visitor expectations, exercise requirements, agency interests, security restrictions and available resources.

Section 4 Conduct the exercise

This section provides a description of how to conduct an exercise, including the delivery of exercise briefings, starting, managing and controlling the exercise, and ending the exercise.

4.1 Exercise briefings

Introduction

Briefings educate participants about their roles and responsibilities in the exercise.

The exercise type and its scope will dictate the level of exercise briefings that are required. For example, a small agency tabletop or discussion exercise will require a significantly different extent of briefings than a multi-agency, full-scale exercise.

Exercise briefings

An initial exercise briefing is provided to exercise participants, exercise control staff, umpires, evaluators and role players before the exercise begins. It is used to orientate all people involved with the exercise.

All exercise briefings should follow a consistent format for ease of understanding, as well as support any exercise instructions people have received before the exercise.

Briefings should be accurate, concise and sequential. One suggested model is the GSMEACS format as it presents the important information in a logical sequence.

- **Ground:** describes the area(s) where the exercise is happening.
- **Situation:** describes what has happened and perhaps what has been done.
- **Mission:** describes what is to be achieved (aim, objectives).
- **Execution:** how objectives are to be achieved; what needs to be done (not how to do it).
- **Administration and logistics:** administrative and logistical arrangements (e.g. transport, catering).
- **Command and communication:** command structure and communication arrangements for the exercise.
- **Safety:** including welfare and 'No Duff' explanation.

Specific briefings will be required for the different roles being undertaken during the conduct of the exercise. Specific briefings may be required for:

- Exercise Control staff
- Observers
- Role players
- Participants
- Evaluators
- Media.

Exercise control staff briefings

While Exercise Control staff may attend the initial exercise briefing, a second briefing must be given to them to expand on the initial briefing and to state the range and limitations of their activities. Control staff briefings should include:

- roles and responsibilities
- exercise documents
- methods to be used, including communication and technology systems
- departures from scripts
- responding to participant actions
- keeping notes for later debrief.

This second briefing is not done in the presence of exercise participants and should be reasonably short in duration as the control staff should already have received training on how to perform their responsibilities. At the end of this briefing the exercise will start. Regular briefings are also required during the exercise to ensure the scenario is on track.

Evaluator briefings

Before the exercise begins, the lead evaluator should meet with the Exercise Director and/or evaluators to verify roles, responsibilities, and assignments and to provide any significant updates (changes to the scenario or new assignments).

This briefing is the time for evaluators to ask questions and to ensure complete understanding of their roles and responsibilities.

For operations-based exercises, the briefing often includes a tour of the exercise site so that evaluators are familiar with the venue and know where they should position themselves to observe exercise play.

Because many events may occur at once, evaluators may not be able to record all of the action. Knowing which events are important allows for manageable action recording, eliminates unnecessary information, and provides the most useful data for exercise evaluation.

Terminology evaluators should be familiar with

Evaluators should also be familiar with the following terms as outlined in 'Key terms' (see Section 1 *Introduction* on page 1):

- inject
- discussion
- decision
- directive
- movement
- task.

Evaluator observations should include comments on the following:

- initiation and unfolding of scenario events
- deviations from plans or procedures
- timeliness and other performance measures relevant to task evaluation
- effectiveness of, or shortcomings in, command and control
- creative player problem-solving activities
- equipment issue that affect player efforts.

4.2 Control the exercise

Introduction

The Exercise Control staff are responsible for controlling the exercise. This includes starting and stopping the exercise and introducing messages and injects into exercise play.

Start the exercise

Most exercises will be started immediately following the last participant briefing. The Exercise Director ensures that all exercise control staff are in place and role players are ready to begin.

In discussion-based exercises, the subject is normally introduced to players by a facilitator. Functional exercises may be started with an incoming message or by written scripts detailing the first inject. Field exercises may be initiated through a phone call, pager message or other call-out method.

Control staff

The Exercise Director uses the master schedule of events list to control the exercise. They ensure that any problems are rectified to keep the exercise flowing. The Exercise Director can modify the flow of the exercise to make sure objectives are met.

Exercise Control staff have a range of responsibilities to keep the exercise running. They need to stay in contact with the Exercise Director throughout the exercise activity.

An important Exercise Control role is that of umpire. Umpires observe, record, and evaluate the actions of those being exercised and the circumstances in which action occurs. They assist the Exercise Director by monitoring and reporting progress during the exercise.

Introducing problems

Once the exercise has started and participants are in place the problems identified in the master schedule of events list can be introduced into exercise play by means of individual or a series of messages and injects. As these problems are introduced, it is a worthwhile activity to create a log of the time the problem was introduced and to record, if possible, what the reaction or solution to the problem was. Creating this log can be very useful as part of the evaluation of the exercise. This log is also useful to

help evaluate and decide on the speed that subsequent messages or injects are introduced.

In functional exercises or the functional part of a full-scale exercise, the problems are pre-set and additional messages or injects are not always required.

Encouraging spontaneity

Players should be able to decide among a full range of responses normally available to them during an emergency.

To allow for participant spontaneity, Exercise Control staff and simulators must be well-trained and prepared to handle the unexpected.

Sustaining and controlling exercise activity

Sustaining exercise activity is achieved by the continuous injection of exercise information to the participants. This needs to be closely monitored to ensure that the information is released at an appropriate time. Depending on how well participants react to the injects, the rate of injects may need to be increased or slowed down. It may be necessary to add or remove problems to suit the pace of the exercise.

It is also important to control exercise activity. Participants may react in a different way to what was anticipated. If this happens then a check needs to be made to see if the reaction will have an ongoing effect on the exercise. Free play also needs to be controlled to prevent it from de-railing the exercise. If there is a danger that free-play or a reaction will have a negative effect on the exercise, the addition of a spontaneous problem or solution inject may correct the problem. The Exercise Director may need to step in and put the exercise back on track.

Where pre-written information forms a large part of the exercise, control staff must mark off on the master schedule of events list when injects are sent. Pre-written messages should quote an exercise inject serial number (e.g. #89) while additional injects should add a check letter (e.g. #89A) to distinguish them.

In some cases where participants start to get frustrated, injects start to back up, or conflict occurs between players then the Exercise Director may need to step in temporarily and pause the exercise. Once the problems have been resolved, the Exercise Director can start the exercise again. It is important that the Exercise Director ensures the exercise is a positive experience for the participants.

Exercise pace

The Exercise Director can control the pace of the exercise by adjusting the inject flow, slowing things down when the pace is too frantic or speeding it up when the exercise drags. It can also even out the pace among participants.

Ideas to slow the pace:

- Reschedule events to allow more reaction time. Have control staff wait before sending injects.
- Discarding injects that are relatively unimportant or do not impact on decisions.

Ideas to increase pace and fill gaps:

- Speed up delivery pace (varying from planned schedule).
- Determine what is causing gaps and be ready to add or alter injects spontaneously when needed.
- Keep supply of optional injects on hand that can be added when needed.
- Adding side events and routine actions that have to continue throughout the emergency.
- Adding secondary events that develop out of the main flow of exercise events.
- Adding special planning requirements that would cause an inactive group to engage in activity.
- Adding misdirected injects (messages given to the wrong agency or function). Such injects can be used to gauge the agency or function's clarity of role definition and test whether they forward the message properly.

Ideas to relive overload on particular agencies:

- **Reassign:** Verify that all injects are assigned to the correct agency or function. Then reassign any specific injects that could be used by another agency.
- **Thinning:** Divide the overloaded injects into two piles, 'essential to flow of exercise' and 'nice to have' and remove some of the latter.

End the exercise

Finishing the exercise is a controlled activity. The Exercise Director stops the exercise at a pre-planned time.

An immediate hot debrief should be provided for all players and staff to capture information and feedback while it is still fresh in their minds.

For health and safety purposes in functional exercises, ensure that all of the participants and staff are accounted for before releasing people from the exercise.

In large full-scale exercises, a damage inspection may be required.

Section 5 Evaluate the exercise

This section provides a description of the evaluation phase of an exercise, including debriefing, the end of exercise report and exercise follow-up.

5.1 The evaluation process

Introduction

Exercises give organisations the opportunity to evaluate capabilities and assess progress toward meeting capability targets in a controlled, low-risk setting. All exercises should have a learning focus. Learning is maximised when there is a continuous process of review to draw out the lessons identified. Review is the process of evaluating and validating the exercise.

The primary method to evaluate an exercise is through debriefing while validation relies on a range of processes that investigate an exercise's impact on an agency's workplace.

There are two principle reasons for evaluating and validating exercise performance:

- identify improvements needed in an agency, process or function
- establish whether the exercise achieved its objectives.

Evaluation planning

It is important that evaluation planning begins during the initial planning phases of the exercise. Identifying clear evaluation requirements early in the planning process will ensure that the design, development and conduct of the exercise best support an effective evaluation.

5.2 Exercise debriefing

Introduction

A post exercise debrief is a critical review of the entire exercise and it identifies those areas that were handled well, those areas where issues were experienced and identifies recommendations for improvement.

A debrief is run by an experienced facilitator to:

- Determine what went right, what went wrong and why without trying to lay blame
- Note specific questions which arise from achievement or non-achievement of objectives
- Acknowledge good performance
- Seek constructive information from those being debriefed
- Focus on improving procedures and training
- Record relevant information to enable reports to be compiled
- Summarise key points and suggest follow-up action.

Depending on the size of the exercise and the number of participants, there may need to be a series of debriefs building on one another.

There are usually two debriefs conducted after an exercise: *Hot* debrief, and *Cold* debrief.

Hot debrief

Held immediately after an exercise, a hot debrief is an opportunity for all participants to provide feedback while the exercise is still fresh in their minds. A hot debrief should include, but is not limited to:

- what worked well?
- what didn't work well?
- safety issues?
- what, if any, immediate action is required?

A suggested format for this:

- have a short break of about 10 minutes after the end of the exercise
- the Exercise Director gives his or her initial feedback
- obtain participant round-table feedback
- evaluators provide their feedback
- provide appropriate acknowledgements.

Cold debrief

A cold debrief is a more formal debrief held within four to six weeks following the exercise. The debrief process should include:

- what happened during the exercise?
- what went well?
- what needs improvement?
- what plans, procedures or training programmes need amendments?
- what follow up is required, including identifying any capability gaps for future capacity building?
- was the exercise realistic?
- how could the exercise have been improved?

The debriefing process should remain focused on evaluating the exercise's effectiveness – on issues, successes and problems.

Note: Personal criticism of individual participants at the meeting must be disallowed. However, these issues may need to be addressed in separately facilitated 'defuse sessions'.

For more information, refer to *MCDEM Organisational Debriefing Information for the CDEM Sector [IS6/05]* available at www.civildefence.govt.nz, by searching for the document name.

Planning team, control team and evaluators debrief

A debrief with the exercise planning team, facilitators, umpires, control staff and evaluators should be held as soon as possible following the exercise. This debrief allows evaluators to collect observations and thoughts about the conduct of the exercise and leads to the development

of preliminary analyses of exercise observations. This debrief is conducted by an experienced facilitator.

When writing preliminary analyses, evaluators should consider the following questions:

- Were the objectives of the exercise met?
- Did discussion suggest that all personnel would be able to successfully complete the tasks necessary to execute each activity? If not, why not?
- What are the key decisions associated with each activity?
- Did discussion suggest that all personnel are adequately trained to complete the activities or tasks needed to demonstrate a capability?
- Did discussion identify any resource shortcomings that could inhibit the ability to execute an activity?
- Do the current plans, policies, and procedures support performance of activities? Are players familiar with these documents?
- Do personnel from multiple agencies need to work together to perform a task, activity, or capability? If so, are the agreements or relationships in place to support the coordination required?
- What should be learned from this exercise?
- What strengths were identified for each activity?
- What areas for improvement are recommended for each activity?

5.3 Exercise validation

Introduction

After an exercise the evaluation forms must be completed and collated, and a validation of the exercise conducted.

The validation must be presented in the form of an exercise report.

Validation

The final stage of the exercise process is to determine whether or not the exercise has met the objectives identified in the needs assessment. Validation compares the performance of agencies and participants during the exercise against performance expected on the job. It is a way of measuring the value of the exercise and deals with more strategic issues than debriefing.

Validation answers the following questions:

- Did the exercise address the identified need?
- Did the exercise provide an opportunity for agencies and participants to perform in a manner closely resembling that expected in the real world?
- Did the exercise lead to improvements in agency policies, plans, and procedures, or individual performance?

Validation can be carried out by:

- observation on the job
- evaluation forms
- debrief notes
- interviews with participants and their supervisors
- post-exercise questionnaires.

After validation, agencies may change or develop plans, procedures and training programmes. Exercise outcomes may be retested in future exercises, or new exercises written to meet newly identified needs.

Root cause analysis

Evaluators examine each critical task not completed and each target not met, with the aim of identifying a root cause. A root cause is the source of or underlying reason behind an identified issue toward which the evaluator can direct an improvement. Root cause analysis involves not just identifying what issues emerged but rather discovering the root causes of those issues.

5.4 End of exercise report

Introduction

The final exercise report provides:

- a description of what happened
- describes best practices or strengths
- identifies areas for improvement
- provides recommendations for improvement in the form of a corrective action plan.

Improvements must be assigned to a responsible person or agency via a corrective action plan.

All improvements should be tracked to check on progress.

End of exercise report template

The exercise report should contain the following:

- Introduction – executive summary
- Background – aim, objectives, scope, participating organisations
- Evaluation – commentary on objectives (observations, recommendations)
- Conclusions.

See Appendix L *End of exercise report template* on page 81

5.5 Exercise follow up

Introduction

The recommendations of the final exercise report must be followed up.

The Corrective Action Plan included in the exercise report must be considered by the governance group or sponsor and agreed upon. Coordination and oversight of the implementation of the Corrective Action Plan must be assigned to a specific agency or person, who must develop a work programme towards implementation of the action points.

The Exercise Coordinator should:

- **assign responsibility:** clearly assign tasks and schedules, and designate responsibility for each recommended action point.
- **monitor:** establish a monitoring plan to track the progress of implementing recommended improvements.
- **report:** provide regular reports to senior officials on the progress of implementing recommended improvements.

Other follow-up actions may include:

- return of equipment
- payment of exercise related accounts, and
- letters of appreciation.

Corrective Action Plan

Corrective actions are concrete, actionable steps that are intended to resolve capability gaps and shortcomings identified in exercises or real world events.

Questions to guide discussions when developing corrective action plans include:

- What changes need to be made to plans and procedures to improve performance?
- What changes need to be made to organisational structures to improve performance?
- What changes need to be made to management processes to improve performance?
- What changes to equipment or resources are needed to improve performance?
- What capability development is needed to improve performance?
- What are the lessons learned for approaching similar problems in the future?
- What gaps or uncertainties in information regarding the scenario were identified that could be addressed through additional research or other methods?

Corrective actions captured should be tracked and reported on until completion.

Section 6 Appendices

Appendix A Exercise concept (purpose statement) template 65
Appendix B Exercise development checklist 67
Appendix C Exercise warning order template 69
Appendix D Exercise Coordinating Instruction template 70
Appendix E Exercise General Instruction template 72
Appendix F Communications and media management plan template 74
Appendix G Standard message/inject template 75
Appendix H Evaluation Plan template 76
Appendix I Exercise control and evaluator rules of play template 78
Appendix J Sample master schedule of events 79
Appendix K Sample evaluation tool 80
Appendix L End of exercise report template 81
Appendix M Bibliography and references 82

Appendix A Exercise concept (purpose statement) template

EXERCISE [NAME] CONCEPT

The purpose of the Exercise Concept is to provide initial information on Exercise [insert name] and obtain official sign off.

Overview

Exercise need	*Summary of the need to conduct this exercise.*
Exercise aim	
Exercise objectives	*The exercise objectives could be included as an Appendix to this document.*
Exercise date	
Exercise theme	
Exercise location	
Exercise type	*Orientation, drill, tabletop, functional, full scale*
Exercise design	*How is the exercise to be delivered? Are there phases or separate sessions?*
Exercise scope	*What is included; what is excluded?*
Exercise deliverables	*Are there specific deliverables that are not covered by the exercise objectives?*
Resourcing	*This section could include budgeting, personnel and equipment requirements, and outline any constraints.*

Exercise governance and management

Exercise Governance Group	
Lead agency	
Exercise Director	
Exercise Coordinator	
Exercise Planning Team	
Other key appointments	*Exercise facilitators or evaluators*

Participation

Proposed participating agencies

Timeline of key milestones

Timeline of key milestones

If known, fill out the following table:

Milestone	Deadline

Approval

[Name]

[Title]

[Date]

Appendix 1: Exercise objectives

Exercise objectives	Sub objectives (if applicable)	Key performance indicators *(if known – these don't have to be included in this document)*
1.0 [Objective]	1.1 [Sub Objective]	1.1.1 [KPI]
2.0 [Objective]	2.1 [Sub Objective]	2.1.1 [KPI]

Appendix B Exercise development checklist

Ref	Event	✓
Analyse the need		
1	Check multi-year training and exercise programme	
2	Conduct a needs assessment	
3	Determine the type of exercise	
4	Select an exercise name	
5	Develop exercise purpose statement and obtain high level signoff	
Design the exercise		
6	Determine the scope of the exercise	
7	**Establish a planning team** • Appoint an Exercise Coordinator • Appoint an exercise planning team • Establish a terms of reference for the planning team • Appoint exercise control roles • Establish exercise timeline (including exercise planning meetings)	
8	Establish the exercise aim	
9	Define the exercise objectives	
10	Define the key performance indicators (KPIs)	
11	Develop the outline scenario	
12	Announce the exercise (Coordinating Instruction)	
13	Develop the detailed scenario	
14	Confirm agency participation	
15	Determine the risks	
16	Develop and issue exercise documentation • General Instruction • Communications plan • Control staff instruction (and resources if required)	
17	Develop major and detailed events	
18	Develop control documents (messages and injects)	
19	Develop evaluation and exercise control rules of play	

20	Develop evaluation forms and checklists	
21	Develop master schedule of events	
22	Exercise set-up • Logistics and administration • Physical room / field set-up • Simulators • Casualty simulation • Evaluator training • Observer programme	
Conduct the exercise		
23	Conduct briefings to staff, exercise control and evaluators, other agency personnel and media	
24	Start the exercise; Introduce problems; Sustain and control exercise activity; End the exercise	
Evaluate the exercise		
25	Conduct hot debrief(s)	
26	Conduct control staff and evaluator briefing	
27	Conduct cold debrief	
28	Compile umpire evaluator reports and participant feedback forms	
29	Compile end of exercise report	
30	Exercise follow-up	

Appendix C Exercise warning order template

EXERCISE [NAME] WARNING ORDER

The purpose of this warning order is to provide advance warning that Exercise [insert name], (*you may wish to say who it is led by…)* will be conducted [insert date]. Your agency will be formally invited to participate by [insert date].

Overview

Exercise need

Exercise aim

Exercise location

Exercise type

You may wish to use this table if the exercise is being conducted over a number of days or in a series of workshops.

Session	Participants	Date	Description
1			
2			
3			

Exercise dates

Participation

Formal invitations and further information

Formal invitations

Lead agencies

Exercise Director

Exercise Coordinators

Exercise Planning Team

Exercise enquiries

Appendix D Exercise Coordinating Instruction template

Title page	
Contents	
Amendment schedule	
Introduction or background	Introduce how the exercise came about; including a brief introduction on when the exercise will occur and what level of exercise it is (according to the National Exercise Programme tiers). State whether the exercise is a multi-agency or individual agency exercise.
Aim	State the overall exercise aim (in large exercises there will be an overall aim, however, individual agencies may have their own aims and objectives which will be outlined in each agency's General Instruction and other documentation).
Objectives and KPIs	State the overall exercise objectives (in large exercises there will be overall objectives, however, individual agencies may have their own aims and objectives which will be outlined in each agency's General Instruction and other documentation). These may be included as an Appendix.
Scenario	Include the outline scenario.
Exercise concept	**Assumptions:** List any assumptions. **Scope and type:** What type of exercise is it (e.g. tabletop, full scale, etc.), and what size is it – is it an all of government exercise, multi-agency or individual agency exercise? **Themes:** In large, complex exercises, there may be themes. **Functions:** In large, complex exercises there may need to be several functions under each theme exercised to allow participants to exercise specific parts of a complex scenario. **Timelines:** List exercise timelines and key dates. **Participation:** Outline which agencies are taking part. **Documentation:** What key documentation will be issued as part of the exercise? **General Instruction:** When will this be issued (and if multiple agencies are involved, when these need to be completed by?) **Evaluation and reporting:** Outline who has overall responsibility for this. Do agencies need to appoint their own evaluators or will these be provided? When will debriefs be held? Who will collect debrief reports and when do they need to be completed by? Who will write the overall evaluation report and end of exercise report?
Exercise delivery	**Exercise format:** Are there exercise phases? (for exercises with lead-in e.g. volcanic or weather events). **Exercise hours:** What days and times will the exercise be held. **Injects:** Are there different types of injects? Some may only be seen by certain agencies. How will injects be inputted into exercise play?

	Communication: Will normal communications be available in the exercise or will there be periods during the exercise when telecommunications blackouts are imposed by exercise control, and hence phones and on-line communications will be deemed not available?
Responsibilities and administration	**Governance:** Who is leading the exercise or has mandated it? **Exercise management:** What is the exercise management structure? **Exercise coordination and control arrangements:** How will the exercise be coordinated and what are the responsibilities of the exercise planning team? **Organisational responsibilities:** Provide a brief outline of what agencies are responsible for in the lead up to, during and after the exercise. **Finance**: Will agencies fund their own costs? **Contact details:** List contact details for exercise coordinator(s).

Appendix E Exercise General Instruction template

Title page	
Contents	
Glossary of terms	
Introduction	Introduce how the exercise came about; including a brief introduction on when the exercise will occur and what level of exercise it is (according to the National Exercise Programme tiers). State whether the exercise is a multi-agency or individual agency exercise.
Aim	State the overall exercise aim (in large exercises there will be an overall aim, however, individual agencies may have their own aims and objectives which will be outlined in each agency's General Instruction and other documentation).
Objectives and KPIs	State the overall exercise objectives (in large exercises there will be overall objectives, however, individual agencies may have their own aims and objectives which will be outlined in each agency's General Instruction and other documentation).
Scenario	Include the outline scenario.
Participants	Who is involved? How many agencies? What is the extent of their involvement or level of participation?
Exercise concept	What type of exercise is it (e.g. tabletop, full scale, etc.)? Is it conducted in real time or compressed time frames and what weather conditions/forecasts will there be on the day(s)? **Locations and infrastructure:** Where will the exercise take place? **Timings:** What are the exercise date(s) and when will the exercise start and finish? **Staff notification:** How will staff know when the exercise starts? Will they be notified in some way? **Transport:** Are any transport provisions required to get to the exercise site? **Meals:** Will catering be provided to exercise participants? If yes, what times, what location(s)? **Communications:** • All telephone communication should be prefaced with the words *"This is an Exercise [insert name] message".* • All written correspondence must be prefaced with the words: *"Exercise [insert name] only".* This includes faxes, emails, SitReps and briefing papers. **Media:** • Is there any external (out-of-exercise media activity planned? If yes, what is this? • Is there any internal (within the exercise activity planned? If yes, what will this be?)

	Observers: Will there be observers or visitors to the exercise? If yes, is there an observer programme and who is responsible for coordinating it? What are the details? If it is a large programme, this may be covered in a different document. **Dress:** What standard of dress is required?
Control and evaluation	**Outline roles and responsibilities:** There are usually different exercise control roles such as evaluators and exercise control staff, umpires, etc. How will these people be identified (e.g. coloured nametag etc.)? Include a section on the roles and responsibilities of the exercise evaluators, Exercise control staff, etc. How will these people communicate with each other and how will exercise players communicate with them? How many evaluators are there and where will they be located? **Debriefs:** Hot and cold debrief details.
Exercise cancellation	Reference should be made to what happens if a real event occurs, or for whatever reason the exercise is to be stopped. The Exercise Coordinator will advise exercise participants agencies. Such a message will be preceded with the phrase “No duff”.
Roll allocations (roster)	Include a roster so that readers can identify when they are required to participate in the exercise.
Evaluation forms	Add evaluation forms if appropriate.

Appendix F Communications and media management plan template

Title page	
Background	Introduce how the exercise came about; including a brief introduction on when the exercise will occur and explain at what level (agency, local, regional, or national) the exercise will be conducted. State whether the exercise is a multi-agency or individual agency exercise.
Communications strategy	Will there be real media 'out of exercise' and playing media 'in exercise' requirements?
Objectives and KPIs	List any communications objectives and KPIs.
Participating stakeholders	Who is involved? How many agencies? What is the extent of their involvement or level of participation?
Target audiences	Who is/are the target audience?
Spokespeople	Who is/are the spokesperson(s)?
Key messages	Are there any key messages that should be used in exercise promotion?
Tools and tactics	Are there any tools or tactics to be used such as briefings, documents, groups, articles, media releases, etc.?
Real media (out of exercise)	How will the real media be handled and by whom? Will there be any media briefings prior to or during the exercise?
EXERCISE COMMUNICATIONS	
Exercise playing media	What will and will not be distributed to the media as part of the exercise? Will requests for broadcasts be exercised, etc.?
Communication between participating agencies	What sort of communication process will be followed for agencies participating in the exercise? How will media releases be distributed? What process will be followed to ensure messages are consistent if it is a large exercise with many different agencies participating?
Exercise public information processes	What are the media release protocols or processes within the exercise?
Exercise roles and responsibilities	What are the roles and responsibilities of people fulfilling media liaison or public information roles within the exercise?

Appendix G Standard message/inject template

[Exercise name] – EXERCISE ONLY –

[Insert date]
Time hrs
INJECT ID: [Insert number-insert time E.g.01-0635]

TO	
FROM	EXERCISE CONTROL Playing [insert agency name] _____
SUBJECT	

MESSAGE STARTS

MESSAGE ENDS

NOTES

* ANY ENQUIRIES ABOUT THIS INJECT SHOULD BE DIRECTED TO EXCON: [Insert name of EXCON member of staff and/or contact details]

[Exercise name] – EXERCISE ONLY – [Exercise name] – EXERCISE ONLY

Appendix H Evaluation Plan template

Title	Include the name of the exercise.
Introduction	Include a short statement on what you are evaluating and why.
Use of the evaluation	Who will use this evaluation information and what will it be used for?
Management of the evaluation	Who is responsible for conducting the evaluation? Who is the lead evaluator (if applicable)? Who is/are the evaluator(s)?
Aim of the evaluation	What are you aiming to get out of the evaluation?
Parameters of the evaluation	What is in scope? What is out of scope?
Key question(s) and sub questions	List the evaluation questions (and link them to the objectives and key performance indicators).
Related documents	Provide a list of documentation you need to source to conduct the evaluation. This could include plans, SOPs, guidelines etc.

Methods
• **data collection**
• **analysis**
	Identify the methods (data collection and analysis) that will be used to answer the sub questions.
	• Data collection – outline the methods and arrangements for collecting data. It may be useful to include a matrix showing which methods will apply to the various sub questions.
	• Analysis – outline the methods and arrangements for analysing the data.
	  ○ Who will collect the data?
	  ○ How will the analysis be conducted?
	  ○ Resource requirements

Quality control	Outline the process for quality control. This could include: • Debriefs and/or workshops to review data and its interpretation • Agreed criteria for terms such as 'timely', 'appropriate', 'efficient' and 'successful'. • Cross-checking evidence, findings and recommendations.
Security, safety and ethics	How will security, safety and ethics be managed? This may be in accordance with organisational requirements and existing procedures.
Key risks/mitigation strategy	Briefly discuss what could go wrong with the evaluation (not the exercise) and what steps will be taken to mitigate this.
Communication strategy	How will the findings of the evaluation be communicated?
Evaluator preparation	How will you train your evaluator(s) and provide them with the information they require to evaluate the exercise? *More information may be found in the 'exercise control and evaluator rules of play' template in the CDEM Exercises Guideline.*
Report	Who will compile and review the draft report? Once approved, how will it be made available to relevant parties?
Resources	Who is funding the evaluation component of the exercise (if applicable)?

Timeframe	Outline when the following will be completed: • When the evaluation plan will be completed • When the evaluation will be conducted • When the analysis will be conducted • When the draft report is due • When the final report is due
Attachments	Provide attachments to the report where applicable.

Appendix I Exercise control and evaluator rules of play template

Document purpose	Outline the document purpose.
Overview of exercise participation	**Timing of agency participation:** What is the date of the exercise and what are the core exercise hours? **Location of exercise participation venues:** Provide information (including maps if appropriate) on the location of participating venues. **Range of agencies participating:** Outline the range of agencies taking part in the exercise.
Exercise control team	**Who is the exercise control team made up of?** **What are their roles and responsibilities?** (E.g. exercise control staff – providing injects, tracking progress/outputs of injects or adjusting timeline progress, risk management. Exercise evaluators – observing and assessing processes, procedures, and techniques).
Exercise control team communications	**How will the exercise control team communicate?** Will there be any teleconferences?
Exercise rules	• All telephone communication should be prefaced with the words *"This is an Exercise [insert name] message".* • All written correspondence must be prefaced with the words: *"Exercise [insert name] only".* This includes faxes, emails, SitReps and briefing papers. • Exercise control members should draw any non-compliance to the attention of participants.
Operational communications	**Communications:** Will normal communications be available in the exercise or will there be periods during the exercise when telecommunications blackouts are imposed by exercise control, and hence phones and on-line communications will be deemed not available?
Media communications	Who will liase with the media?
Real events	Reference should be made to what happens if a real event occurs, or for whatever reason the exercise is to be stopped. The Exercise Coordinator will advise exercise participants agencies. Such a message will be preceded with the phrase "No duff".
Weather conditions and forecasts	Note any special information about weather conditions and forecasts.

Appendix J Sample master schedule of events

Introduction

A master schedule of events will differ from exercise to exercise depending on the size and complexity of the project. This is a sample taken from a medium sized exercise.

Exercise in confidence – For limited distribution to exercise planning team and control staff only

Exercise [insert name] **master schedule of events**

Last updated: [insert date]

Serial	Date	Time	Agency	Source	Event	Control documents	Resources	Role players	Comments
01	26.05.09	0655	All		Major earthquake occurs on alpine fault				
02	26.05.09	0715	All	GNS Science	Preliminary earthquake report	CD01 – App notification			
03	26.05.09	0730	All	MCDEM	National Advisory – Earthquake	CD02 – Email and SMS notification	National Warning System		
04	26.05.09	0735	All	MCDEM	National media release	CD03 – Email	National Warning System		

Appendix K Sample evaluation tool

Introduction

Evaluation tools differ from exercise to exercise depending on the size and complexity of the project. This is a sample taken from a medium sized exercise.

Objective [insert number]	**[insert objective wording]** Please comment on any aspects of the objective you observed.		
KPI description	**Evaluation criteria**	**Yes/No** Circle or N/A for not observed	**Comment:**
[insert KPI description]	[insert criteria]	**Yes/No**	
	[insert criteria]	**Yes/No**	
	[insert criteria]	**Yes/No**	
	[insert criteria]	**Yes/No**	

Appendix L End of exercise report template

Title page	
Administrative handling instructions	
Table of contents	
Executive summary	
Introduction	Introduce how the exercise came about including a brief introduction on when the exercise will occur and what level of exercise it is (according to the National Exercise Programme tiers). State whether the exercise is a multi-agency or individual agency exercise.
Exercise overview	Include information such as the exercise name, date, duration, etc.
Exercise design summary	Include the overarching exercise purpose; objectives, capabilities, activities, and tasks identified for validation; a summary of designated initiating event(s)/key scenario events; and exercise design issues.
Analysis of capabilities	Describe how the exercise met the aim and objectives, including overall performance of the agency (or agencies) participating.
Observations, conclusions, and recommendations	
Corrective action plan	Include the corrective action plan.
Lessons learned	(optional)
Participant feedback summary	(optional)
Exercise events summary table	(optional)
Performance ratings	(optional)
Definitions and abbreviations	
Attachments	A collection of relevant documents that provide extra detail, arranged in a logical order.

Appendix M Bibliography and references

Introduction

This guideline has relied heavily on material obtained from a variety of sources and acknowledgement must be made in particular to the following resources:

Revised

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