Australian Emergency Management Arrangements





Australian Disaster Resilience Handbook Collection

Australian Emergency Management Arrangements

Third edition 2023.

© Commonwealth of Australia 2023

Published by the Australian Institute for Disaster Resilience.

ISBN: 978-0-6457560-0-5

Copyright

The Australian Institute for Disaster Resilience encourages the dissemination and exchange of information provided in this publication.

The Commonwealth of Australia owns the copyright in all material contained in this publication unless otherwise noted.

Where this publication includes material whose copyright is owned by third parties, the Australian Institute for Disaster Resilience has made all reasonable efforts to:

- clearly label material where the copyright is owned by a third party
- ensure that the copyright owner has consented to this material being presented in this publication.

Wherever a third party holds copyright in material presented in this publication, the copyright remains with that party. Their permission is required to use the material.

All material presented in this publication is provided under a Creative Commons Attribution-NonCommercial 4.0 International Public License, with the exception of:

- the Commonwealth Coat of Arms
- registered trademarks, including
 - the Australian Government's National Emergency Management Agency logo
 - Australian Institute for Disaster Resilience logo
- materials specifically mentioned as not being provided under a Creative Commons Attribution 4.0 International Public Licence
- · content supplied by third parties.



Details of the relevant licence conditions are available on the Creative Commons Attribution 4.0 website (http://creativecommons.org.au), as is the full legal code for the CC BY-NC 4.0 license.

Attribution

Where material from this publication is used for any purpose, it is to be attributed to the developer as follows:

Source: Australian Institute for Disaster Resilience (2023) Australian Emergency Management Arrangements East Melbourne, Australia

Using the Commonwealth Coat of Arms

The terms of use for the Coat of Arms are available from the It's an Honour website: **www.dpmc.gov.au/government/itshonour**

Contact

Enquiries regarding the content, licence and any use of this document are welcome at:

The Australian Institute for Disaster Resilience Level 1, 340 Albert St, East Melbourne Vic 3002 Telephone: +61 (0) 3 9419 2388

Disclaimer

The Australian Government's National Emergency Management Agency and the Australian Institute for Disaster Resilience, in consultation with emergency management professionals and subject matter experts, exercise care in the compilation and drafting of this publication; however, the document and related graphics could include technical inaccuracies or typographical errors and the information may not be appropriate to all situations.

In no event shall the Commonwealth of Australia (acting through the National Emergency Management Agency) or the Australian Institute for Disaster Resilience be liable for any damages whatsoever, whether in an action of contract, negligence, or other tortious action, arising out of or in connection with the use of or reliance on any of the information in this publication.

Cover images, clockwise: Tom Rumble, unsplash, DFES, AIDR.

Australian Disaster Resilience Handbook Collection

The Australian Disaster Resilience Handbook Collection provides guidance on national principles and practices for disaster resilience.

The Handbook Collection:

- provides an authoritative, trusted and freely available source of knowledge about disaster resilience principles in Australia
- aligns national disaster resilience strategy and policy with practice, by guiding and supporting jurisdictions, agencies and other organisations and individuals in their implementation and adoption
- highlights and promotes the adoption of good practice in building disaster resilience in Australia
- builds interoperability between jurisdictions, agencies, the private sector, local businesses and community groups by promoting use of a common language and coordinated, nationally agreed principles.

The Handbook Collection is developed and reviewed by national consultative committees representing a range of state and territory agencies, governments, organisations and individuals involved in disaster resilience. The collection is sponsored by the Australian Government Department of Home Affairs.

Access to the Handbook Collection and further details are available on the Australian Disaster Resilience Knowledge Hub (the Knowledge Hub): <u>www.knowledge.aidr.org.au/</u> <u>handbooks</u>

Australian Emergency Management Arrangements	Land Use Planning for Disaster Resilient Communities	
Community Engagement for Disaster Resilience	Lessons Management	
Communities Responding to Disasters: Planning for	Managing Exercises	
Spontaneous Volunteers Community Recovery	Managing the Floodplain: A Guide to Best Practice in Flood Risk Management in Australia	
Disaster Resilience Education for Young People	National Emergency Risk Assessment Guidelines	
Emergency Planning	Public Information and Warnings	
Evacuation Planning	Safe and Healthy Crowded Places	
Flood Emergency Planning for Disaster Resilience	Systemic Disaster Risk	
Health and Disaster Management	Tsunami Emergency Planning in Australia	
Incident Management		

Acknowledgements

This handbook was made possible through the support of a broad cross-section of the disaster resilience and emergency management sector.

AIDR also acknowledges the contribution and oversight by members of the Australian New Zealand Emergency Management Committee.

AIDR thanks Euan Ferguson AFSM for writing the handbook and Dr Michael Eburn for conducting the 2023 minor review to incorporate changes recommended by the 2020 Royal Commission into National Natural Disaster Arrangements.

Working group members

AIDR acknowledges the expert guidance from the working group in developing this handbook.

Australian Local Government Association – Monica Telesny, Senior Policy Advisor

Australian Red Cross – John Richardson, (former) National Resilience Adviser

Department of the Chief Minister, Northern Territory – Paul Terawsky, (former) Director, Security and Emergency Recovery

Department of Fire and Emergency Services, Western Australia – Muriel Leclercq, Director, Assurance

Emergency Management Australia (former) – Steve Dwyer, Assistant Director, Disaster Preparedness; Faruk Yay, Assistant Director, Public Safety Communications and Kelly Grocock, Policy Officer, Public Safety Communications

Emergency Management Victoria – Susan Fayers, Manager, Emergency Management Doctrine

Office of Emergency Management, New South Wales – Bronwyn Weir, Principal Policy Analyst Emergency Management Coordination

Queensland Fire and Emergency Services – Kevin Walsh, Assistant Commissioner, Emergency Management and Community Capability

South Australia Fire and Emergency Services Commission – Linda Haskins, Senior Project Officer, Emergency Management

Tasmania State Emergency Service – Cheryl Ames, Projects Coordinator, Emergency Management Unit

AIDR also acknowledges the support and input of the following individuals and organisations

Australian Capital Territory Emergency Services Agency – Nick Lhuede, Senior Director, Risk and Planning

Department of Fire and Emergency Services, Western Australian - Peta Turner, Principal Policy Officer; Abby Simons, Senior Policy Officer, and Matt Verney, Principal Policy Officer

Northern Territory Police, Fire and Emergency Services - David Willing, Executive Director, Northern Territory Fire, Rescue and Emergency Services

Office of Emergency Management, New South Wales – Ben Millington, Chief Superintendent, Emergency Management Coordination and Ivan Mills, Policy Officer, Emergency Management Coordination

South Australia Fire and Emergency Services Commission – Brenton Keen, Director, Emergency Management Office

South Australia Police – Senior Sergeant First Class Russell Dippy, Emergency Management Coordinator, Emergency and Major Event Section

Queensland Fire and Emergency Services - John Rolfe, Director, Community Resilience and Risk Mitigation; Adam Green, Executive Manager, Hazard and Risk Unit and Wayne Hepple, Executive Manager, Severe Weather Mitigation

Contents

Australian Disaster Resilience Handbook Collection	iii
Acknowledgements	iv
Executive summary	vii
Introduction	ix
Principles of emergency management	x
Chapter 1: Legal and administrative framework	1
Key points	2
1.1 Introduction	2
1.2 National Strategy for Disaster Resilience	2
1.3 Sendai Framework for Disaster Risk Reduction 2015-2030	2
1.4 National Disaster Risk Reduction Framework	
1.5 Governance	3
1.6 PPRR - Prevention, preparedness, response and recovery	3
1.7 Response and recovery arrangements	3
1.8 Roles and responsibilities of governments	
1.8.1 Local governments	4
1.8.2 State and territory governments	
1.8.3 Australian Government	5
1.9 A shared approach	7
1.9.1 Families and individuals	7
1.9.2 Communities	8
1.9.3 Schools and school communities	8
1.9.4 Emergency management volunteers	
1.9.5 Critical infrastructure owners and operators	9
1.9.6 Businesses, industry and primary producers	
1.9.7 Residential and small businesses	10
1.9.8 Land use planners	
1.9.9 Design, building and construction industries	11
1.9.10 Insurance industry	11
1.9.11 Non-government organisations (NGOs)	11
1.9.12 Not-for-profit sector	12
1.9.13 Natural resource management bodies	12
1.9.14 Broadcasters and information dissemination mechanisms	12
1.9.15 Scientists and researchers	12

Chapter 2: Prevention and mitigation	
Key points	
2.1 Discussion	
Chapter 3: Preparedness	
Key points	
3.1 Discussion	
3.2 Emergency planning	
Chapter 4: Response	
Key points	
4.1 Discussion	
4.2 Incident management	
4.3 Relief	
Chapter 5: Recovery	
Key points	
5.1 Discussion	
5.2 Recovery principles	
5.3 Early recovery	
5.4 Medium to long-term recovery	
5.5 Transition	
5.6 Recovery arrangements	
Chapter 6: Catastrophic disasters	
Emergency management plans	
References	

List of Tables

Table 1: Features of emergencies of increasing impact	4
---	---

List of Figures

Figure 1: National Coordination Mechanism and Domain Concept	
--	--

Executive summary

Globally, losses from natural and human caused hazards are increasing. The factors affecting this impact are varied and complex, and include:

- increasing population
- improved standards of living and a rapidly growing middle class
- · increasing concentration of people and assets in urban areas
- settlement and industrialisation of vulnerable areas (such as coastal zones and flood plains)
- increased complexity and interdependencies in supply chains
- intensification and accumulation of extreme weather events.

Australia is not immune from these factors. These trends may increase the vulnerability to, and the impacts of, emergencies and disasters.

To help prepare for a future that is complex and uncertain, the Australian Emergency Management Arrangements Handbook (AIDR 2023) has been prepared to articulate the national arrangements for emergency management within Australia and its states and territories.

The handbook establishes a set of principles that are intended to underpin and guide emergency management activities.

It also describes the emergency management roles and responsibilities of all levels of government, non-government organisations (NGOs), businesses, communities and individuals.

Arrangements and responsibilities for the comprehensive approach to emergency management - prevention, preparedness, response and recovery (PPRR) are discussed.

These arrangements support emergency management in Australia through the concepts of an 'all hazards' approach and 'shared responsibility'.

Purpose of the Australian Emergency Management Arrangements

The Australian Emergency Management Arrangements (the Arrangements) are intended to guide Australian governments, NGOs, emergency management organisations, agencies, and

communities in establishing their emergency management arrangements. They articulate the principles, structures and procedures that support national coordination of emergency management.

The purpose of the Arrangements is to provide a high-level, scalable overview of how Australia addresses the risks and impacts of hazards through a collaborative approach to the prevention of, preparedness for, response to and recovery from emergencies.

The principles and structures herein also support Australians affected by emergencies overseas and allow the Australian Government to assist (if requested by) foreign governments affected by emergencies and for assistance to be received from foreign governments.

The Arrangements outline the collaboration necessary to address the nature and scale of different emergencies.

This handbook is intended to:

- be the authoritative and trusted source of knowledge of the emergency management arrangements in Australia
- provide nationally agreed principles that underpin emergency management arrangements in Australia
- identify and promote the adoption of good practice in emergency management arrangements
- build interoperability between jurisdictions, agencies, businesses, communities and individuals by the application of the principles and common language
- align national disaster resilience strategies, frameworks and policy with emergency management arrangements by informing and assisting jurisdictions, agencies, businesses, communities and individuals in the implementation and adoption of these arrangements.

The purpose of the handbook is not to specify the management of an emergency in response to a specific event or disaster. However, the underpinning principles provide a context for guiding the approach to these situations.

Context

This handbook is part of the Australian National Disaster Resilience Handbook Collection.

This handbook is intended to complement other handbooks in the collection. *Community Recovery* (AIDR 2018) is an important reference that supports this handbook.

This handbook reflects the intent and content of the National Strategy for Disaster Resilience (COAG 2011), Australia's commitment to the Sendai Framework for Disaster Risk Reduction 2015-2030 (the Sendai Framework) and the National Disaster Risk Reduction Framework (Australian Government Department of Home Affairs 2018).

It updates and replaces the 2014 edition of *Australian Emergency Management Arrangements*. The handbook is published by the Australian Institute for Disaster Resilience, on behalf of the Australian Government.

This 2023 edition of *Australian Emergency Management Arrangements* was reviewed, edited and updated during 2018 and 2019. A working group including representatives from each Australian state and territory was established to review the handbook and provide input into the revised content. It was further revised in 2022 to take into account the recommendations from the 2020 Royal Commission into National Natural Disaster Arrangements.

Scope

It is important to define the terms 'emergency management', 'emergency' and 'disaster' as these terms are used frequently in this handbook.

Emergency management: A range of measures to manage risks to communities and the environment; the organisation and management of resources for dealing with all aspects of emergencies. Emergency management involves the plans, structures and arrangements which are established to bring together the normal endeavours of government, voluntary and private agencies in a comprehensive and coordinated way to deal with the whole spectrum of emergency needs including prevention, response and recovery (COAG 2011).

Emergency: An event, actual or imminent, which endangers or threatens to endanger life, property or the environment, and which requires a significant and coordinated response (AIDR 2019).

Emergencies can and do happen on a daily basis. In some cases, the size, scale, impact, complexity or consequence of an emergency is such that the emergency is considered a disaster.

Disaster: A serious disruption of the functioning of a community or a society at any scale due to hazardous events interacting with conditions of exposure, vulnerability and capacity, leading to one or more of the following: human, material, economic or environmental losses and impacts (Australian Government Department of Home Affairs 2018). There is jurisdictional variation in the use of the terms 'emergency' and 'disaster'.

Catastrophic disaster: Is what is beyond our current arrangements, thinking, experience and imagination (i.e. that has overwhelmed our technical, non-technical and social systems and resources, and has degraded or disabled governance structures and strategic and operational decisionmaking functions) (Australian Government Department of Home Affairs 2018). It should be noted that severe to catastrophic disasters differ from emergencies in that they exceed business-as-usual emergency management systems and capability design parameters.

These Arrangements:

- outline the principles and structures that support national coordination of emergency management in Australia and its off-shore territories
- recognise that states and territories have the primary role for emergency management
- support the concept of an 'all hazards' approach
- support the concept of 'shared responsibility'
- are intended to support, not supersede or conflict with, specific sector or hazard specific guidance where it exists.

The role of the Australian Government is to provide support and assistance to the jurisdictions. The Australian Government, states and territories and local governments may have their own legislation and administrative arrangements for emergency management. The intent of this handbook is to support and reinforce these arrangements. It is intended for use and guidance by emergency management professionals in governments at every level, agencies (including not-for-profit entities), businesses and communities.

This handbook should be read in conjunction with the National Strategy for Disaster Resilience, the Sendai Framework, Australian Disaster Preparedness Framework, the Australian Disaster Recovery Framework and the National Disaster Risk Reduction Framework.

The Arrangements will be reviewed and reissued at least every three years or more frequently for major changes. The Australia-New Zealand Emergency Management Committee (ANZEMC) will oversee revisions and the Australian Government approves the publication of the handbook.

Introduction

Australians expect governments at all levels to work together with communities in building resilience to emergencies. Where emergencies occur, communities should be well served by prevention and mitigation plans and by preparedness, response, relief and recovery arrangements that are effective and forward thinking.

Under Australia's constitutional arrangements, 'state and territory governments have primary responsibility – and accountability – for emergency management' (Royal Commission, p. 6), however all levels of government acknowledge that the impact of some emergencies will be particularly severe or widespread and may exceed the capability of a single state or territory.

Australia's emergency management arrangements bring together the efforts of the Australian, state, territory and local governments, NGOs, businesses, communities and individuals to deliver coordinated emergency management across all hazards. These arrangements rely on a high level of trust and cooperation between all parties. They reflect the result of shared experiences in dealing with and learning lessons from past emergencies and activities such as training exercises.

The National Cabinet (formerly COAG) and its associated Ministerial Council for Emergency Management focuses on a resilience and risk reduction-based approach to emergency management policy, which is aimed at enhancing resilience so that Australians and their communities are better able to withstand and recover from emergencies.

Internationally, Australia forms strategic partnerships for mutual international assistance arrangements to mitigate or reduce the impact of emergencies domestically and globally, particularly in Australia's region of interest.

Principles of emergency management

Australia's approach to the management of emergencies is guided by a number of high-level principles that are intended to provide guidance, flexibility and a broad understanding of the approaches to emergency management. The goal of these principles is to improve and provide consistency in policy and decision making and to support resilience to emergencies and disasters in Australia.

An explanation of the emergency management principles follows:

Principle	Explanation	
Primacy of life	The protection and preservation of human life (including both communities and emergency service personnel) and relief of suffering will be paramount over all other objectives and considerations.	
Comprehensive	The development of emergency management arrangements will embrace the phases of prevention, preparedness, response, and recovery (PPRR) across all hazards. These phases of emergency management are not necessarily sequential.	
Collaborative	Relationships between emergency management stakeholders and communities are based on integrity, trust and mutual respect, building a team atmosphere and consensus. Planning and systems of work reflect common goals and all stakeholders work with a unified effort.	
Coordinated	The bringing together of organisations and other resources to support emergency management, risk reduction, preparedness, response, relief and recovery. It involves the systematic acquisition and application of resources (organisational, human and equipment) in an emergency situation. Activities of all stakeholders are synchronised and integrated. Information is shared to achieve a common purpose, and impacts and needs are continuously assessed and responded to accordingly.	
Flexible	Emergency situations are constantly changing. Emergency management decisions may require initiative, creativity and innovation to adapt to new and rapidly emerging challenges. Emergency plans need to be agile to change and adapt to these new circumstances.	
Risk based	Emergency managers use systemic risk management principles and processes in prioritising, allocating and monitoring resources to manage the risks from hazards. Systemic risk based planning will anticipate the effect of efforts, the changing hazard landscape and the changing consequences of the emergency.	
Shared responsibility	Everyone understands their own responsibility in an emergency, and the responsibility of others. Communities and individuals understand the risk. This encourages all stakeholders to prevent, prepare for, and plan for how they will safely reduce their risk, respond to and recover from an emergency situation.	
Resilience	The ability of a system, community or society exposed to hazards to resist, absorb, accommodate, adapt to, transform and recover from the effects of a hazard in a timely and efficient manner, including through the preservation and restoration of its essential basic structures and functions through risk management (UNDRR 2017).	
Communication	Information is crucial to decision making and to the preservation of life. Emergency managers need to support common information systems and are responsible for providing and sharing clear, targeted and tailored information to those who need it, and to those at risk, to enable better decision making by all stakeholders.	
Integrated	Emergency management efforts must be integrated across sectors, not progressed in silos, ensuring the engagement of the whole of governments, all relevant organisations and agencies, the business sector and the community.	
Continual improvement	All sectors continuously learn and innovate to improve practices and share lessons, data and knowledge so that future emergency management is better and the overall cost of impact of emergencies and disasters is reduced. Continuous monitoring, review and evaluation should examine the processes, timelines and outcomes of plans. Review informs communities and displays transparency and accountability. Review also enables facilitation of the adaptive change process with communities.	

Chapter 1: Legal and administrative framework

Key points

- The underpinning strategy for Australia's approach to emergency management is the *National Strategy for Disaster Resilience* (COAG 2011).
- The Sendai Framework for Disaster Risk Reduction and the National Disaster Risk Reduction Framework support disaster risk reduction activities in Australia.
- The Australia-New Zealand Emergency Management Committee (ANZEMC) is responsible for influencing and advocating for national policies and capabilities that reduce the risk of emergencies, minimise the potential for harm and uphold public trust and confidence in emergency management arrangements.
- Australian emergency management arrangements are scalable and underpinned by partnerships at every level.
- Australia's approach to emergency management is guided by a set of principles.

1.1 Introduction

State and territory governments have primary responsibility for emergency management legislation, policies and frameworks within their jurisdictions. Arrangements are underpinned by partnerships between the Australian, state, territory and local governments; businesses and industry; nongovernment organisations; community groups; emergency management and volunteer organisations; and communities.

These partnerships aim to:

- · recognise the primacy of life and the relief of suffering
- build whole of community resilience to disasters by minimising vulnerability to risks associated with hazards
- · protect property and the environment
- recognise the need to build resilience to emergencies into businesses and infrastructure
- minimise adverse social and economic impacts during and after emergencies
- facilitate recovery, restoration, rehabilitation and reconstruction.

1.2 National Strategy for Disaster Resilience

The *National Strategy for Disaster Resilience* (the Strategy) was adopted by the former Council of Australian Governments (COAG) in February 2011.

The Strategy provides the basis for governments to shift from the traditional emphasis of response to and recovery from emergencies to one which emphasises the need for a greater focus on prevention, mitigation, preparedness and building capability. The Strategy is guided by the principle of shared responsibility between:

- · all levels of governments
- · business and industry
- · Australian Government organisations
- non-government organisations (NGOs)
- the not-for-profit and for-purpose sectors
- · community groups (including community services)
- emergency management and other volunteer organisations
- · landowners and landholders
- · communities.

The Strategy acknowledges that all levels of government (national, state and territory, and local) have a role in driving systemic change for greater resilience to emergencies in Australia.

1.3 Sendai Framework for Disaster Risk Reduction 2015-2030

The Sendai Framework for Disaster Risk Reduction 2015-2030 (the Sendai Framework) was adopted by Australia and other members of the United Nations at the third United Nations World Conference on Disaster Risk Reduction. Through the Sendai Framework, Australia recognises the importance of not only managing disasters, but managing disaster risk.

The Sendai Framework states that to strengthen resilience, countries must prevent new and reduce existing disaster risk. It also outlines four global priorities for action to disaster risk: understanding disaster risk; strengthening disaster risk governance to manage disaster risk; investing in disaster risk reduction for resilience and enhancing disaster preparedness for effective response, and to 'Build Back Better' in recovery, rehabilitation and reconstruction.

1.4 National Disaster Risk Reduction Framework

Reducing disaster risk is critical to supporting communities and economies to be resilient when a shock occurs. Recognising this, in early 2018 the Australian Government invited all states and territories, local government, and key private sector representatives to work together to co-design and develop the *National Disaster Risk Reduction Framework*. The Framework was endorsed by the Ministerial Council for Police and Emergency Management (MCPEM) on 28 June 2019.

The National Disaster Risk Reduction Framework, which is informed by the Sendai Framework, sets out the foundational work to proactively reduce risk now and into the future. It guides national, whole-of-society efforts to proactively reduce disaster risk in order to minimise the loss and suffering caused by disasters.

1.5 Governance

The Australia-New Zealand Emergency Management Committee (ANZEMC) is the senior officials committee responsible for emergency management. ANZEMC is responsible for informing, influencing and advocating for national policies and capabilities that reduce disaster risk, minimise the potential for harm and uphold public trust and confidence in emergency management arrangements.

ANZEMC comprises senior representatives from the Australian, state and territory governments, the Australian Local Government Association and the New Zealand government. ANZEMC is co-chaired by the Coordinator-General, National Emergency Management Agency and a rotating state/territory representative. The National Emergency Management Agency is a Commonwealth member of the ANZEMC. The Mitigation and Risk Subcommittee (MaRS) and the Community Outcomes and Recovery Subcommittee (CORS) are sub-committees of ANZEMC.

1.6 PPRR - Prevention, preparedness, response and recovery

The Australian approach to managing emergencies recognises four phases of emergency management: prevention, preparedness, response and recovery. This is abbreviated to PPRR.

Some jurisdictions are redefining PPRR to three phases of the 'before', 'during' and 'after' the emergency. Both approaches are in use in Australian states and territories.

1.7 Response and recovery arrangements

In times of emergency, national arrangements may be required from the outset (for example, a pandemic threatening Australia). However, most often it is the community who are first at the scene and who are able to provide the first response. Notwithstanding this initial community response, personnel in the emergency services and other agencies at the local level are usually the first organised response to an emergency. In most emergencies, communities, emergent groups, state, territory and local resources and emergency management NGOs (such as Australian Red Cross) become involved in providing emergency response and incident management support, relief and recovery.

Coordination and support at a regional level may be required to ensure the response is effective and tailored to the situation. The response may be progressively escalated, in a graduated and planned manner, from the local level to the region, state and national level as circumstances require. As the scale of impact and complexity of an emergency increases, intra-state/territory arrangements may be activated. Further escalation may activate inter-state/territory arrangements for additional assistance.

Arrangements are also in place for provision of assistance from the Australian Government. Examples include the arrangements for assistance from the Australian Government National Situation Room, Bureau of Meteorology, Geoscience Australia and the Australian Defence Force.

National coordination may occur when assistance is requested by the state or territory, or if the crisis has the potential to affect, or has affected, multiple jurisdictions, the broader community or an Australian Government area of responsibility, regardless of the level of emergency. Table 1 summarises the features of emergencies of different intensity and impact.

National coordination may occur in times of catastrophic disaster and when international assistance has been offered or received.

Catastrophic disasters are discussed further in Chapter 6.

1.8 Roles and responsibilities of governments

Each level of government has different roles and responsibilities in emergency management. A common and overriding principle of emergency management is the primacy of life. The federal, state and territory, and local governments have established legislative and organisational arrangements (and lines of reporting) to undertake emergency mitigation and to prepare for and deal with emergencies effectively. Jurisdictional legislation and organisational arrangements are tailored to best utilise available capabilities and deliver common intended outcomes.

Each level of government has responsibility, commensurate with their capacity and local legislation – and within its own jurisdiction, for emergency planning. This may include prevention (mitigation) and preparedness activities in relation to landscape, property, the environment, assets and infrastructure and relief and recovery planning.

An effective national framework for emergency management requires a high level of collaboration and coordination within and across all levels of government, and with non-government stakeholders, including communities and the business sector.

Decisions should be made at the lowest appropriate level of authority, in accordance with legislative requirements or delegations, with coordination at the highest necessary level of authority.

Table 1: Features of emergencies of increasing impact

	Intensity	Impact	Response
sity and complexity	Catastrophic	 A whole of government response is required Normal decision-making may be degraded Resource coordination may be overwhelmed Crisis plans may be activated Significant relief and recovery arrangements may be required International assistance may be requested 	 Impact may be greater than previous experience and modelling More than one state/territory may be impacted Severe disruption to community, economic wellbeing, social networks, infrastructure and environment Impact may be across an extensive area and may continue for a very long time The consequences of the impact may be felt across numerous sectors
Increasing size, intensity and complexity	Major	 Multi-state/territory and multi-agency command, control and coordination arrangements are in place Strategic resource coordination may be required Specific hazard plans may need activation Specialised assistance from other states and territories, from the Australian Government, or internationally may be required 	 Impact across a significant area Significant population or population centres may be impacted Impact over an extended period of time The impact may have consequences beyond the area of the impact
	Minor	 Response by individual state/territory Jurisdictional plans and arrangements sufficient Jurisdictional recovery plans sufficient 	 Local and minor impact* Short duration

*Although the impacts may be minor when judged from the community or state level, it is acknowledged that these events have significant and often life altering impacts for those directly involved.

Local responders are the building blocks of response and recovery on any scale. As the size, complexity, impacts and consequences of an emergency grow, the level of support from each level of government and other organisations may increase.

1.8.1 Local governments

Local governments play a fundamental role in emergency management. This is because of their strong relationship with their local community networks and knowledge of locally available resources.

Local governments often have a more detailed knowledge of the population dimensions within a local government area (such as people with special needs, vulnerable and at risk people and special interest groups).

Where local government powers exist, and state legislation enables, local governments have responsibilities, in partnership with respective state and territory governments, to contribute to the safety and wellbeing of their communities by participating in local emergency management planning and providing capability.

The principal roles and responsibilities of local governments may include (but are not limited to):

- · building and promoting resilience to emergencies
- undertaking cost-effective measures to mitigate the effects of hazards on local communities and business,

including routinely conducting emergency risk assessments and exercising emergency arrangements

- systematically taking proper account of risk assessments in land use planning to reduce hazard risk
- representing community interests in emergency management to other spheres of government and contributing to decision-making processes before, during and after emergencies
- ensuring all requisite local emergency planning and preparedness measures are undertaken and that plans are exercised on a regular basis
- ensuring an adequate local emergency response and recovery capability is in place, including resources for local volunteers
- undertaking public education and awareness to support community preparedness measures
- assisting appropriate authorities with the provision of emergency risk information and (where necessary) emergency warnings
- ensuring appropriate local resources and arrangements are in place to provide emergency relief and recovery services to communities
- continuing to provide services to their municipalities (such as waste collection, pollution control, water provision, wastewater treatment and stormwater drainage) during emergencies
- participating in post-emergency assessment, debrief analysis and lessons management.

1.8.2 State and territory governments

State and territory governments have primary responsibility for protecting life, property and environment within their borders.

State and territory governments establish plans and arrangements for most of the functions essential for effective emergency management (prevention and mitigation, preparedness, response and recovery) and in the interests of community safety and wellbeing. For example, maintaining agencies that provide emergency services to the community (e.g. police, fire, ambulance, emergency, health and medical services). This may include responsibility for:

- building and promoting resilience to hazards
- periodically undertaking risk assessment and assurance monitoring activities
- developing, implementing and ensuring compliance with comprehensive emergency mitigation policies and strategies in all relevant areas of government activity, including land use planning, infrastructure provision and building standards compliance
- aligning jurisdictional emergency arrangements to national frameworks
- strengthening partnerships with local governments and communities (including remote and Aboriginal and Torres Strait Islander communities), and encouraging and supporting them to undertake emergency risk assessments and carry out mitigation measures
- developing arrangements and plans that articulate preparations for emergencies
- ensuring provision of appropriate emergency awareness and education programs
- · ensuring warning systems are in place and are effective
- ensuring that arrangements for evacuation, refuge and relief are in place
- ensuring community and emergency management agencies are prepared for and able to respond to emergencies, and that plans are exercised on a regular basis
- maintaining adequate levels of capability, including appropriately equipped and trained career and volunteer emergency response and recovery personnel
- ensuring appropriate emergency relief and recovery arrangements are in place
- ensuring post-emergency assessment and debrief, analysis and lessons management processes are undertaken
- developing and monitoring capability
- ensuring arrangements for coordinating the allocation of resources and capabilities are in place and acted upon.

1.8.3 Australian Government

The Australian Government:

 provides support to states and/or territories when coordinated assistance is requested

- undertakes threat and security risk assessments and provides national security capabilities to prepare for and respond to events determined to be of national significance
- supports a state or territory where, in the judgement of the Australian Government and following consultation with relevant jurisdictions where practicable, the nature of a crisis has or is expected to exceed the sovereign capacities of that state or territory to manage
- jointly manages a crisis with states and/or territories if a crisis has the potential to affect, or has affected, multiple jurisdictions, the broader community or an Australian Government area of responsibility (for example a pandemic, a large scale or complex terrorist event or a cyber-incident)
- manages a crisis that is not the responsibility of a state and/or territory (for example a crisis that occurs outside Australia but impacts Australians or Australia's national interest)
- works with states, territories, industry and the public to build national resilience against future hazards, particularly those with national consequences
- provides financial assistance to eligible Australian residents who are adversely affected by a crisis
- support the states and territories through cost sharing arrangements to alleviate the financial burden associated with the provision of emergency relief and recovery services and activities
- where necessary, provide direct assistance to affected communities
- be a party to various international and foreign country agreements and guidelines intended to assist governments to become better prepared for international response and recovery operations
- build national capability in conjunction with states and territories (e.g. Australian Medical Assistance Teams (AUSMAT) and Urban Search and Rescue (USAR))
- support the conduct of research of national significance to the management of emergencies
- identify national priorities for the mitigation of emergencies, in collaboration with other levels of government, NGOs, business, community and individuals
- provide support for emergency risk assessment and mitigation measures, in conjunction with state, territory and local governments
- support public information, such as public safety broadcasts
- provide vital public warnings for severe weather, bushfire, flood and tsunami
- assign resources in support of and at the request of jurisdictions, allocate resources from the Australian Government (such as from the Department of Defence)
- provide information services such as meteorological, hydrological, geophysical and other geodata services that inform and underpin the management of emergencies.

The Australian Government has a continuing role in providing:

- · coordination of the national response to emergencies
- a contact point for requests for assistance to, and for offers of assistance from, other countries
- leadership on national emergency management related strategies
- support to state, territory and local governments for costeffective, prioritised emergency risk management
- financial assistance to state, territory and local governments to assist them in meeting their disaster mitigation responsibilities.

The Department of the Prime Minister and Cabinet is responsible for maintaining and updating the Australian Government Crisis Management Framework (AGCMF). The AGCMF underpins other crisis plans which are maintained by the National Emergency Management Agency (NEMA). Further, NEMA provides end-to-end oversight on risk reduction, prevention, preparedness, response and recovery.

NEMA maintains a range of response plans that can support state and territory governments and international partners responding to an emergency. Further details of these plans can be found at the Department of Home Affairs website (www.homeaffairs.gov.au/about-us/our-portfolios/ emergency-management/emergency-response-plans).

Recognising the need to invest in disaster risk reduction, the Australian Government has committed to investing up to \$200 million per year (from 2023-24) on disaster prevention and resilience initiatives through the new Disaster Ready Fund (DRF). The DRF will curb the devastating impacts of natural hazards by investing in important disaster prevention projects like flood levees, sea walls, cyclone shelters, evacuation centres, fire breaks and telecommunications improvements. The jointly-funded Australian Government-State Disaster Recovery Funding Arrangements (DRFA) assists state and territory governments with the costs of delivering certain relief and recovery assistance to disaster-affected communities. Where the arrangements have been activated, the Australian Government may fund up to 75 per cent of the assistance available to individuals and communities.

The Australian Government may provide direct assistance to affected individuals or businesses through a single disaster recovery payment, or an ongoing disaster recovery allowance.

A range of other Australian Government departments have important roles in developing policies and planning for emergencies, building community resilience and providing services during and after emergencies. As outlined in the *National Emergency Declaration Act 2020*, where an emergency is declared to be a 'national emergency', government Ministers may modify the administrative requirements of their departments in order to facilitate the response to the emergency. For example, they may modify the need for identification so that people can access government services even when their personal documents have been lost due to fire or flood.

The Australian Government is directly responsible for emergency management arrangements in Australia's territories of Christmas Island, Cocos (Keeling) Islands, Jervis Bay, Ashmore and Cartier Islands, Coral Sea Islands, the Australian Antarctic Territory, the Territory of Heard Island and McDonald Islands, and Norfolk Island. It also has specific responsibilities in relation to national security and defence, border control, aviation and maritime transport, biosecurity measures, enforcement of Australian Government legislation, the safety and welfare of Australians overseas, international relations, provision of assistance to other countries and receiving assistance from other countries.

The National Coordination Mechanism

The NCM is an effective tool for national management of the consequences of any complex crises, it is hazard and vector agnostic. The NCM can be utilised in preparedness, response and recovery. The NCM uses the convening authority of the Australian Government to bring together a broad range of stakeholders that have equity in the problem and identify actions to mitigate the problem. The NCM identifies the problem, scopes options to mitigate or stabilise and tasks and coordinates actions accordingly. The NCM does not operate as a command-and-control model, rather a collaboration, coordination and communication model.

The Deputy Coordinator-General (DCG) Emergency Management and Response, NEMA activates and chairs the NCM.

While there is no legislative basis for the establishment of an NCM, forums are held regularly by NEMA during emerging, active and/or concurrent crisis events providing an ongoing forum for, private sector industries, charities, NGOs and volunteer groups to liaise directly with state and territory government representatives and key Australian Government departments.

The NCM leverages existing authorities, systems, networks and sectors to unify effort to stabilise or mitigate the impacts and consequences of any crises or disaster. The NCM does not override any existing authorities or assume responsibilities of other departments, agencies or industry sectors.

Attendees of an NCM engage in strategic coordination, stakeholder communication and collaboration to respond to and recover from domestic crises.

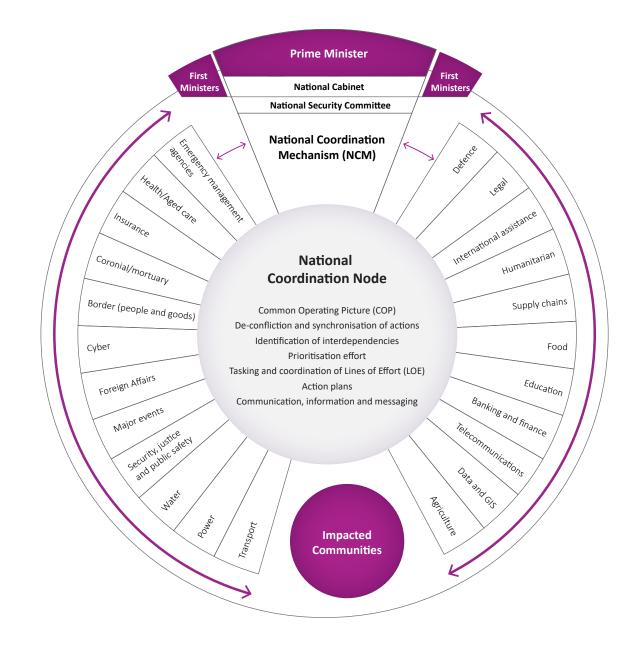


Figure 1: National Coordination Mechanism and Domain Concept

1.9 A shared approach

Dealing with emergencies is not a matter for governments alone. Individuals, families and communities play a role in determining how well they are prepared for and safeguarded from emergencies, and their ability to recover from them.

Sharing roles and responsibilities for key non-government stakeholders provides many benefits, including but not limited to those summarised below.

1.9.1 Families and individuals

Families and individuals have principal responsibility for their own safety, and for safeguarding their health and wellbeing,

property, assets, and livelihoods. This is done through household, family and individual risk identification and implementing mitigation measures, including having adequate financial protection. This may include property, contents and income protection insurance.

The collective actions of individuals, families and neighbours can have a major influence on the severity and impact of a hazard. In significant emergencies and disasters, emergency management personnel do not, and never will, have the capability and capacity to solve the emergency threat for every individual at risk. Nor do governments, NGOs or notfor-profits have the ability (or responsibility) to fully offset the economic, social, cultural and human losses incurred by families and individuals in the course of an emergency. It is the role and responsibility of families and individuals to attain the highest degree of physical and financial self-reliance – before, during and after an emergency. In particular, they should:

- be fully aware of the risk that hazards may present to themselves, their home, work, school and holiday places
- plan to ensure continuous access to health-related requirements during an emergency (for example: the provision of medications and ongoing operation of medical devices that rely on continuous electricity supply)
- actively seek information as the risk environment around them increases or changes including having contingencies for staying connected, where to find information and who to call for help
- follow the advice and messaging from emergency services in the event of an emergency
- be aware of relevant legislation that may apply to the individual or the household (examples might include the restricted use of fire in many parts of Australia during periods of high bushfire risk and the restricted transport of fruits and vines in parts of rural Australia)
- identify their strengths, capacities and potential vulnerabilities, and seek support where needed
- build strong connections within the local neighbourhood to be able to draw upon these resources for support, before, during and after an emergency
- arrange, where available, for adequate insurance to cover likely risks in their area including home, contents and income protection insurance
- find out what relevant local plans are in place in the event of an emergency
- make plans and prepare for dealing with emergencies and their likely impacts and consequences (including evacuation)
- include consideration for companion animals, pets and livestock in emergency planning
- prepare, plan and provide extra support to family members who may not be able to make personal safety decisions e.g. the elderly and the very young.

To assist individuals to understand their risk, the Royal Commission into National Natural Disaster Arrangements (Royal Commission) recommended that state and territory governments should work with the Australian Government to develop a process or mechanism through which to communicate natural hazard risk information to households (including prospective purchasers). In response to Recommendations 4.1 to 4.7 of the Royal Commission, the Australian Climate Service was established to provide a data and intelligence service which connects and leverages the Australian Government's extensive climate and natural hazard information into a single national view.

State and territory governments are also urged to continue to deliver, evaluate and improve education and engagement

programs aimed at promoting disaster resilience for individuals and communities.

1.9.2 Communities

A community can be defined as: a social group with a commonality of association and generally defined by location, shared experience, or function and with a number of things in common, such as culture, heritage, language, ethnicity, pastimes, occupation, or workplace (AIDR Glossary).

Local communities can take a wide range of actions to become more resilient to emergencies. In particular, communities should:

- promote high levels of awareness of the risks arising from hazards in their community, and the collective preparations and actions that should be taken to minimise vulnerability
- · take action to mitigate the consequences of such risks
- provide active support for government and community efforts to minimise the possible consequences of emergencies, such as disaster risk reduction measures as well as helping to prioritise recovery efforts
- promote a culture of support and recognition for emergency services and other volunteers
- identify community strengths and capacities that can be used to support prevention, preparedness, response and recovery
- · provide local leadership in recovery.

State and territory governments and the Australian Government have roles to empower communities to become more resilient. These include:

- providing nationally consistent community education on the function and limitations of different sheltering facilities, including evacuation centres, Neighbourhood Safer Places, places of last resort and disaster shelters
- ensuring that those responsible for evacuation planning periodically review plans and update them where appropriate including defining the roles of local communities and education of communities about signage and evacuation routes and consider those in the community who are unable to evacuate, either by reason of circumstances or personal characteristics.

1.9.3 Schools and school communities

Emergency plans for schools and school communities are particularly important. This is because:

- · many communities have schools
- schools may be associated with and organised by specific providers (this includes state government, private and independent schools and faith-based schools)

- during the school term, schools may house children who may be particularly vulnerable or at-risk during times of emergency
- many people may be involved in the broader school community, including extended families and after school hours care-givers
- through teaching and support staff, schools are able to communicate to school families about risks and actions in time of uncertainty, increased risk or emergency
- some school buildings may be specifically constructed to better withstand extremes of weather and risks such as bushfire and therefore offer some level of protection to occupants
- specific transport arrangements might mean that it is possible to move students and teachers in a timely and efficient manner away from areas of greater or emerging risk.

History has also shown that in times of emergency the leadership, actions and decisions made by teachers, principals and school committees can be instrumental in ensuring the health, safety and welfare of the school community.

Because of their network of contacts and databases, schools may be in a position to provide up to date and accurate information to school families. Schools are often in the unique position of being able to ensure that school aged children are transferred back to their home or to responsible households safely and securely.

Model school emergency plans are available from school providers and from state or territory education and training departments. School emergency plans deal with a range of threats and hazards. School emergency plans need to be shared with the broader community and should be exercised and audited on at least an annual basis.

School teachers may also be in a position to identify students that may need specific support during extended recovery.

Whilst this section is focussed on school aged children, other education providers, including universities, colleges and adult education centres also play a role in caring for students before, during and after an emergency.

1.9.4 Emergency management volunteers

Emergency management volunteers are a crucial component of community participation in preparing for, responding to and recovering from emergencies in Australia.

Emergency management volunteers include those that are involved in prevention and mitigation, (including community preparedness and education), response and relief and recovery activities that may extend for months and years after an event.

Emergency management volunteers contribute a significant amount of time and skills – before, during and after

emergencies. Further, in support of these emergency management volunteers, there are thousands of employers who generously release staff for volunteer-related activities.

Emergency management volunteers may have employment protection under national, state or territory laws to allow them to undertake their volunteer duties during an emergency or disaster. The 2020 Royal Commission recommended that governments establish a national register of fire and emergency services personnel, equipment and aerial assets to facilitate interstate deployment of both staff and volunteers.

It is useful to consider two groups of non-traditional volunteers that may become involved in emergencies. One is largely self-organised and has a well-developed emergency management capability or technical skill that has been developed specifically for activation in times of emergency. These 'extended volunteers' usually have a level of leadership, command or supervision within their organisation and can generally be readily tasked (within their existing capability).

The other group are more individual based and require more support. These spontaneous volunteers may come together in an unplanned and sometimes unprepared way.

The subject of spontaneous volunteers is dealt with in more detail in *Communities Responding to Disasters: Planning for Spontaneous Volunteers* (AIDR 2018).

1.9.5 Critical infrastructure owners and operators

Critical infrastructure is defined in the *Critical Infrastructure Resilience Strategy* (Australian Government 2015) as:

those physical facilities, supply chains, information technologies and communication networks, which if destroyed, degraded or rendered unavailable for an extended period, would significantly impact the social or economic wellbeing of the nation, or affect Australia's ability to conduct national defence and ensure national security.

Critical infrastructure underpins the delivery of essential services such as power, water, health, transport, food, telecommunications and banking.

Critical infrastructure operators should work with the Australian Government, to:

- 1. identify critical infrastructure
- 2. assess key risks to identified critical infrastructure from disasters of national scale or consequence
- 3. identify steps needed to mitigate these risks
- 4. identify steps to make the critical infrastructure more resilient

- 5. improve information flows during and in response to disasters
- 6. review supply chain risks, and consider options to ensure supply of essential goods in times of disasters
- 7. track achievement against an agreed plan.

The Department of Home Affairs works with critical infrastructure operators to co-design rules that underpin risk management programs to mitigate the risk to infrastructure and the subsequent risk to communities and individuals.

One of the first consequences of inadequate infrastructure protection will be on emergency services. For instance, emergency services and emergency response agencies will be reliant on telecommunications networks in order to alert, activate and provide safe and effective coordination of resources in response to an emergency. The Australian Government is working with industry to further improve the resilience of its telecommunications networks through the Strengthening Telecommunications Against Natural Disasters (STAND) program.

Essential service providers and critical infrastructure owners and operators are ultimately responsible for determining and discharging their own legal obligations and managing risks to their operations that might have a material, financial, legal or reputation impact on themselves and others. Essential service providers may also have community service obligations.

Essential service providers and critical infrastructure owners and operators meet their obligations through appropriate risk management practice. This includes the development and review of business continuity plans, providing adequate security for their assets, and making provision to protect/ replace their assets and business continuity, including arranging adequate levels of insurance. Refer to the *Critical Infrastructure Resilience Strategy* (Australian Government 2015).

The occurrence of emergencies is one of the risks that any business enterprise should take into account in business planning. With regard to risk reduction, essential service providers and critical infrastructure owners and operators should:

- · maintain an awareness of their operating environment
- actively apply risk management techniques to their planning processes
- conduct regular reviews of risk assessments, and security, emergency and contingency plans
- develop plans for crowded places in conjunction with other agencies and organisations
- use any physical or logistical measures to protect or remove assets and stock from the effects of any hazard, to ensure that supply chains are maintained
- make provision to protect/replace their assets, stock and business continuity from the likely risks in their area to minimise business interruption and loss of income (this could include arranging adequate levels of insurance)

- work with government through relevant jurisdictional arrangements to understand critical interdependencies and reliance on continued service delivery
- partner with government and emergency service organisations through relevant jurisdictional arrangements to plan for and manage consequences arising from emergencies, including environmental harm.

For more on planning for crowded places, refer to *Safe* and *Healthy Crowded Places* (AIDR 2018).

1.9.6 Businesses, industry and primary producers

A crucial part of businesses and industry resilience is business continuity planning. Business continuity planning should identify possible and likely risks from hazards and consequent threats to the conduct, viability and profitability of an enterprise. They also contribute to community preparedness and recovery.

Businesses, industry and primary producers make a contribution to resilience and emergency management by understanding the risks they face, the risk their activities pose to the natural environment and to the community and by ensuring they are able to continue providing their business services during or soon after an emergency.

Business owners need to be aware of relevant legislation that may apply to their enterprise and the activities they are involved in before, during and after emergencies.

Additionally, businesses and primary producers should make their operation less vulnerable to emergency impacts (e.g. power failure) and protect their assets from the likely risks in their area, including arranging adequate levels of insurance.

Primary producers have a responsibility to plan for the management of livestock during periods of increased risk before, during and after an emergency.

Businesses and industries can provide local, state, national and international knowledge. Particular industries may also provide a range of expert resources, before, during and after emergencies. Industry peak representative bodies also have a role in managing industry recovery programmes that may also improve resilience. Peak bodies may also be in a position to ensure that landholders and operators can access information, advice and support that is tailored to facilitate recovery for that industry.

1.9.7 Residential and small businesses

Residential businesses and small businesses contribute to a broader resilience by:

• understanding the hazard environment and the risks they face

- being a key part of the community and promoting community connectedness
- · contributing to a robust local economy
- acting, individually and collectively, to prevent or mitigate those risks
- being informed and prepared as the risk profile increases/ changes
- having a plan of how to manage animals and livestock in times of emergency
- having a business continuity plan
- · developing a response plan for expected emergencies.

For further discussion on emergency risk assessment refer to the *National Emergency Risk Assessment Guidelines* (NERAG) (AIDR 2020).

1.9.8 Land use planners

Land use planning and environmental management that takes into account hazard risks has been identified as the single most important measure in preventing and mitigating future vulnerabilities and emergency losses in areas of new development. Examples include planning decisions in areas subject to cyclones, riverine flooding, coastal erosion and bushfire risk.

All organisations, including state, territory and local governments, should consider present and future disaster risk, including climate risks when making land-use planning decisions for new developments and when planning for the mitigation of natural hazards. For example, low lying coastal areas and associated coastal environment landscapes will be most vulnerable to the impacts of storm tides and rising sea levels.

The professions involved with land use planning and design have important roles and responsibilities. These include prudent risk assessment and management, implementing best-practice planning and taking into account emergency risk reduction measures including evacuation routes. Planning needs to ensure that legislative and policy frameworks enable recovery operations and that urgently required works are not constrained during and after an emergency.

Land use planning is discussed in more detail in *Land Use Planning for Disaster Resilient Communities* (AIDR 2020).

1.9.9 Design, building and construction industries

The resilience of the built environment to hazards is a key factor in promoting human safety, reducing damage costs and enabling business continuity when emergencies occur. Hazard leaders, developers, architects, engineers and the construction industry have important roles to play in achieving improved resilience to emergencies:

Hazard leaders are responsible for understanding industry hazards and the consequent risks and to ensure that collaborative plans and networks are in place to mitigate, plan, and prepare for and recover from risks as they eventuate and as lessons are learned from events.

- Developers have a responsibility to ensure that their projects do not compromise the long-term safety, health and wellbeing of those who will live and work in their developments or increase or transfer exposure to hazards or risks to others in society.
- Architecture and engineering professionals have roles in educating their members about hazard impacts on structures, through tertiary courses and continuing professional education, and promoting best practice and innovation, and the use of suitable building products that are resilient to hazards.
- The building and construction industry has a role in promoting hazard awareness and hazard minimisation in the industry and a culture of compliance with building codes and standards.

1.9.10 Insurance industry

The insurance industry assists individuals, business and the community more broadly to recover financially from emergencies.

Insurance is a key element in building community resilience. Insurance provides financial protection in the event of loss through a process of aggregating premiums and spreading risk. Insurance can also play a role in encouraging mitigation to reduce losses from future emergencies. All property owners – including home owners, occupiers and small businesses – are able to minimise the financial impact from emergencies by purchasing insurance. The price, or premium for, and availability of, insurance provide signals about the level of risk from a range of hazards and provide some encouragement for risk mitigation and therefore taking preventative action to reduce vulnerability to loss. The insurance industry is well placed to produce and communicate to consumers clear guidance on individuallevel natural hazard risk mitigation actions that insurers will recognise in setting insurance premiums.

Having insurance for emergencies does not reduce the number of deaths and injuries, physical damage and disruption to normal life. However, it provides a confidence of readily available funds through the insurance industry's wellestablished delivery channels.

Insurance, which is essentially risk transfer, allows the economy to manage risk more effectively, reducing financial uncertainty in the event of an emergency and allowing for more efficient use of capital by individuals, business and government.

1.9.11 Non-government organisations

Non-government organisations (NGOs) operate at the local, national, or international levels. An NGO is distinct from a government organisation, having no statutory ties with a national government (AIDR Glossary).

NGOs play an important role in emergency management through mobilising resources and providing support and advice to individuals and communities before, during and after emergencies. They advocate on behalf of communities to governments. Through their strong community networks, NGOs also provide training and education that contribute to building community resilience to emergencies.

NGOs also have access to national and international expertise, participate in research and contribute to the development of best practice guidelines and policies.

They may also manage service provision on behalf of governments. An example is 'Register. Find. Reunite.' which is managed by Australian Red Cross on behalf of the state and territory governments.

NGOs and governments need to work together to ensure their efforts are coordinated and are directed to those most in need, achieving the best possible outcomes for the community.

In addition, NGOs should make provision to protect/replace their own assets from the likely risks in their area including arranging for adequate levels of insurance. NGOs should develop and test their business continuity plans so that their operations are able to continue when they are impacted by a hazard.

1.9.12 Not-for-profit sector

The not-for-profit sector plays an important role in emergency management. This includes the provision of funds directly to those in need or via emergency relief organisations and through philanthropy, which is the activity of helping those who are in need as a consequence of an emergency.

Not-for-profits also work to prevent and mitigate the impact of disasters, particularly natural hazards. The work done by conservation groups to mitigate the effect of flood waters and coastal erosion on the marine ecology is one such example.

1.9.13 Natural resource management bodies

Natural resource management bodies provide a crucial link between government, communities, community organisations, rural and public land interest groups, landowners and land managers. They have an important contribution to make in preventing or mitigating damage to the natural environment at a broad geographic landscape or catchment scale. Good natural resource management such as specific strategies for the protection of waterways, conservation of rangelands, soil conservation and control of weed, vermin and pest animals provides a strong basis for better emergency management and improved economic, social and environmental outcomes.

1.9.14 Broadcasters and information dissemination mechanisms

Everyone involved in emergency management requires information to make appropriate and informed decisions and actions. In particular, the community require information that is timely, tailored and relevant and which enables their own decision-making.

Emergency managers rely on multiple modes of communication to the public. As the risk from a hazard increases, so too does the level of information and warnings about that hazard. Experience shows that having multiple modes of information transmission (for example: radio, television, web sites, social media, the national telephonebased warning system Emergency Alert, and face-to-face meetings) reinforces the message.

Broadcasters and information dissemination media have an important role in the conversations about changing risks and vulnerabilities in the community. They can convey messages about how to best manage risks and about prevention, mitigation, and preparedness. Broadcasters and media managers can also provide vital information in advance of and during emergency response, relief and recovery operations.

Management and updating of incident information is essential when informing the community. Emergency managers rely on publishers, including broadcasters, to disseminate information on preparation and mitigation strategies, to enable community understanding about their local risks, and for the communication of timely warnings when an emergency is imminent or occurring.

Agreements exist between emergency agencies and key organisations such as the Australian Broadcasting Corporation, Commercial Radio and Audio, and local and community broadcasters to ensure educational and warning messages are distributed as required.

Contracts are maintained between state and territory governments and major telecommunication providers for the provision of emergency messages through Emergency Alert: www.emergencyalert.gov.au

For more information, refer to *Public Information and Warnings* (AIDR 2021).

1.9.15 Scientists and researchers

Scientists and researchers can play a vital role in understanding and recording the factors around emergencies. Scientific endeavours may devise measures, including monitoring and early warning networks, to help forecast and inform decision makers of new opportunities to mitigate the impact of natural events. Science helps to understand the short, medium and long term impacts of the emergency. The social sciences contribute to our understanding of the impacts that emergencies have on individuals, families and communities.

Science leaders can affect discussions on broader emergency management practice that lead to new thinking and changes in land management, design, engineering and social engagement programs.

Chapter 2: Prevention and mitigation

Key points

- Prevention aims to decrease or eliminate the negative consequences of hazards.
- Mitigation seeks to minimise the impact, and therefore reduce the consequences of an emergency.
- Prevention and mitigation are primarily a role of state or territory government and are often legislated.
- Landowners and landholders often play a key role in planning and implementing prevention and mitigation actions.
- Disaster risk reduction activities and priorities should be informed by risk assessment.

2.1 Discussion

Risk management process should be guided by relevant industry standards. For further discussion on emergency risk assessment refer to the *National Emergency Risk Assessment Guidelines* (NERAG) (AIDR 2015).

Prevention measures seek to eliminate the impact of hazards and reduce vulnerability to them, whereas mitigation measures accept that the event will occur and seek to reduce the inevitable impact by both physical means (e.g. flood levees) and by increasing the resilience of the community subject to the impact of those hazards through education and awareness. Prevention and mitigation activities and strategies are undertaken by governments, NGOs, businesses, communities and individuals. State and territory governments have the primary role in prevention within their respective jurisdictions. This role is often supported by legislation and policy; however, government agencies at all levels undertake prevention programs as part of their day-to-day functions within the scope of their responsibilities.

Examples of prevention and mitigation strategies that lead to greater resilience include:

- hazard-specific control programs, such as building flood levees, bushfire mitigation programs, and installation of automatic sprinkler systems
- land use planning and building controls in legislation and regulations
- · quarantine and border control measures
- · public health strategies, such as vaccinations
- community education and awareness, for example flood and cyclone safety messaging
- · hazardous material safety/security initiatives
- · critical infrastructure protection
- · crowded places health and safety/protection measures
- ensuring access to publicly available geologic and topographic mapping and earthquake and tsunami monitoring services
- implementing specific hazard and disaster risk research studies.

Chapter 3: Preparedness

Key points

- Preparedness is the ability to be ready for, or to anticipate action, in response to or recovery from a hazard or emergency.
- Preparedness should be commensurate with the assessment of risk. Appropriate consultative riskbased planning with relevant stakeholders is key to preparedness.
- Preparedness activities include developing, auditing and testing emergency management legislation, policy, plans and procedures.
- Preparedness plans should be amended as future risk changes.
- Planning, exercising and lessons management are key to continually improving preparedness and development of capability systems.
- Testing of procedures and systems is an indicator of a resilient community.

3.1 Discussion

Preparedness involves actions to ensure that, as the risk increases or when an emergency occurs, resources and services are available, and communities are capable of taking appropriate actions for response and recovery.

Examples of preparedness activities include:

- developing household emergency plans and preparing emergency kits to last 72 hours
- · developing tailored response and recovery plans
- critical infrastructure resilience planning and cooperation, across all levels of government and in partnership with the business sector
- · public communication arrangements
- · interoperability of systems across the country
- warning systems for the public, including the national telephone-based warning system, Emergency Alert
- stockpiling and distribution of essential items, such as generators and medicines
- education and training programs
- testing of procedures through exercise programs
- lessons management and continually improving preparedness systems.

Planning will be guided by a risk-based approach to the actions taken and resources applied.

Agencies will individually and collectively prepare for known, potentially dangerous, conditions. This may include prepositioning scarce resources such as heavy plant, specialists, aircraft, and other resources (including incident management teams and personnel) to locations that can better service areas where conditions are likely to become hazardous. Preparedness for emergencies should also occur in businesses, industry, (including primary producers), communities, neighbourhoods, families and individuals.

3.2 Emergency planning

Planning is a key element of being prepared. It is facilitated by encouraging governments, business, NGOs and communities to develop and document appropriate anticipated and planned actions and develop capability and provisions for their own preparedness.

It is very important that emergency planning is done in a manner that is collaborative, integrated and inclusive.

A key principle of Australia's emergency management arrangements is the collaborative and effective emergency planning for all hazards. The existence of such plans allows all emergency managers and responders to understand the roles, responsibilities, capability and capacity of other organisations.

In some hazard types, risk management planning may be determined by relevant standards and legislation. Examples include standards for crowded places, bushfire risk minimisation, flood mitigation and built environment standards.

These plans are tested through exercises and events to ensure they are current and appropriate to the task. This process also enhances relationship building between key personnel in different roles and in different organisations. This is critical because, in the urgency of a response when immediate decisions and actions are required, relationships between key personnel need to have already been established.

The National Strategy for Disaster Resilience and the Critical Infrastructure Resilience Strategy acknowledge that it is not possible to have a plan for every scenario. The concept of resilience recognises that we cannot plan for every risk, but building resilience to known hazards assists in addressing risks that are unforeseen or unexpected.

National, state and territory, and local government emergency management plans play an important role in emergency planning. Further details can be found in *Emergency Planning* (AIDR 2020) and the Emergency Planning Collection on the AIDR Knowledge Hub: www.knowledge.aidr.org.au/collections/emergencyplanning/.

Chapter 4: Response

Key points

- Response is primarily about the protection of life, property and the environment.
- First response to an emergency is often the local community and emergency responders.
- States and territory governments are responsible for establishing response arrangements.
- A key feature of response is the provision of warnings and information to enable the community to act to protect themselves.
- Arrangements should include systems for incident management, unity of command and coordination.
- Response planning should adopt an 'all hazards' approach and be applied at incident, region, state or territory levels as needed.
- Response may extend beyond borders and into foreign country borders.
- Planning for relief and recovery commences in parallel with the response phase.

4.1 Discussion

Response involves actions taken in anticipation of, during and immediately after an emergency to ensure that its impacts are minimised, and people affected are given immediate relief and support. The response to an emergency is often managed first at the local level. Assistance from adjacent local areas, across the state or territory, other states or territories and the Australian Government, is provided according to the scale of the emergency. Some emergencies may require national arrangements from the outset, for example, a pandemic threatening Australia.

The protection and preservation of life is the over-riding goal of response. Preventing and mitigating losses, including damage to critical infrastructure and the natural environment, are also response goals.

A key factor of successful response is the provision of information and warnings to enable community action to minimise the risk to vulnerable and at-risk people, businesses, essential services and critical infrastructure.

Response actions may include:

- risk assessment
- providing warning messages and public information in relation to changing risks or vulnerabilities
- evacuating people or communities
- providing medical support
- searching for, rescuing and re-uniting displaced or lost people and animals
- · disaster victim retrieval and identification

- containing or neutralising the threat from a hazard (e.g. firefighting; hazardous materials containment; eradication campaign for pests/diseases)
- providing for animal/stock welfare (e.g. fodder drops; and the provision of veterinary services)
- · situation reporting
- procuring and prioritising the application of key and specialist resources
- · assessing damage
- · incident cause investigation
- observations and insights to inform lessons management.

All jurisdictions have their own emergency management legislation, structures, plans and procedures that can be used to respond to an impending or actual emergency. All jurisdictions have established groups of representatives from emergency services that coordinate all available resources at local, regional and jurisdictional levels.

4.2 Incident management

Managing the response to an emergency can be complex and challenging. Most agencies develop standard operating procedures that provide good practice guidelines for managing and resolving common emergency operational response situations.

Systems of work have been established to enable a structured and common approach to incident management. These systems include common terminology, a scalable incident action planning process and organisational structures to match the size, impact and complexity of the incident.

As an incident grows in size, complexity and consequence there is a need to adopt a common and comprehensive system for incident management. Within Australia, fire and emergency services, police and biosecurity agencies have all adopted systems of incident management.

Incident management systems have been developed to assist with the management of all incidents, imminent or actual, occurring in the natural or built environment; and for the many other activities that emergency management agencies, and those that support them, may have to deal with.

Incident management systems include a number of principles that are consistent with the principles of emergency management.

The National Coordination Mechanism is in place to assist in those emergencies that are beyond the resources available from within an impacted state or territory, or where assistance is being provided to or from another country.

More information on incident management can be found in *Incident Management* (AIDR 2023).

4.3 Relief

Relief is the provision of material aid and emergency medical care necessary to save and preserve lives and enable families to meet their basic needs for shelter, clothing, water, food (including the means to prepare food) and psychosocial support.

Relief services include:

- · community information
- · emergency shelter
- · provision of food, water and sanitation
- household drinking water
- · continuity of food supply
- psychosocial support
- · disbursement of material aid (non-food material items)
- \cdot ~ reconnecting family and friends
- primary first aid and health care
- emergency financial assistance
- · animal welfare.

Relief and recovery are linked. Relief is focussed on providing immediate needs, whereas recovery is a more gradual process of assisting individuals and communities to achieve an effective level of functioning after an emergency.

Relief spans the response and recovery phases.

An incident controller, as well as planning the response and control of an emergency, will have responsibilities to ensure that relief is coordinated and occurring in a way that is effective and meets immediate needs.

As an emergency is brought under control, the emphasis shifts from response to relief and recovery. This transition should be done in an integrated and concurrent manner.

Relief and recovery efforts may be coordinated at a regional or state level by a nominated relief and recovery coordinator as set out in state legislation and recovery plans. National relief and recovery efforts are led by the National Emergency Management Agency.

Chapter 5: Recovery

Key points

- Planning for recovery commences well before an emergency.
- Recovery includes working with responders to establish relief functions within and for the affected community.
- Recovery extends across built, social, environmental and economic environments.
- Recovery should recognise the key leadership role of landowners, local community organisations and their leaders.
- Recovery is often protracted.
- Recovery agencies must be an integral part of emergency management arrangements.

5.1 Discussion

It is not possible to prevent all emergencies. Well-connected and well-prepared individuals, businesses and communities with good financial and social resources are often able to adapt to their changed circumstances after an emergency with little or no formal assistance. However, for some, with less capacity, or with significant losses, formalised assistance is required after an emergency and throughout the recovery process. Therefore, customised recovery activities are needed to address reconstruction, rehabilitation and re-establishment demands across built, social, environmental and economic elements.

Recovery is more than the replacement of tangible losses. The psychosocial impacts affect and change how individuals live their lives, and communities function. These can be both positive and negative changes. The recovery process allows individuals and communities to adapt to these changed circumstances, as well as learn from the disaster experience to strengthen their resilience.

Planning for recovery commences well before an emergency. Early planning for recovery is integral to emergency preparation. Mitigation actions may often be initiated as part of recovery.

Recovery starts with the initial response and may continue for a long time (months to years) – well after the physical damage has been repaired. It requires the collaboration of governments, business, NGOs and, most importantly, individuals and communities.

Recovery actions and associated management structures should be initiated during the response phase. As such, recovery personnel should be embedded within response activities.

Recovery includes continuance of relief actions such as:

- providing immediate relief and short-term recovery arrangements (e.g. food, water and shelter)
- providing psychosocial support
- establishing emergency coordination centres and evacuation and relief centres

- providing financial services
- reuniting separated families and companion animals.

5.2 Recovery principles

Recovery in Australia is based on the following six nationally endorsed principles:

- **Understand the context:** Successful recovery is based on an understanding of the community context.
- Recognise complexity: Successful recovery is responsive to the complex and dynamic nature of both emergencies and communities.
- Use community-led approaches: Successful recovery is community-centred, responsive and flexible, engaging with communities and supporting them to move forward.
- Coordinate all activities: Successful recovery requires a planned, coordinated and adaptive approach based on continuing assessment of impacts and needs.
- Communicate effectively: Successful recovery is built on effective communication between the affected community and other partners.
- Recognise and build capacity: Successful recovery recognises, supports and builds on individual, community and organisational capacity and resilience.

These principles are explored in more detail in the Recovery Collection on the AIDR Knowledge Hub: www.knowledge.aidr.org.au/collections/recovery/.

5.3 Early recovery

In the early recovery phase, the affected community will have access to temporary or transitional shelter, services and supplies. Community routines will begin to re-emerge with children returning to school (albeit in temporary facilities) and people returning to work. Businesses will reopen, and may operate from temporary locations or be co-located with businesses that are less impacted. The restoration of critical infrastructure such as electricity, gas and telecommunications will be underway.

5.4 Medium to long-term recovery

The medium to long-term phase is characterised by the restoration of community connections and relationships, networks and social structures, which is supported by the repair of the built environment – houses, community facilities, road, bridges etc. Temporary arrangements established in the relief and early recovery stages will be replaced by, or evolve into more permanent, ongoing arrangements that reflect and support community priorities. Recovery may require support for months and even years.

5.5 Transition

There is considerable overlap between the phases of recovery, given the complexity and the range of impacts and pre-existing situations that are present in any community. Each individual and community will experience this differently. The transition from one phase to another may occur quite quickly. In other circumstances, the duration of each phase can last for weeks or months, and in the case of medium to long-term recovery, may continue for years. In these circumstances, the movement of the community through the various recovery stages is likely to be less well defined. However, the transition from response to recovery and finally, the return to a post-disaster state of community functioning are critical milestones that require understanding, effective planning and public recognition.

5.6 Recovery arrangements

As with other emergency management arrangements, Australia has in place coordinated recovery arrangements across all levels of government. Recovery agencies are part of each state's and territory's emergency management committees to ensure continuity, consistency and coordination between response and recovery. This includes input from the community and NGOs.

The arrangements in jurisdictions are documented in recovery plans, or as sub-plans of broader emergency management plans. Generally, these plans:

 outline the arrangements for managing recovery activities at local, state or territory and national levels, including the involvement of community leadership in recovery activities

- · provide for ongoing impact and needs assessments
- provide regular reporting that monitors recovery progress and improves its effectiveness
- monitor public health aspects of recovery (e.g. food safety)
- provide protocols for establishing and managing local evacuation, and relief or recovery centres that offer immediate support and advice
- provide processes for emergency relief and assistance measures
- detail arrangements for establishing and managing public appeals, donated goods, and emergent volunteers and agencies
- recommend approaches for providing continuing information to the affected population
- detail arrangements for psychosocial support and counselling
- identify the types of activities that rebuild communities, including economic activity and social cohesion, and clean and healthy environments
- include the need to identify lessons then implement them, to improve systems and recovery operations in the future.

All Australian governments have a range of recovery coordination arrangements to support states and territories, communities and individuals during and after an emergency. These arrangements are documented in *Australian Disaster Recovery Arrangements* (AIDR 2022).

Chapter 6: Catastrophic disasters

A catastrophic disaster is an event that is beyond our current arrangements, thinking, experience and imagination (i.e. that has overwhelmed our technical, non-technical and social systems and resources, and has degraded or disabled governance structures and strategic and operational decisionmaking functions).

It should be noted that severe to catastrophic disasters differ from emergencies in that they exceed business as usual emergency management systems and capability design parameters.

A catastrophic event could be of sudden or sustained impact over an extended timeframe. There may also be cascading events – loss of power, telecommunication outage, financial systems failure, transport/supply chain disruptions that occur concurrently and, collectively, result in a catastrophic consequence.

A significant factor in responding to a catastrophic disaster is the extent to which emergency response and recovery capability is significantly affected by the disaster. There will be a need to prioritise response actions, and the deployment of resources to meet economic, social, environmental, infrastructure and medical needs. A catastrophic disaster is one that will take a considerable time from which to recover.

A catastrophic level disaster may be characterised by one or more of the following:

- · reduced ability of a government to function
- · a serious impact on a significant population or area
- large numbers of casualties or displaced people, possibly in the tens of thousands
- large numbers of people left temporarily or permanently homeless, and possibly requiring prolonged temporary housing and other assistance

- a need for broader national coordination of interstate and international assistance
- destruction of, or significant disruption to, critical infrastructure, such as utilities (water, gas, electricity, fuel, waste disposal), medical and health facilities, food supply, and telecommunications
- a detailed and reliable operational picture of the impacts not being achievable for some time.

While Australia has faced few events that would be considered catastrophic, the need to be prepared for such events is recognised. Existing emergency management arrangements are well understood, are tested and exercised regularly and work well within existing capability and capacity.

Existing emergency plans and arrangements will continue to apply in a catastrophic disaster. However, a catastrophic disaster will require enhanced measures, mainly in the area of strategic leadership and high-level coordination, to ensure the maximum good for the maximum number of people.

Emergency planning should consider and address catastrophic disasters and articulate gaps in capability and capacity at every level.

Priorities in a catastrophic disaster will be to preserve human life, provide food, water, shelter, medical assistance and access to financial services, reunite separated families, and communicate with the public. The manner in which these services are provided will depend on the nature of the catastrophe, but aim to be tailored to local need.

More information can be found in the *Australian Disaster Preparedness Framework* (2018)

Emergency management plans

Australian Government – https://nema.gov.au/about-us/emergency-management/emergency-response-plans Australian Capital Territory - www.esa.act.gov.au/emergency-management/emergency-arrangements/ New South Wales - https://www.nsw.gov.au/rescue-and-emergency-management/state-emergency-management-plan-emplan Northern Territory - https://pfes.nt.gov.au/emergency-service/emergency-management Queensland - www.disaster.qld.gov.au/cdmp/Documents/Queensland-State-Disaster-Management-Plan.pdf South Australia - https://www.dpc.sa.gov.au/responsibilities/security-emergency-and-recovery-management/state-emergencymanagement-plan Tasmania - https://d2kpbjo3hey01t.cloudfront.net/uploads/2018/10/Tasmanian-Emergency-Management-Plan-Issue-8.pdf Victoria - https://www.emv.vic.gov.au/responsibilities/semp Western Australia - www.semc.wa.gov.au/resources/legislation-and-policy-framework

References

Australian Government 2015, *Critical Infrastructure Resilience Strategy: Plan*, www.tisn.gov.au/Documents/ CriticalInfrastructureResilienceStrategyPlan.PDF

Australian Government Department of Home Affairs 2018, National Disaster Risk Reduction Framework, www.homeaffairs.gov. au/emergency/files/national-disaster-risk-reduction-framework.pdf

Australian Government, 2018, Australian Disaster Preparedness Framework

Australian Government, Department of Prime Minister and Cabinet 2021, *Australian Government Crisis Management Framework*, https://www.pmc.gov.au/resource-centre/national-security/australian-government-crisis-management-framework

Australian Government, National Emergency Management Agency: About Us, https://nema.gov.au/about-us

Australian Government, 2021, Royal Commission into National Natural Disaster Arrangements Implementation of Recommendations, https://recovery.gov.au/sites/default/files/files/royal-commission-natural-disaster-june-2021.pdf

Australian Government, 2022, Australian Disaster Recovery Framework

Australian Institute for Disaster Resilience, Australian Disaster Resilience Glossary, www.knowledge.aidr.org.au/glossary/

Australian Institute for Disaster Resilience, Australian Disaster Resilience Handbook Collection, https://knowledge.aidr.org.au/ collections/handbook-collection/

Australian Institute for Disaster Resilience, Australian Disaster Resilience Knowledge Hub, www.knowledge.aidr.org.au/

Australian Red Cross, Register. Find. Reunite. https://www.redcross.org.au/emergencies/about-register-find-reunite/

COAG, 2011, National Strategy for Disaster Resilience, https://www.homeaffairs.gov.au/emergency/files/national-strategy-disaster-resilience.pdf

Emergency Alert www.emergencyalert.gov.au/

Royal Commission into National Natural Disaster Arrangements, 2020, https://naturaldisaster.royalcommission.gov.au/

United Nations Office for Disaster Risk Reduction 2015, *Sendai Framework for Disaster Risk Reduction 2015-2030*, www. preventionweb.net/files/43291_sendaiframeworkfordrren.pdf

Australian Institute for Disaster Resilience Knowledge Hub

www.knowledge.aidr.org.au

