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Australian Institute for  
**Disaster Resilience**

**AUSTRALIAN EMERGENCY  
MANUAL**

**COMMUNITY EMERGENCY  
PLANNING GUIDE**  
SECOND EDITION

**NATURAL DISASTERS ORGANISATION**

**FOR OFFICIAL USE ONLY**

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## THE AUSTRALIAN EMERGENCY MANUAL SERIES

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AEM	—	LAND SEARCH OPERATIONS (incorporating Urban Search)	A
AEM	—	FLOOD RESCUE BOAT OPERATIONS	A
AEM	—	STORM DAMAGE OPERATIONS	A
AEM	—	COMMUNITY EMERGENCY PLANNING GUIDE	A
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AMENDMENT LIST

Amendment		Effected	
No.	Date	Signature	Date

**FOREWORD**

THE AUSTRALIAN EMERGENCY MANUAL - COMMUNITY EMERGENCY PLANNING GUIDE IS DESIGNED TO ASSIST IN EMERGENCY PLANNING AT THE COMMUNITY LEVEL.

WHILST THIS MANUAL FOCUSES PRIMARILY ON PLANNING NEEDS AT THE COMMUNITY LEVEL, THE PROCESS AND GUIDELINES ARE EQUALLY APPLICABLE TO THE DEVELOPMENT OF PLANS AT OTHER LEVELS.

THE MANUAL HAS BEEN DEVELOPED BY A NATIONAL WORKING PARTY, REPRESENTATIVE OF EACH STATE AND TERRITORY EMERGENCY SERVICE (S/TES). THE WORKING PARTY WAS SPONSORED BY THE NATURAL DISASTERS ORGANISATION (NDO) ACTING ON AN INITIATIVE BY THE 1990 NATIONAL CONFERENCE OF DIRECTORS (NDO & S/TES).

THE MANUAL HAS BEEN COMPILED FROM INFORMATION PROVIDED BY VARIOUS S/TES AND THE AUSTRALIAN COUNTER-DISASTER COLLEGE, NDO AND ADAPTED TO REFLECT A NATIONAL STRATEGY.

THE WORKING PARTY EXPERIENCED THE PROBLEM OF VARIATION IN USE AND INTERPRETATION OF TERMINOLOGY BY STATES AND TERRITORIES. (AN EXAMPLE IS THE USE OF THE TERMS "EMERGENCY" AND "DISASTER". THROUGHOUT THE MANUAL, "EMERGENCY" IS USED TO REPRESENT BOTH). A GLOSSARY IS THEREFORE INCLUDED. VARIATION ALSO OCCURS IN THE STRUCTURE AND LAYOUT OF PLANNING DOCUMENTS. WHERE APPROPRIATE, THEREFORE, DETAILED SPECIFIC REQUIREMENTS MAY BE ADDED AT THE END OF THE MANUAL.

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0-6  
**CONTENTS**

	<b>Page</b>
<b>AMENDMENT LIST</b>	<b>iii</b>
<b>FOREWORD</b>	<b>v</b>
<b>CONTENTS</b>	<b>vii</b>
	<b>Para</b>
<b>CHAPTER ONE</b>	<b>WHY PLAN?</b>
	General 1.01
	PPRR 1.03
	Prepared Community 1.04
	Benefits of Planning 1.05
	Legal Protection 1.06
	The Planning Process 1.07
	Record of Commitment 1.08
	Summary 1.10
<b>CHAPTER TWO</b>	<b>PLANNING PROCESS OVERVIEW</b>
	What is the Planning Process? 2.01
	Planning Process Steps 2.03
	Determine the Authority to Plan 2.04
	Establish the Planning Committee 2.05
	Conduct Hazard Analysis 2.06
	Set Planning Objectives 2.08
	Apply the Management Structure 2.09
	Determine Responsibilities 2.10
	Analyse Resources 2.11
	Develop Emergency Management Arrangements and Systems 2.12
	Document the Plan 2.13
	Test the Plan 2.14
	Review the Plan 2.15
	Summary 2.16
<b>CHAPTER THREE</b>	<b>THE PLANNING COMMITTEE</b>
	Planning Committee Composition 3.01
	Commitment to Planning Process 3.03
	Terms of Reference 3.04
	Authority to Plan 3.05
	Planning Aim 3.06
	Planning Assumptions 3.07
	Planning Committee Meetings 3.08
	Emergency Management Briefing 3.09
	Summary 3.10
<b>CHAPTER FOUR</b>	<b>HAZARD ANALYSIS</b>

General	
A Simple Process	4.01
Definitions	4.02
Benefits	4.03
A Hazard Analysis Process	4.04
Step 1 - Identify Hazards	4.05
Step 2 - Describe Hazards	4.06
Step 3 - Describe Community and Environment	4.07
Step 4 - Describe Effects	4.08
Step 5 - Prioritise Hazards	4.09
Step 6 - Determine Planning Objectives	4.10
Summary	4.12
Annex A - What if?	
Annex B - Factor Analysis	
Annex C - The FEMA Model	
Annex D – SMUG Hazard Priority System	

**CHAPTER FIVE**

**MANAGEMENT STRUCTURE**

General	
Hierarchy of Plans	5.01
Management Structure	5.03
Command, Control and Coordination	5.04
Activation	5.05
Functional Sub-Committees	5.06
Summary	5.09

**CHAPTER SIX**

**DETERMINE RESPONSIBILITIES**

General	6.01
Describe Roles and Responsibilities	6.04
Assign Roles and Responsibilities	6.06
Summary	6.07

**CHAPTER SEVEN**

**ANALYSE RESOURCES**

General	7.01
Needs Analysis Matrix	7.02
PPRR Considerations	7.03
Resource Shortfall or Surplus	7.05
Summary	7.09

**CHAPTER EIGHT**

**DEVELOP EMERGENCY MANAGEMENT ARRANGEMENTS AND SYSTEMS**

General	8.01
Prevention	8.02
Preparedness	8.04
Public Education	8.05
Communications	8.06
EOC Management	8.07
Preparation and Issue of Warnings	8.08



## FOR OFFICIAL USE ONLY

0-8

Evacuation Management	8.09
Training and Testing	8.10
Financial Management	8.13
Response	8.14
Recovery	8.15
Summary	8.16

## CHAPTER NINE

### DOCUMENT THE PLAN

Write the Plan for the User	
User Groups	9.01
User Needs	9.03
Shape the Plan Appropriately	9.04
Prepare a Practical Plan	9.05
Parts of the Plan	
Contents	9.06
Authority	9.07
Distribution List	9.08
Plan Aim and Objectives	9.09
Scope	9.10
Geographic/Topographic Description	9.11
Hazard Analysis Results	9.12
Activation	9.13
Management Structure	9.14
Management Systems for Reponse and Recovery	9.15
Functional Plans	9.16
Glossary	9.17
Other Plans	9.18
Sub-Plans	9.19
Special Plans	9.20
Structure the Plan for Broad Input	9.21
Avoid Planning in Isolation	9.22
Summary	9.23
Annex A - Plan Documentation	
Annex B - Suggested Distribution Format	
Annex C - Suggested Amendment Record Format	
Annex D - Sample Objectives for a Local Main Plan	
Annex E - Sample Objectives for a Local Functional Plan	

## CHAPTER TEN

### TEST THE PLAN

General	10.01
Benefits of Testing	10.02
Types of Exercise	10.03
Table Top Exercise	10.04
Tactical Exercise Without Troops (TEWT)	10.05
Field Exercise	10.06
Exercise Considerations	10.07
Exercise Control	10.09
Exercise Debrief	10.10

FOR OFFICIAL USE ONLY

	0-9	
	Follow-Up Action	10.12
	Summary	10.14

**CHAPTER ELEVEN      REVIEW THE PLAN**

General	
Minimum Review Requirement	11.01
Plan Amendments	11.02
Review Schedule	11.04
Summary	11.07
Annex A - Criteria for Review of Emergency Management Plans	

**GLOSSARY**

STATE/TERRITORY PLANNING REQUIREMENTS, STRATEGIES AND FORMATS  
(Insert as required)

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# CHAPTER ONE

## WHY PLAN?

### GENERAL

**1.01** The economic and social effects of emergencies including destruction of property, dislocation of communities and loss of life are increasing in scope and severity.

**1.02** Coping with hazards gives us our reason and focus for planning. If hazards, natural or technological did not exist, or threaten, there would be no reason to plan. Hazards exist within all communities whether they are recognised or not.

### 1.03 PPRR

The community's ability to cope with the impact of these hazards depends mainly on whether it has prepared plans and programs for:

- a. **prevention** - regulatory and physical measures to ensure that emergencies are prevented, or their effects mitigated;
- b. **preparedness** - arrangements to ensure that, all resources and services which may be needed, can be rapidly mobilised and deployed;
- c. **response** - actions taken, during and immediately after a hazard impact to ensure that its effects are minimised; and
- d. **recovery** - arrangements to ensure that a community is restored to normal.

### 1.04 PREPARED COMMUNITY

In order to protect life, property and the environment, it is necessary to have:

- a. an alert, informed and prepared community;
- b. an understanding of hazards that the community faces;
- c. a program for prevention and mitigation of emergency events;
- d. identification of those responsible for controlling and coordinating emergency management;
- e. acceptance of support roles and responsibilities;
- f. cooperation between emergency services and others, and acceptance of their roles in emergency management;
- g. a coordinated approach to the use of all resources; and
- h. arrangements to enable communities to recover from emergencies.

## **BENEFITS OF PLANNING**

**1.05** Emergency planning is the key to meeting these requirements. Communities which have effectively applied the emergency planning process are better able to cope with the impact of hazards.

### **1.06 LEGAL PROTECTION**

Emergency planning may help protect organisations from litigation arising out of the “duty of care” provisions in common law. The general obligation of fulfilling duty of care, and the specific requirements under most state/territory legislation, indicate clearly the need for communities to develop, test and review emergency plans.

## **THE PLANNING PROCESS**

**1.07** There is a proven process for preparation of emergency plans. The key to emergency management is the planning process, from which all related programs, strategies and arrangements should flow.

### **1.08 RECORD OF COMMITMENT**

The planning process enables agreements to be reached between people and organisations to meet their communities' needs during emergencies. The plan becomes a record of the commitments made to perform certain actions, provide resources, etc.

**1.09** Chapter Two presents an overview of the emergency planning process and the remaining chapters of this guide present and discuss each step of this process.

## **SUMMARY**

**1.10** Coping with the impact of hazards gives us our reason to plan. A community's ability to cope effectively will depend on whether it has prepared plans covering:

- a. prevention;
- b. preparedness;
- c. response; and
- d. recovery.

**1.11** In most states and territories, legislation requires preparation, testing and review of emergency plans.

**1.12** The planning process is the key to emergency management. From this process flow all emergency management programs, strategies and arrangements.

**1.13** The planning process allows agreements to be reached between people and organisations. The written plan becomes a formal record of commitments made.

## CHAPTER TWO

### PLANNING PROCESS OVERVIEW

#### WHAT IS THE PLANNING PROCESS?

- 2.01** The planning process is a sequence of steps by which an emergency management plan is prepared.
- 2.02** The interactive process of planning should result in:
- a. an understanding of other agencies roles and responsibilities;
  - b. strengthening of emergency networks;
  - c. improved public awareness and education strategies;
  - d. emergency communications, public warning and other operational arrangements; and
  - e. a simple written plan.

**NOTE:** The written plan is only one outcome of the planning process.

#### PLANNING PROCESS STEPS

- 2.03** Figure 2:1 provides an outline of the steps in the suggested planning process. These steps are briefly explained in this chapter. Each step is then individually detailed in a following chapter.

Figure 2:1

#### **2.04 DETERMINE THE AUTHORITY TO PLAN**

The authority to plan is established either under legislation, by government direction, or by community agreement. Authorisation of a plan gives it credibility, recognition, and promotes its acceptance.

#### **2.05 ESTABLISH THE PLANNING COMMITTEE**

The formation of a planning committee encourages involvement of all appropriate organisations. The planning committee should contain

representatives of all organisations which are involved in emergency management.

## **2.06 CONDUCT HAZARD ANALYSIS**

A hazard analysis defines those adverse events, both manmade and natural, that may impact on the community. Through this process the need, scope and priorities for planning are identified.

**2.07** Effective hazard analysis must consider the effects hazards have on the community and the interaction of both with the environment.

## **2.07 SET PLANNING OBJECTIVES**

Planning objectives are based on the results of the hazard analysis and detail the required emergency management strategies.

## **2.08 APPLY THE MANAGEMENT STRUCTURE**

An accepted emergency management structure for control and coordination arrangements is normally defined by legislation or government direction. This structure is applied by the planning committee to the organisations that exist in the community.

## **2.09 DETERMINE RESPONSIBILITIES**

The lead combat and support roles and responsibilities of participating organisations may be determined by:

- a. legislation;
- b. government direction;
- c. inter-service agreement; or
- d. the planning committee.

**NOTE: This is a vital step in the planning process. Unless agreement on roles and responsibilities is reached, planning cannot continue.**

## **2.10 ANALYSE RESOURCES**

A resource analysis is undertaken to identify:

- a. the resources required for effective emergency management;
- b. the resources currently available within the community; and
- c. any shortfalls (and surpluses) that exist. As shortfalls are identified, arrangements to overcome them are made. These arrangements may be prescribed by a higher level plan.

## **2.11 DEVELOP EMERGENCY MANAGEMENT ARRANGEMENTS AND SYSTEMS**

The planning committee identifies and develops specific management arrangements for preparedness, response and initial recovery. The group may also identify prevention and/or mitigation opportunities, and refer these to appropriate agencies. There is also a requirement to design emergency management systems, which may include:

- a. communications;
- b. public education;
- c. emergency operations centre management;
- d. effective liaison;
- e. information management;
- f. preparation and dissemination of public warnings;
- g. public information;
- h. resource management;
- i. training and performance appraisal; and
- j. financial management.

#### **2.12 DOCUMENT THE PLAN**

In order to minimise errors and omissions, detailed documentation begins as soon as the planning process commences. Documents resulting from the planning process may include:

- a. the results of hazard analysis;
- b. the main plan;
- c. functional and special plans; and
- d. emergency service procedures.

The final agreed documents are printed and distributed to users according to their operational need.

#### **2.13 TEST THE PLAN**

Once documentation is complete, the response and recovery aspects of the plan should be tested (exercised) to measure the extent to which the planning objectives have been achieved.

#### **2.14 REVIEW THE PLAN**

It is important that the plan is regularly reviewed and updated. Review of the plan may result from:

- a. operations;

- b. exercises;
- c. a prescribed program for reviewers; or
- d. significant changes to hazards, the community, or the environment.

**NOTE: Planning is a continuous process. The written plan is a living document, constantly being reviewed and up-dated.**

## **SUMMARY**

- 2.16** The planning process is a sequence of steps by which an emergency management plan is prepared.
- 2.17** Output from the process will include the necessary emergency management systems and arrangements, as well as simple written plans.
- 2.18** The written plan should be constantly reviewed and updated.

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## **CHAPTER THREE**

### **THE PLANNING COMMITTEE**

#### **PLANNING COMMITTEE COMPOSITION**

**3.01** The planning committee is representative of the community and may consist of the following:

- a. Chairperson.
- b. Executive Officer.
- c. Representatives from:
  - (1) police;
  - (2) fire services;
  - (3) ambulance, health and medical;
  - (4) State/Territory Emergency Service;
  - (5) local government authority;
  - (6) welfare authorities; and
  - (7) utility agencies (eg water, electricity).
- d. Other persons as required from time to time.

**3.02** Committee composition may mirror higher level emergency planning committees. Representatives must be sufficiently senior to commit their organisations to decisions made by the planning committee.

#### **3.03 COMMITMENT TO THE PLANNING PROCESS**

Representatives should be committed to the planning process, and their continuity of membership maintained. Alternate members should be identified and available to attend planning meetings as required.

#### **TERMS OF REFERENCE**

**3.04** The committee must determine its terms of reference, which include:

- a. authority to plan;
- b. planning aim; and
- c. planning assumptions.

#### **3.05 AUTHORITY TO PLAN**

The authority to plan is established either under legislation, by government direction, or by organisations, or community agreement.

### **3.06 PLANNING AIM**

The planning aim is a broad statement of intent in respect of arrangements for preparation for, response to, and initial recovery from emergencies within the community. The committee should include, in its aim, matters relating to hazard prevention and mitigation.

### **3.07 PLANNING ASSUMPTIONS**

Planning is normally based on assumptions relating to the nature and effects of hazards, availability of resources, and reactions of people in times of emergency. If assumptions have a possible impact on planning, they should be clearly stated (eg a flood plan based on occurrence of a maximum flood event of 1% probability per year).

## **PLANNING COMMITTEE MEETINGS**

**3.08** Agreement needs to be reached by members of the planning committee on the frequency and method of conducting its meetings.

Aspects which should be considered are:

- a. authority or reasons for calling meetings;
- b. method of notification of meeting dates and details;
- c. frequency and timing (appropriate for the majority of representatives);
- d. representation (by key players and from support organisations);
- e. meeting method (chairperson, agenda, minutes, recommendations, follow-up action); and
- f. in-servicing (administrative and technical consultancy support).

### **3.09 EMERGENCY MANAGEMENT BRIEFING**

At an early stage, new planning committees should be briefed by an emergency management professional on issues of hazard identification and analysis, structure of local plans, and testing and maintenance of plans. In addition, selected representatives should be encouraged to attend courses and seminars on emergency planning.

## **SUMMARY**

**3.10** The planning committee is representative of the community. Its composition may mirror that of a higher level committee.

**3.11** Representatives must be sufficiently senior to commit their organisations to the committee's agreed decisions.

**3.12** The committee must determine terms of reference in respect of its:

- a. authority to plan;
  - b. planning aim; and
  - c. planning assumptions.
- 3.13** Agreement needs to be reached on the frequency, format, and method of conducting committee meetings.
- 3.14** The planning process is the key to emergency management. From this process flows all emergency management programs, strategies and arrangements.
- 3.15** The planning process allows agreements to be reached between people and organisations. The written plan becomes a formal record of commitments made.

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# CHAPTER FOUR

## HAZARD ANALYSIS

### GENERAL

#### 4.01 A SIMPLE PROCESS

This chapter describes a simple process for identifying and analysing hazards and their effects upon a community. This process, as part of the overall planning process;

- a. identifies the planning problem;
- b. enables planning objectives to be written; and
- c. provides the basis of emergency management arrangements.

**NOTE: This is a purely qualitative process and it may be necessary to consult quantitative risk analysts for some particular specialised hazards.**

#### 4.02 DEFINITIONS

The following definitions are used for the terms “hazard” and “hazard analysis”:

- a. **Hazard** - A potential or existing condition that may cause harm to people or damage to property or the environment.
- b. **Hazard Analysis** - That part of the planning process which identifies and describes hazards and their effects upon the community.

#### 4.03 BENEFITS

The benefits of hazard analysis are that:

- a. a range of possible hazards is identified;
- b. the most likely and damaging hazards are highlighted;
- c. effects of these hazards on the community are determined; and
- d. a firm basis for community emergency management planning is provided.

### A HAZARD ANALYSIS PROCESS

- 4.04** Figure 4:1 outlines a hazard analysis process. Each step is explained below in detail:

Figure 4:1

#### 4.05 STEP 1 - IDENTIFY HAZARDS

The planning committee can identify hazards in the community by using the following methods:

- a. Involve the whole planning committee in the process.
- b. Research the history of previous hazards in the community. Consult local historical records, old newspapers, local government records etc, for evidence of previous emergencies.
- c. Ensure both “natural” and “man-made” are identified. Be completely objective.
- d. Go out and inspect the community; sitting in an office is not good enough. This must be an active process.
- e. Brainstorm, using the complete planning committee, to ensure no hazard has been overlooked.
- f. Draw information from emergencies in other comparable communities.
- g. Consider hazards identified by higher level planning committees.

The output of this step is a list of hazards, including those which have no history of occurrence in the community area. List hazards randomly; do not attempt to rank them at this stage. Some hazards may be overlooked despite the thoroughness of analysis. Therefore, emergency planning must be flexible.

#### 4.06 STEP 2 - DESCRIBE HAZARDS

In order to understand the nature of identified hazards, search out detailed information. Do not involve consideration of the effects on the community of each hazard at this stage. Each hazard is described in terms of:

- a. **Frequency/History** - For each hazard listed, examine local history of the event. How often has it occurred? If there is no local history, look to the broader picture elsewhere. Do not ignore the possibilities of emergencies where no localised previous history exists.
- b. **Severity/Intensity** - This is not a description of the potential effects of a hazard. The severity or intensity describes how fast, strong, high, intense, etc, the hazard will be in the area.

- c. **Time-Frame** - What is the duration of the hazard impact? Is prior warning of the threatened population possible?
- d. **Geographical Extent** - What land area will be affected by the hazard impact? What additional area could be threatened?
- e. **Manageability** - Can we do anything to control the hazard impact?

**4.07 STEP 3 - DESCRIBE COMMUNITY AND ENVIRONMENT**

- a. A full description of the community and its environment should include consideration of the following:

(1)	<b>Demography</b>	population density/distribution age distribution mobility useful skills and knowledge awareness of hazards vulnerable groups
(2)	<b>Culture</b>	traditions ethnicity social values
(3)	<b>Economy</b>	trade agriculture/livestock investments industries
(4)	<b>Infrastructure Networks</b>	volunteer organisations service clubs communication networks local government essential services community assets
(5)	<b>Environment</b>	Landforms/geology waterways climate/weather native flora and fauna

- b. Vulnerable groups, eg the aged, infirm, children, non-English speaking, and their location in the community, need to be given special attention:
  - (1) Assess the proportions of each group as part of the whole population.
  - (2) Identify any specific localities where there are concentrations of vulnerable people, eg schools, retirement villages, in proximity to a hazard source.
  - (3) For each group identified, note problems which might be expected under emergency conditions.
- c. Also identify those groups in the community that have specialist skills or knowledge that may be useful in emergency management.

**4.08 STEP 4 - DESCRIBE EFFECTS**

- a. The physical and social fabric of a community can be altered by an emergency. Planning committees must consider the range of effects that will arise from any one event, and answer the following questions:
  - (1) What areas are affected?
  - (2) Who is affected (directly and indirectly)?

- (3) What property is affected?
  - (4) What facilities and services are affected?
  - (5) What are the potential problems?
- b. The “What If?” analysis and “Factor Analysis” (Annexes A and B) can be used to assist groups in conducting this step.
  - c. Specialised risk analysis may be required in some cases. This is best undertaken by technically qualified people acting as consultants to the planning committee, eg local government engineers, or risk analysts.

#### **4.09 STEP 5 - PRIORITISE HAZARDS**

- a. To define the planning task, it may be worthwhile to assign a priority order to hazards. This step can be assisted by using certain tools, eg “Factor Analysis”, “FEMA Model”, and “SMUG Hazard Priority System” (Annexes B, C, and D).
- b. If the tools in the Annexes are applied to local hazards, it is important that more than one be used. The results of using a single tool may not be valid. After applying a number of tools, results should be compared.
- c. Prioritising hazards enables a planning committee to concentrate its **initial** planning efforts on those hazards which may have the greatest effect on the community.

#### **4.10 STEP 6 - DETERMINE PLANNING OBJECTIVES**

An effective hazard analysis will give a planning committee answers to the following vital questions:

- a. What hazards are likely?
- b. How frequently could they occur?
- c. What effects will result?
- d. Which sections of the community will be vulnerable and will provide information to assist in answering the following questions:
  - (1) What do we need to do?
  - (2) What resources do we need? Planning objectives are based on these questions, and will need to address:
    - (a) prevention and mitigation programmes; and
    - (b) preparedness, reponse and recovery requirements.

**4.11** Hazard analysis will be the basis of decisions on whether emergency planning is necessary for each hazard and, where so, its objectives and scope. It will determine the need to put into place emergency management

systems and arrangements, and highlight areas where functional support and special planning will be required.

## **SUMMARY**

- 4.12** Hazard analysis is that part of the planning process which identifies and describes hazards and their effects upon the community.
- 4.13** The analysis involves:
- a. identifying hazards;
  - b. describing hazards;
  - c. describing community and environment;
  - d. describing effects;
  - e. prioritising hazards; and
  - f. determining planning objectives.
- 4.14** Hazard analysis provides the basis for emergency planning and arrangements.

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## WHAT IF?

### INTRODUCTION

1. This process is drawn from industry but has application in hazard analysis and emergency planning. The main aim of “What If?” is to consider the consequences of emergency scenarios in the broadest possible terms.

#### Steps:

1. Define study boundaries.
2. Gather information.
3. Define the team.
4. Conduct the “What If?”.
5. Record results.
6. Report findings.

### STEP 1 - DEFINE STUDY BOUNDARIES

2.
  - a. List likely consequences of the hazard under investigation.
  - b. What are likely levels of risk to the public, to rescue and relief workers?
  - c. What is the economic risk to the community?
  - d. Define physical boundaries, ie impose realistic limitations on physical boundaries.

### STEP 2 - GATHER INFORMATION

3.
  - a. A detailed knowledge of the hazard is required.
  - b. What are likely consequences (in fine detail)?

### STEP 3 - DEFINE THE TEAM

4. Usually three or four people who have:
  - a. knowledge of vulnerable groups in the community;
  - b. knowledge of the hazard; and
  - c. experience in techniques of evaluation of consequences and relevant response procedures.

### STEP 4 - CONDUCT THE “WHAT IF?”

5.
  - a. Begin with a general explanation of the problem.

- b. Ask “What If?” questions to expand the problem and to arrive at a range of options which should reflect the combined skills and interaction of the team.

#### **STEP 5 - RECORD THE RESULTS**

- 6.
  - a. What If? - What were the questions asked?
  - b. Consequences - What are the consequences of the What If? questions?
  - c. Recommendations - What would be realistic recommendations for planning?
  - d. Problems - What problems of implementation are envisaged?

#### **STEP 6 - REPORT THE FINDINGS**

- 7. Report findings to the:
  - a. emergency management committee;
  - b. emergency services; and
  - c. supporting organisations.

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## FACTOR ANALYSIS

### AIM

1. Factor analysis aims at providing specific information about each hazard and is useful in determining specific management needs in all areas, particularly response. It encompasses factors which are part of the nature of each hazard. These are:
  - a. frequency;
  - b. duration;
  - c. speed of onset;
  - d. scope;
  - e. intensity;
  - f. predictability;
  - g. forewarning; and
  - h. manageability;

### DEFINITIONS

2.
  - a. **Frequency** is how often the event is likely to occur, for example, whether it is annual, seasonal, occasional or rare.
  - b. **Duration** is the expected time impact would last.
  - c. **Speed of Onset** means the rapidity with which the hazard impacts.
  - d. **Scope** refers to the area of the community impacted, measured in terms of geographical and social scope.
  - e. **Intensity** (or destructive potential) refers to the worst case scenario of how destructive in terms of casualties and property damage the hazard impact could be.
  - f. **Predictability** is the ability of the community to foresee the occurrence of a hazard impact.
  - g. **Forewarning** is the period between warning and impact.
  - h. **Manageability** is the degree to which a community can intervene and manage a hazard to reduce its potential impact. A fire or flood may be partially controlled by response techniques (eg fire fighting, sandbagging etc). An earthquake or cyclone offers no such opportunity.

## APPLICATION

3. The importance of factor analysis lies in its application in determining management requirements, human resources and material resources. This implies two questions:
  - a. Given the nature of the hazard, what particular capability will management systems need?
  - b. What human and material resources will I require? As well as tailoring requirements to each hazard, it enables planners to establish commonalities which apply to several hazards.

## FACTOR ANALYSIS MATRIX

4. Example: **Hazard - Cyclone**

<b>FACTOR</b>	<b>ANALYSIS</b>	<b>PLANNING IMPLICATIONS</b>
<b>FREQUENCY</b>	Annual: November	A capability will be necessary for seasonal phasing of planning, training and exercising. Public education will need more intensity immediately prior to season.
<b>DURATION</b>	6 Hours plus	There will be response down time during cyclone impact when no or only limited movement by response agencies will be possible.
<b>SPEED OF ONSET</b>	Generally slow	Additional warning time may be available for community preparedness, emergency services standby and mobilisation of resources.
<b>SCOPE</b>	Could affect whole region	External assistance may be an early requirement. Limited capability for neighbouring locality support.
<b>INTENSITY</b>	Severe to very severe. Loss of life and injury substantial. Buildings, houses destroyed. Disruption of roads,	Mobility of response teams may be a problem. Post-event evacuation of large areas may be essential. Reconnaissance will be a

	utilities, communications.	major time and resource demand. Large scale response and recovery programs may be necessary.
<b>PREDICTABILITY</b>	Adequate through historical records, climatology and meteorological observation.	Careful historical study required, but care needed on statistical seasonal interpretation.
<b>FOREWARNING</b>	3–24 hours	Warning systems linked with public education campaign necessary for effective response.
<b>MANAGEABILITY</b>	Nil	Emphasis should be on effective preparedness and response planning. Mitigation measures will be an important part of cyclone management.

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# THE FEMA MODEL

## INTRODUCTION

1. The FEMA Model utilises four criteria in a rating and scoring system. These criteria are described below.

## HISTORY

2. If a certain type of emergency has occurred in the past, then it is known that there were sufficient hazardous conditions to cause the event. Unless these conditions no longer exist, or unless they have been substantially reduced, a similar emergency may happen again. Lack of a past occurrence however does not mean that there is no future emergency potential.

## VULNERABILITY

3. Vulnerability attempts to determine the number of people and the value of property which may be vulnerable in an emergency. A number of factors are implied such as:
  - a. vulnerable groups (aged, disabled, children);
  - b. population densities;
  - c. location of population groups in relation to hazard;
  - d. location and value of property in relation to hazard; and
  - e. location of vital facilities (eg hospitals) in relation to hazard.

Vulnerability is assisted by overlaying individual risk maps of identified hazards on a map of the community.

## MAXIMUM THREAT

4. This is essentially the “worst case” scenario. It assumes the most serious event possible and the greatest impact; it is expressed in terms of human casualties and property loss. Secondary events (such as dam failure following an earthquake) also need to be considered.

## PROBABILITY

5. Probability is the likelihood of an event occurring and is expressed in terms of chances per year that an event of a specific intensity or greater will occur. There is some link between probability and history; however, since some hazards develop with technological change but without historical precedent (eg hazardous materials incidents) an analysis of both history and probability is necessary.

## HOW TO RATE HAZARDS

6. A general rating of low, medium or high is made for each criterion.

Follow these steps:

a. **HISTORY**

<b>If an emergency event has occurred:</b>	<b>Evaluation</b>
0 - 1 Times in the past 100 years	Low
2 - 3 Times in the past 100 years	Medium
4 or more time in the past 100 years	High

b. **VULNERABILITY**

(1) <b>Vulnerability of people</b>	<b>Evaluation</b>
<1%	Low
1 - 10 %	Medium
>10%	High

  

(2) <b>Vulnerability of property</b>	<b>Evaluation</b>
<1%	Low
1 - 10 %	Medium
>10%	High

c. **MAXIMUM THREAT**

<b>Area of the community impacted</b>	<b>Evaluation</b>
<5%	Low
5 - 25%	Medium
>25%	High

d. **PROBABILITY**

<b>Chances per year of an emergency</b>	<b>Evaluation</b>
Less than 1 in 1000	Low
Between 1 in 1000 and 1 in 10	Medium
Greater than 1 in 10	High

**SCORING AND WEIGHTING**

7. For each evaluation score the following:

Low	1 point
Medium	5 points
High	10 points

8. Some criteria have been determined as more important than others, the following weighting factors have been established:

History	X2
Vulnerability	X5
Maximum Threat	X10
Probability	X7

9. A composite score for each hazard is therefore arrived at by multiplying the score by the weighting factor, then adding the four scores.

**For example:**

#### **FLOOD**

<b>Criterion</b>	<b>Evaluation</b>	<b>Score &amp; Weighting</b>	<b>Total</b>
History	High	10 x 2	20
Vulnerability	Medium	5 x 5	25
Maximum Threat	High	10 x 10	100
Probability	Medium	5 x 7	35
<b>TOTAL</b>			<b>180</b>

#### **THRESHOLD**

10. The FEMA Model suggests a threshold, which is used to refine a ranked list of hazards. The proposed threshold is a score of 100 points.
10. **ALL HAZARDS** which score more than **100** points may receive higher priority in emergency planning.
12. Hazards scoring less the **100** points, whilst receiving a lower priority, will still need to be considered.
13. This process should be repeated for all identified hazards and for a range of scenarios with the same hazard.



## SMUG HAZARD PRIORITY SYSTEM

### DESCRIPTION

1. This system, known by the acronym for **S**eriousness, **M**anageability, **U**rgency and **G**rowth, allows a direct comparison of a number of possible hazards, through ratings of high, medium or low, against four separate factors which are common to all hazards.
2. Compare all hazards, using one factor at a time, recording results on the table at Figure 4D:1. Tick the assigned rating of H, M, or L, and provide a brief explanation to support the rating. The factors and rationale for ratings are detailed below.

### SERIOUSNESS

3. Seriousness is the relative impact of a hazard in terms of dollars and/or people.
4. If a hazard represents a threat to the largest number of people and/or would involve the highest financial cost, then give that hazard a high rating. Then rate all identified hazards as either high, medium or low in terms of seriousness. It does not matter if there are a number of “highs” and, if the group cannot agree on a rating, give the highest one just to be on the safe side.

### MANAGEABILITY

5. Manageability refers to whether anything can be done about the hazard. If the impact of the hazard can be lessened, then the rating for manageability would be high. If it were manageable only after it had occurred, then the rating would be low.

### URGENCY

6.
  - a. High: indicates that something needs to be done about it now.
  - b. Medium: indicates that something ought to be done about it in the near future.
  - c. Low: there is no urgency and it would be appropriate to plan for action in the medium future.

### GROWTH

7. If nothing is done about the hazard, will it grow worse or remain as it currently is. If the hazard would increase quickly, it should be rated “high”. If it would grow gradually, then rate it “medium”. If it will stay static, then rate it “low”.
8. Having allocated a relative rating to all identified hazards on each of these factors, review the list. Those with the most highly rated factors are those which warrant a high priority for attention.

9. It is very important to provide evidence in support of your ratings, so that justification can be clearly seen.

Figure 4D:1

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# CHAPTER FIVE

## MANAGEMENT STRUCTURE

### GENERAL

#### 5.01 HIERARCHY OF PLANS

A hierarchy of plans normally exists within which plans at lower levels dovetail into plans at the next highest level, as shown in Figure 5:1.

Figure 5:1

**5.02** The existence of this hierarchy indicates the requirement for compatibility between plans. It is thus essential that the command and control, and roles and responsibility arrangements in a plan are compatible with other plans to which it relates.

#### 5.03 MANAGEMENT STRUCTURE

An agreed emergency management structure should apply at all levels for planning and operations. The structure should encompass the everyday operational structures of emergency management organisations, and must be compatible with arrangements at state/territory level.

#### 5.04 COMMAND, CONTROL AND COORDINATION

In particular, it is the management structure which prescribes command, control and coordination arrangements to apply during multi-service operations. These arrangements are:

- a. **Command** - Direction of members and resources of an organisation in performance of its agreed roles and tasks. Authority to command is established in legislation or by agreement within an organisation. Command relates to an organisation and operates vertically within it.
- b. **Control** - Overall direction of emergency management activities in a designated emergency situation. Authority for control is established in legislation or in an emergency plan, and carries with it responsibility for tasking and coordinating other organisations in accordance with the

needs of the situation. Control relates to **situations** and operates horizontally across organisations.

- c. **Coordination** - Bringing together organisations to ensure effective emergency management response and recovery, and is primarily concerned with systematic acquisition and application of resources (people, material, equipment etc) in accordance with requirements imposed by the threat or impact of an emergency. Coordination relates primarily to resources and operates vertically within an organisation (as a function of the authority to command), and horizontally across organisations (as a function of the authority to control).

## 5.05 ACTIVATION

Determination of who activates these arrangements will reflect individual state/territory legislation/government direction. Although state/territory arrangements will be followed locally, the activation process will be detailed by community planning committees.

## FUNCTIONAL SUB-COMMITTEES

- 5.06** The planning committee will need to determine whether any specialist functions will be required to be performed in support of the main community plan. These functions may include:

- a. medical;
- b. communications;
- c. rescue;
- d. welfare;
- e. transport;
- f. engineering; and
- g. agriculture.

- 5.07** It may be necessary to form functional planning sub-committees, responsible to the main planning committee, to prepare and maintain supporting plans covering essential functions.

- 5.08** Where the resources of an organisation are multi-functional, that organisation may be represented on more than one sub-committee. A representative of each functional sub-committee is a member of the main planning committee.

## SUMMARY

- 5.09** A hierarchy of plans normally exists, within which plans at lower levels dovetail into plans at the next higher level.

- 5.10** An agreed emergency management structure for planning and operations should apply at each level. This structure prescribes command, control and coordination arrangements to apply during multi-service operations.

- 5.11** The planning committee must determine whether any specialist functions need to be performed in support of the main community plan, and prepare supporting plans covering these functions.

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## CHAPTER SIX

### DETERMINE RESPONSIBILITIES

#### GENERAL

**6.01** Once the emergency management structure is agreed to by the planning committee, roles and responsibilities of all lead combat and supporting organisations can be described. The aim of this step is to ensure that all required control, co-ordination, and support functions and tasks are accounted for, and that there is no overlap between organisations. Roles and responsibilities at community level will conform to general state/territory arrangements.

**6.02** An organisation may be assigned formal (legislated) or traditional (agreed) responsibilities within one or more of the four emergency management elements (prevention, preparedness, response and recovery). Each organisation represented on the planning committee will clearly identify and declare its roles, and define the limits of its responsibilities in performance of those roles, within each element.

**6.03** For any one element, an organisation must be able to determine that, it has:

- a. a **primary role** - that is responsibility for initiating and maintaining action; and/or
- b. a **secondary role** - responsibility for undertaking tasks in support of an organisation with a primary role; or
- c. no role at all.

#### **6.04 DESCRIBE ROLES AND RESPONSIBILITIES**

a. Two methods of describing these roles and responsibilities can be used by the planning committee:

(1) List involved **organisations** and describe their roles for each hazard.

(2) List **hazards** , identify the lead combat and support organisations.

b. The description of roles and responsibilities **by organisation** is useful for each commander to review their organisation's overall involvement. The description **by hazard** allows the controller/coordinator or anyone else to obtain an overview of roles and responsibilities.

**6.05** Figure 6:1 can be used to describe the responsibilities of organisations by hazard.

Figure 6:1

## **6.06 ASSIGN ROLES AND RESPONSIBILITIES**

The assignment of roles and responsibilities must be agreed upon by the planning group and the organisations they represent. This agreement is necessary before any further steps in the planning process can be taken.

### **SUMMARY**

- 6.07** Once the emergency management structure is agreed to by the planning committee, the roles and responsibilities of all lead combat and supporting organisations can be described.
- 6.08** For each emergency management element, an organisation will have;
- a. a primary role; and or
  - b. a secondary role; or
  - c. no role at all.
- 6.09** Roles and responsibilities can be described:
- a. by organisation; or
  - b. by hazard.
- 6.10** Any assignment of roles and responsibilities must be the result of complete agreement and acceptance by each member of the planning committee and the organisations they represent.

## **CHAPTER SEVEN**

### **ANALYSE RESOURCES**

#### **GENERAL**

**7.01** Next step in the process is a resource needs analysis to identify:

- a. the resources needed for effective emergency management;
- b. what resources are currently available within the community; and
- c. what variation (shortfall or surplus) exists.

#### **7.02 NEEDS ANALYSIS MATRIX**

The analysis is broad-based to encompass a wide range of resources eg information, physical resources, finance, people, legislation, management systems etc. Use of a matrix (Figure 7:1) enables the planning committee to logically evaluate each resource, and to focus attention where there is an identified shortfall.

Figure 7:1

#### **7.03 PPRR CONSIDERATIONS**

The planning committee first lists in the matrix, resource needs for “prevention”. These may include legislation, codes of practice and systems that have been put in place to eliminate the hazard or mitigate its effects. The committee should refer any problems to the appropriate agency. The other three elements of emergency management (preparedness, response, recovery) are then dealt with in turn.

**7.04** Emergency management exercises and debriefs of actual operations will also assist in identifying shortfalls in resources.

#### **7.05 RESOURCE SHORTFALL OR SURPLUS**

When resource needs have been described, the planning committee is then able to make a realistic evaluation of each current resource availability. Any resource variation, either shortfall or surplus, is noted.



- 7.06** A shortfall is addressed by the organisation responsible for that resource. If an organisation cannot meet a shortfall, it may be met from elsewhere in the community or identified as an outstanding resource need in higher level plans. If a surplus exists, information should also go to the higher level planning committee.
- 7.07** Figure 7:2 summarises the steps in resource needs analysis.

Figure 7:2

- 7.08** The degree of detail used in resource listing and analysis will vary with size and location of a community, and its planning needs.

#### **SUMMARY**

- 7.09** A resource needs analysis is undertaken to answer the following:
- a. What resources are required?
  - b. What resources are available?
  - c. What variation exists?
- 7.10** Emergency management exercises and debriefs of operations will also identify deficiencies in resources.
- 7.11** Any deficiency in a required resource should be resolved locally or, where that is not possible, met from adjoining communities or identified as an outstanding resource need in higher level plans.

## **CHAPTER EIGHT**

### **DEVELOP EMERGENCY MANAGEMENT ARRANGEMENTS AND SYSTEMS**

#### **GENERAL**

**8.01** One way a planning committee can effectively address this stage of the planning process is to consider requirements for arrangements and systems under the headings of prevention, preparedness, response, and recovery.

#### **PREVENTION**

**8.02** The issues to be considered under prevention generally take the form of restrictions or requirements put into place through various means including legislation, flood mitigation programs, building codes, Australian standards etc.

**8.03** Planning committees need to be aware of prevention issues which apply to their community and, where necessary, make recommendations for additional or improved arrangements to appropriate authorities. Some prevention issues may be addressed by the planning committee through local community processes (eg maintenance of existing flood levee banks).

#### **PREPAREDNESS**

**8.04** Emergency management arrangements and systems to be implemented during response and recovery must be addressed in detail by the planning committee. They include:

- a. public education;
- b. communications;
- c. EOC management;
- d. preparation and issue of warnings/public information;
- e. evacuation management;
- f. training and testing; and
- g. financial management.

The primary requirements in respect of each of these areas are considered in the following paragraphs.

#### **8.05 PUBLIC EDUCATION**

The aim of public education is to ensure an alert and informed community. There is a requirement to have the community informed about the characteristics and possible effects of identified hazards. Public education material needs to contain action statements which will direct the public to make desired preparations and take appropriate actions. Again, particular

attention is given to identified special needs groups. A broad range of methods for dissemination should be considered, including:

- a. newspapers;
- b. radio;
- c. television;
- d. brochures;
- e. public meetings; and
- f. school visits.

It is also useful to advertise the existence of hazard analysis and emergency plans, and to place these on public view.

## **8.06 COMMUNICATIONS**

An efficient all-service communications system needs to be developed to allow:

- a. coverage both within and between organisations;
- b. primary reliance on existing systems;
- c. compatibility between organisations' systems;
- d. a dedicated radio frequency for control and co-ordination;
- e. a back-up system in case of primary system failure;
- f. a back-up power supply; and
- g. simplicity of activation and operation.

## **8.07 EMERGENCY OPERATIONS CENTRE (EOC) MANAGEMENT**

An emergency operations centre is a facility for control of operations and coordination of resources. It is the focus of the community emergency response and recovery structure. Operational and administrative procedures for the EOC are usually covered in **Standing Operating Procedures** (SOPs) which lay down prescribed routine actions to be followed by staff during operations. They cover such procedures as indicated in Figure 8:1.

Figure 8:1

There is a strong connection between SOPs and plans, but they should still be kept separate. They are normally agreed to by the planning committee, and displayed in the EOC. For further information refer to the AEM - Emergency Operations Centre Management.

### **8.08 PREPARATION AND ISSUE OF PUBLIC WARNINGS**

A public warning is intended to bring about an appropriate response to avoid or minimise exposure to danger. Warning messages are one part of the public information system. They should:

- a. provide timely information about the hazard;
- b. state what action should be taken to reduce loss of life, injury and property damage;
- c. state to the public, consequences of not heeding the warning;
- d. provide feedback to operational decision makers on the extent of public compliance;
- e. cite a credible authority;
- f. be short, simple and precise;
- g. have a personal context;
- h. contain active verbs; and
- i. repeat important information regularly.

Methods used for disseminating the warning may include media messages, door knocks, community networks, audible and/or visual signals. Consideration should be given to warning special needs groups.

### **8.09 EVACUATION MANAGEMENT**

Planning for evacuation must cover the following:

- a. The round trip nature of the evacuation process. Consideration needs to be given to the fact that evacuation involves going to some other area away from a locality, and almost always a return to the original point of departure. To ignore the round-trip nature of the evacuation process is to miss much of what must be planned in practical terms.
- b. The stages of evacuation which are:
  - (1) warning;
  - (2) withdrawal;
  - (3) shelter;

- (4) reunion; and
  - (5) return.
- c. Identification of:
- (1) sites suitable as assembly areas;
  - (2) sites suitable as evacuation centres;
  - (3) evacuation routes between the above;
  - (4) organisations responsible for conducting and assisting with the evacuation;
  - (5) registration teams;
  - (6) organisations responsible for arranging and coordinating transport; and
  - (7) organisations responsible for operating evacuation centres. Evacuations are difficult operations to conduct. However, difficulties can be minimised if prior planning is undertaken. Where the possible need to evacuate an area is identified during the emergency planning process, an evacuation plan should be prepared.

## **8.10 TRAINING AND TESTING**

The success of any operation depends on the ability of individuals and groups to perform identified tasks to required standards and to follow operating procedures.

**8.11** To effectively perform tasks and follow procedures, some form of training will be necessary. The level of training required will be prescribed by training objectives which will be consistent with, and relate directly to, planning objectives.

**8.12** State/territory legislation and/or arrangements may prescribe the frequency with which plans will be tested. Exercises are used to test performance of individuals and groups, and effectiveness of arrangements and systems prescribed in plans.

## **8.13 FINANCIAL MANAGEMENT**

Financial arrangements for emergency response and recovery will need to be considered. It is imperative that planning committees understand their state/territory financial procedures, and apply them at community level.

## **RESPONSE**

**8.14** Response is the activation and implementation of operational systems which includes:

- a. activating and staffing the Emergency Operations Centre;

- b. activating the communications system;
- c. collecting, processing, and disseminating information;
- d. alerting support organisations;
- e. preparing and disseminating warnings and other public information;
- f. activating liaison arrangements;
- g. coordinating and deploying resources; and
- h. arranging outside assistance, and providing assistance to other areas.

## **RECOVERY**

**8.15** Recovery is restoration of the community structure and facilities, and support provided to affected people. It may include:

- a. providing short-term emergency accommodation;
- b. counselling emotionally-affected people;
- c. establishing and managing emergency financial relief schemes;
- d. repairing or replacing damaged public utilities, services, and assets;
- e. surveying and assessing damage to public and private property; and
- f. managing environmental rehabilitation programs.

Arrangements in the plan will ensure that a smooth transition from response to recovery can take place.

## **SUMMARY**

**8.16** All emergency management arrangements and systems are developed and put into place by the planning committee.

**8.17** It is a function of response to activate and implement arrangements and systems, through prescribed emergency procedures.

**8.18** Arrangements are included to ensure a smooth transition from response to recovery operations.

**8.19** Prevention issues should be examined by the planning committee, with recommendations for additional or improved arrangements being referred to the appropriate agencies.

# CHAPTER NINE

## DOCUMENT THE PLAN

### WRITE THE PLAN FOR THE USER

#### 9.01 USER GROUPS

There are two user groups of the emergency management plan at community level. They are:

- a. those who are involved in the planning process and need either a general knowledge of the whole plan or a more detailed knowledge of particular parts of the plan; and
- b. those who have to apply the plan, or some part of it, in an executive capacity.

**9.02** Some people fit into both groups. People who have an executive responsibility for implementing the plan need to be directly involved in the planning process. However, the users' requirements can differ. Members of the first group look upon the plan as a guide to principles, structure, responsibilities and management arrangements, while members of the second want the plan to assist them in making decisions in particular situations.

#### 9.03 USER NEEDS

All users, therefore, need a plan which:

- a. gives them a general overview of the plan itself, and the relationships between parts of the plan and the various agencies involved; and
- b. allows them to go directly to that part of the plan which they wish to use.

### SHAPE THE PLAN APPROPRIATELY

**9.04** The planning committee's task is to shape the plan to meet the user's requirements. This suggests that a usable plan should have the following structure:

- a. It opens with a brief but clear statement of what the plan as a whole is intended to do, describes general arrangements (and any particular control and coordination arrangements) around which the plan is based, and contains attachments which are of concern to all participants. This is referred to as the **main plan**.
- b. It includes, as annexes or separate "stand-alone" parts, **functional plans** (welfare, communications, transport etc) and **sub-plans** (dealing with threats that require special arrangements not covered in the main plan).

A sample planning structure is shown at Annex A.

## PREPARE A PRACTICAL PLAN

### 9.05 A practical plan:

- a. is produced in loose-leaf format for ease of amendment;
- b. comes complete with a record of distribution and an amendment summary page; and
- c. contains a “ready-reference’ section which, in conjunction with a table of contents, allows users to quickly identify those parts of the plan they need. Sample formats for record of distribution and amendment summary are shown at Annexes B and C.

## PARTS OF THE PLAN

### 9.06 CONTENTS

The table of contents should be brief but complete, easily accessed and able to be revised as necessary.

### 9.07 AUTHORITY

The authority to plan is normally prescribed by legislation or government direction. A statement to the following effect should appear in the introduction to the plan: “This plan has been prepared by.....under the authority of.....”

### 9.08 DISTRIBUTION LIST

A comprehensive distribution list is included in the plan to enable amendments to be distributed at later dates. Copies of the plan are distributed to at least;

- a. those involved in the planning process;
- b. those agencies which are committed to carrying out the arrangements described in the plan;
- c. other local authorities;
- d. local libraries;
- e. related planning committees; and
- f. regional and state/territory emergency managers.

### 9.09 PLAN AIM AND OBJECTIVES

It is important to clearly differentiate between the planning aim and objectives, and to specifically state each at the commencement of the plan:

- a. **Aim** - This is a broad statement of planning intent. It provides the “mission statement”. It should be worded in a clear and concise manner, eg “The aim of this plan is to detail the agreed emergency management arrangements~`for.....”



- b. **Objectives** - These are statements of the end products (results) to be achieved from the planning process, and should be:
  - (1) a series of enabling statements;
  - (2) non-ambiguous;
  - (3) capable of being achieved; and
  - (4) measurable.

Sample objectives for a main community plan are shown at Annex D.

#### **9.10 SCOPE**

The scope of planning involves a series of short statements describing such factors as:

- a. jurisdiction;
- b. planning assumptions;
- c. limitations on planning;
- d. geographical area;
- e. type of hazard/s; and
- f. support to/interface with other plans.

#### **9.11 GEOGRAPHIC/TOPOGRAPHIC DESCRIPTION**

A short general description and maps (as annexes) of the area covered by the plan. The description may include:

- a. communities;
- b. topography;
- c. climate;
- d. population;
- e. vegetation;
- f. land use areas; and
- g. transport routes.

The description should be sufficiently detailed to allow users unfamiliar with the geography of the area to gain an understanding of the presence and location of major contributing factors.

#### **9.12 HAZARD ANALYSIS RESULTS**

This should involve a short description of results of the hazard analysis.

### **9.13 ACTIVATION**

The triggering events for, and means of, activation of the plan need to be clearly prescribed in the document. Who can activate, under what circumstances, in what stages, and using what procedures need to be specified.

### **9.14 MANAGEMENT STRUCTURE**

The management structure, roles and responsibilities previously agreed to are summarised.

### **9.15 MANAGEMENT SYSTEMS FOR RESPONSE AND RECOVERY**

Describe systems established to control and co-ordinate:

- a. preparation and issue of warnings;
- b. collection, analysis and dissemination of operational information;
- c. public education;
- d. public information;
- e. use of community resources;
- f. financial management; and
- g. EOC management.

### **9.16 FUNCTIONAL PLANS**

Identification and analysis of hazards should enable the planning committee to nominate key response and recovery functions required to deal with them. Once these key functions are identified, functional planning committees can be constituted to plan for each one. Functional plans are written in support of the main plan, and may include other functions as identified by the planning committee as well as:

- a. communications
- b. rescue;
- c. transport;
- d. medical; and
- e. welfare.

These plans are produced using the same process and having the same general content as the main plan. Their objectives, however, are more specific as shown by the sample objectives for an evacuation functional plan at Annex E.

### **9.17 GLOSSARY**

A glossary should be included to provide definitions of special terminology used. The definitions must be consistent with those stated in higher level plans.

## **OTHER PLANS**

**9.18** Consideration of hazards by the main planning committee may identify a particular or special threat to the community. If that special threat requires a specific response which is outside the scope of arrangements in the main plan, it may be necessary to draw up a separate plan to deal with it.

### **9.19 SUB-PLANS**

A sub-plan may be an annex to an existing main plan, with additional statements of special control/co-ordination arrangements and roles/responsibilities;

### **9.20 SPECIAL PLANS**

A special plan is complete in itself, and may have associated functional plans and other supporting material. Again, the process for the production of these plans, and their general structure, is the same as for the major plan.

## **STRUCTURE THE PLAN FOR BROAD INPUT**

**9.21** The suggested planning structure of a main plan, functional plans and other plans allows input from all authorities and organisations which have an emergency management role. The structure highlights the need for a co-operative effort to achieve effective community emergency planning.

### **9.22 AVOID PLANNING IN ISOLATION**

The planning process will also avoid a common obstacle to effective preparedness, response and recovery, ie planning in isolation without reference to other organisations which may have key roles.

## **SUMMARY**

**9.23** The emergency management plan is written with the needs of the user in mind.

**9.24** Planning documentation components may include:

- a. a main plan;
- b. functional plans; and
- c. other plans (sub-plans or special plans as annexes to the main plan, or as "stand alone" plans).

**9.25** These components record details noted in this chapter to achieve effective documentation of emergency management arrangements. Specific formatting of components may be adapted to conform to state/territory standards.

## PLAN DOCUMENTATION

The following is a sample format for a community emergency plan. It sets out the detail which should be included to achieve effective documentation of emergency management arrangements. States and territories may adapt the sample format to suit their specific community emergency planning requirements.

### TITLE PAGE

### TABLE OF CONTENTS

### INTRODUCTION

- Authority
- Aim
- Objectives
- Scope
- Plan review arrangements

### HAZARD ANALYSIS RESULTS

### ACTIVATION OF PLAN

### MANAGEMENT STRUCTURE

- Command, control, co-ordination
- Communications
- Responsibilities by organisation
- Responsibilities by hazard

### MANAGEMENT SYSTEMS FOR RESPONSE AND RECOVERY

Warnings	EOC management
Information management	Financial management
Public education	
Public information	
Resource management	

### FUNCTIONAL PLANS

### OTHER SUB-PLANS

### ANNEXES

- Issue history and amendment list
- Distribution list
- Terminology(glossary)
- Planning committee composition
- Geographic/topographic details
- Maps
- Organisation charts
- Contact list

Key resources list  
Standing operating procedures

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**SUGGESTED DISTRIBUTION FORMAT**

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**DISTRIBUTION**

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**SUGGESTED AMENDMENT RECORD FORMAT**

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**AMENDMENT RECORD**

<b>AMENDMENT NO</b>	<b>DATE OF ISSUE AMENDED</b>	<b>BY DATE AMENDED</b>
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**NOTE:**

Where possible, amendments are issued as complete replacement pages, which have the amendment number and date identified. Where manuscript amendments are necessary, these should be identified in the amended text with an adjacent amendment number eg (Amend 2).

## SAMPLE OBJECTIVES FOR A LOCAL MAIN PLAN

The objectives of the “X” Shire/Municipality Emergency Plan are to:

1. identify hazards and describe their likely effects;
2. define emergency services and supporting agency responsibilities in prevention, preparedness, response and recovery;
3. establish, staff and maintain an EOC;
4. prescribe and implement agency activation arrangements;
5. promote effective liaison between all emergency services/supporting agencies;
6. provide arrangements for efficient coordination of local resources and any external support resources;
7. establish and implement public warning system;
8. establish and implement public information and education systems; and
9. prescribe arrangements for testing, evaluation and maintenance of this plan.

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## **SAMPLE OBJECTIVES FOR A LOCAL FUNCTIONAL PLAN**

### **FUNCTION: Evacuation**

The objectives of the Evacuation Functional Plan to the “X” Shire/Municipality Emergency Plan are to:

1. define responsibilities for conduct and control of evacuation;
2. prescribe priorities for evacuation;
3. establish hazard free assembly areas;
4. prescribe evacuation routes;
5. provide timely and effective warning of the need to evacuate;
6. provide transport for evacuees and their personal items;
7. safely and efficiently conduct an evacuation;
8. secure the evacuation area;
9. establish and maintain arrangements with the Welfare Service for provision of:
  - a. general welfare support;
  - b. reception centres and accommodation;
  - c. personal services, including counselling; and
  - d. public information and enquiry;
10. register all evacuees and maintain movement records;
11. control the return of evacuees, in conjunction with the Welfare Service; and
12. provide public health measures for assembly/reception areas.

# CHAPTER TEN

## TEST THE PLAN

### GENERAL

**10.01** Exercises are essential to ensure that plans are workable and effective.

### **10.02 BENEFITS OF TESTING**

Exercises allow planners to:

- a. test the effectiveness of the community plan;
- b. bring together all members of emergency management agencies and give them knowledge of, and confidence in, each other;
- c. help educate the community about local plans and programs;
- d. allow participating agencies an opportunity of testing their operational procedures and skills in simulated emergency conditions; and
- e. test the ability of separate agencies to work together on common tasks, and to assess effectiveness of co-ordination between them.

### TYPES OF EXERCISE

**10.03** There are three main types of exercise that can be used to test plans.

### **10.04 “TABLE TOP” EXERCISE**

This is an indoor exercise employing a carefully prepared scenario to test and practise various aspects of the plan and the emergency management system. It may be:

- a. a simple **discussion-type exercise** in which participants play through a scenario with real times expanded or contracted to maintain realism and allow time for discussion of key issues; or
- b. extended to include actual tests of critical processes in the emergency management system such as EOC procedures, communication arrangements and coordination/liaison methods (sometimes called an **indoor telephone exercise** ).

### **10.05 TACTICAL EXERCISE WITHOUT TROOPS (TEWT)**

This is used to relate emergency management arrangements to a simulated operational situation on the ground. This allows controllers, operations officers etc to be practised and tested in applying operational procedures without deploying resources.

### **10.06 FIELD EXERCISE**

This is an exercise in which organisations and agencies involved in a plan respond to a simulated situation on the ground as though it were a real emergency.

## **EXERCISE CONSIDERATIONS**

**10.07** Practical considerations such as time, finance and simulation constraints will not allow all parts of the plan to be exercised. Not all actions will be able to be taken through to their logical conclusions as they would in a real situation.

**10.08** It is sometimes useful to exercise various functional parts of the plan separately (or with one or two closely related functions) before testing the plan in a major exercise.

### **10.09 EXERCISE CONTROL**

Whether an exercise is of the indoor telephone type or a major field exercise, its success will **always** depend upon an effective control mechanism. In order that members of the community emergency management team can play their planned roles in an exercise, it is often necessary to draw exercise control and umpire staff from local organisations which are not fully committed to the exercise, or from organisations beyond the local area.

### **10.10 EXERCISE DEBRIEF**

An exercise is always designed to **test** something: the plan itself; decision-making and other operational processes; or individual/team performance. This process is not complete until results of the **post-exercise debrief** have been reflected in improvements to the plan, procedures, or training.

**10.11** A debrief must be structured in such a way as to provide feedback on what **actually happened** during the exercise compared to what **should have happened** in terms of the exercise objectives. It is equally necessary to determine whether any failure to reach objectives was due to:

- a. insufficient or ineffective exercise planning and preparation;
- b. inadequate performance standards on the part of participants;
- c. a breakdown in operational procedures; d. exercise objectives being unrealistic or unattainable; or
- e. any combination of the above four.

### **10.12 FOLLOW-UP ACTION**

The result of conduct and evaluation of an exercise may be:

- a. revised training programs and/or additional training to correct performance deficiencies;
- b. a follow-up exercise to provide more valid testing;
- c. revision of planning objectives; or

- d. revision of operational systems and procedures, and subsequent amendments to plans.

**10.13** For additional guidance on the planning and writing of exercises, consult the Australian Emergency Manual – Training Management.

## **SUMMARY**

**10.14** Exercises are essential to ensure that plans are workable and effective.

**10.15** Types of exercises which can be used to test plans are:

- a. table top exercise (discussion or indoor telephone versions);
- b. tactical exercise without troops (TEWT); and
- c. field exercise.

**10.16** The testing process is not complete until results of a post-exercise debrief have been reflected in improvements to the plan, to procedures, or to training.

**10.17** The result of conduct and evaluation of an exercise may be:

- a. revised training;
- b. follow-up exercise;
- c. revised planning objectives;
- d. revised operational systems and procedures; or
- e. amendments to plans.

# CHAPTER ELEVEN

## REVIEW THE PLAN

### GENERAL

#### 11.01 MINIMUM REVIEW REQUIREMENT

Planners must realise that planning is a continuous process. Plans, to be effective in an emergency, must be regularly checked, tested and revised/updated as conditions change. This responsibility rests with the planning committee, and a plan review schedule should be established. It is suggested that the minimum requirement is an annual review.

#### 11.02 PLAN AMENDMENTS

Amendments to plans are required where deficiencies in operational systems and procedures are revealed as a result of:

- a. review meetings by the planning committee;
- b. exercises;
- c. operational debriefs; or
- d. changes in hazards, community, environment, or emergency service/support organisations.

**11.03** In order that amendments can be efficiently and effectively distributed, responsibility for plan distribution and amendment control should be assigned to one organisation. It is recommended that amendments be forwarded direct to occupant of the position responsible for holding the plan, rather than to their organisations for secondary distribution.

#### 11.04 REVIEW SCHEDULE

A properly implemented plan review schedule ensures that plans become living documents, which are continually reviewed, evaluated and amended/updated.

**11.05** Plan maintenance, through evaluation of operations, exercises and changing circumstances, is vital so that the planning committee has a clear indication of effectiveness of the plan, can identify deficiencies in the plan, and can revise and strengthen the plan to meet possible future emergencies.

**11.06** To assist planning committees with review and evaluation of plans, a check list of criteria is included as Annex A.

### SUMMARY

**11.07** Plans must be regularly checked, tested and revised/updated as conditions change.

- 11.08** Procedures for amendment control and distribution need to be devised and implemented.
- 11.09** Criteria are available against which the planning committee can conduct a review and evaluation of plans.

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## CRITERIA FOR REVIEW OF EMERGENCY MANAGEMENT PLANS

Critically review an emergency plan by checking it against the following criteria:

1. The plan makes reference to the legislation that establishes the legal basis for planning and carrying out emergency measures.
2. The plan specifies roles and responsibilities of all lead combat and support agencies in response and recovery.
3. The plan identifies key individuals by title who are responsible for carrying out specific functions in response and recovery.
4. The plan identifies individuals by title with responsibility for plan development and maintenance.
5. The plan references mutual aid or other written agreements with organisations and government agencies.
6. The plan requires that emergency procedures are developed and maintained by response and recovery agencies.
7. The plan includes logical aim and objectives.
8. The plan contains a glossary of terms used.
9. The plan is consistent with higher level plans.
10. The plan includes procedures to obtain higher level assistance where local resources cannot meet response or recovery requirements.
11. The plan provides for special needs of vulnerable community groups (eg the aged, disabled, destitute).
12. The plan is reviewed and agreed to by all agencies assigned responsibilities.
13. The plan is distributed to all agencies assigned responsibilities.
14. Provision is made for distribution of amendments to all plan holders.
15. Private sector and voluntary organisations that can provide assistance are identified.
16. Emergency resource requirements are identified.
17. The plan documents availability and accessibility of resources.
18. Arrangements for implementing deployment and control of resources are documented.
19. The local community has an EOC from which control and coordination can be exercised during an emergency.

20. An alternate EOC is designated as a back-up if the primary EOC is unable to function.
21. Arrangements for activating, operating and closing down the EOC are included in the plan.
22. Staffing arrangements for the EOC are determined.
23. The EOC is not located in a hazard prone area.
24. The EOC contains primary and back-up communications equipment, and facilities to support its function. It has maps and displays to allow decision making.
25. The EOC can activate promptly.
26. The EOC can operate continually on a 24 hour basis.
27. Operating procedures are developed to cover EOC functions, layout, staff duties, use of displays, message flows, and staff training.
28. A system is in place to alert key agencies promptly to a possible emergency.
29. A public warning system can be activated using various communication alternatives.
30. Procedures are developed to provide warning to special locations, such as schools, hospitals, industry and places of public assembly.
31. Arrangements are made for warning and provision of public information to hearing impaired and non-English speaking groups.
32. A public information centre is designated as the official point of contact by public and the media during an emergency.
33. Provisions are made for release of information to the public, including appropriate protective actions and responses.
34. Agreements are reached with the media for dissemination of public information and emergency warnings.
35. Procedures are established to inform the public about places of contact for missing relatives, provision of community services etc.
36. The plan is reviewed at least annually by the planning committee.
37. The plan is updated as necessary based on deficiencies identified by operational debriefs exercises, changes in legislation, alterations in hazard analysis, technological changes, etc.



## GLOSSARY

<b>Emergency</b>	An event, actual or imminent, which endangers or threatens to endanger life, property or the environment, and which requires a significant and coordinated response.
<b>Emergency Operations Centre (EOC)</b>	A facility from which the control of emergency operations and co-ordination of resources is affected.
<b>Functional Plan</b>	A document describing roles/responsibilities and arrangements for the performance of a key response or recovery function. It is in support of the main plan.
<b>Hazard</b>	A potential or existing condition that may cause harm to people, or damage to property or the environment.
<b>Hazard Analysis</b>	That part of the overall planning process which identifies and describes hazards and their effects upon the community.
<b>Main Plan</b>	A document describing roles/responsibilities and management arrangements (including specific control and co-ordination arrangements) for community emergency management.
<b>Management Structure</b>	A framework for control and co-ordination arrangements, during multi-service operations, normally prescribed through legislation or government direction.
<b>Operating Procedures</b>	Prescribed routine action to be followed by staff during operations.
<b>Plan</b>	A formal record of agreed emergency management roles, responsibilities, strategies, systems, and arrangements.
<b>Planning Process</b>	The collective and collaborative efforts by which agreements are reached and documented between people and organisations to meet their communities' emergency management needs. It is a sequence of steps which allows emergency management planning to take place.
<b>Preparedness</b>	Arrangements to ensure that, should an emergency occur, all those resources and services which are needed to cope with the effects can be efficiently mobilised and deployed.
<b>Prevention</b>	Regulatory and physical measures to ensure that emergencies are prevented, or their effects mitigated.

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**PLANNING  
REQUIREMENTS,**

**STRATEGIES AND  
FORMATS**

**(To be inserted as  
required by individual  
states/territories)**

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