

Australia's current international policy on risk reduction, including within development or other donor agencies as well as trans-border agreements or regional cooperation.

Australia's Foreign Policy

Close engagement with our Asian and Pacific neighbours is a priority in Australia's external policy. Asian countries are important trading partners, key sources of investment, major security partners and a source of skilled migrants. Australia also has major interests in the stability and development of the countries of the South Pacific and responds to requests from countries seeking to make their government systems more efficient and responsive to both traditional and modern pressures.

Australia's Aid Program

The objective of the Australian aid program is to advance Australia's national interest by assisting developing countries to reduce poverty and achieve sustainable development. The Australian Government's humanitarian policy for the aid program places priority on risk reduction. It seeks to do this by creating close links between development and humanitarian programs and by assisting governments and communities in the Asia Pacific region to develop their own capacity to reduce the impact of disasters and prevent disasters from undermining development objectives.

In Australia's development cooperation program managed by AusAID, humanitarian programs have been progressively integrated into country and regional programs. This strengthens planning for humanitarian action by ensuring it is considered as part of longer-term development objectives. The humanitarian policy also seeks to strengthen international, regional and local partnerships through a range of measures, including support for UN coordination mechanisms, strengthened levels of engagement with multilateral partners and building and maintaining links with other donors.

Disaster Risk Reduction Initiatives

Australia supports a holistic and integrated approach to disaster risk reduction within the context of sustainable development in the Asia Pacific region.

Australia provides both core support and assistance for specific appeals to international agencies such as the UN Office for the Coordination of Humanitarian Affairs (OCHA) and the International Committee of the Red Cross (ICRC). Australia has supported OCHA to establish a Regional Disaster Adviser position in the Pacific region to provide training and coordination of international assistance following disasters.

Australia also supports regional agencies such as the South Pacific Applied Geoscience Commission (SOPAC) and the Asian Disaster Preparedness Centre (ADPC) to reduce the impact of disasters through capacity building and exchange of information and experience at a regional level.

In addition, Australia is supporting a project to provide Pacific Island countries with timely and accurate climate prediction services. We are also funding initiatives to assist Pacific Island countries to plan for and adapt to the long-term potential scale

and implications of changing sea levels, climate variability and extreme weather events and strengthen regional collaboration.

Australia is assisting individual countries, including Papua New Guinea, Solomon Islands, Indonesia and Vietnam, to enhance their national disaster risk management capacity by improving the capacity of their National Disaster Management Offices and developing community-based initiatives. For example, the Disaster Management Project in Papua New Guinea will provide long-term assistance to increase the capacity of the National Disaster Emergency Service and the Provincial Disaster Committees, as well as helping communities to reduce the impact of disasters.

Australia is also supporting non-government organisations to foster community-based risk management throughout the Asia Pacific, including: the Australian Foundation for the Peoples of Asia and the Pacific (AFAP) in Fiji, Vanuatu and Tuvalu and the Pacific region generally; World Vision Australia in PNG, Solomon Islands, Vanuatu and Sri Lanka; Oxfam Community Aid Abroad in Timor Leste; CARE Australia in Cambodia; and the Australian Red Cross in Mongolia and China.

Small Island Developing States (SIDS)

Australia is supporting the Pacific delegation to the World Conference on Disaster Reduction, with the aim of promoting risk reduction for the SIDS.

South Pacific Applied Geoscience Commission (SOPAC)

SOPAC seeks to support the sustainable development of natural resources and to reduce the vulnerability of island countries to natural hazards. Australia's funding for SOPAC is focused on direct support for overall program strategies rather than individual projects. SOPAC's corporate plan highlights three program areas:

- Oceans and Islands
- Community Lifelines
- Community Risk

Each of these programmes contributes significantly to disaster risk reduction. In particular, Community Risk is a top down and bottom up program that focuses specifically on promoting a widespread appreciation of the importance of disaster preparedness and risk reduction, and building a national capacity to achieve this.

FRANZ Agreement

Australia, France and New Zealand have an agreement to share information concerning early warning and disaster response. This agreement is demonstrated through regular meetings at the strategic level and national level for some Pacific Island countries, for example Vanuatu. France has been a dialogue partner of the Pacific Islands Forum since 1989.

Sources

- Department of Foreign Affairs and Trade. Advancing the National Interest – Australia's Foreign and Trade White Paper.
- Australian Agency for International Development. Humanitarian Program Strategy 2001-2003.

Web Sites

www.aisaid.gov.au; www.dfat.gov.au; www.sopac.org/tiki/tiki-index.php

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Chapter 8

Australian Disaster Risk Management Arrangements and Activities

Introduction

Disaster risk management within Australia is commonly, although not exclusively, included in what are referred to as 'emergency management' arrangements. In this chapter, where the term emergency management is used, it can be taken as covering disaster risk management in general.

Disaster risk management arrangements in Australia are influenced by a number of key factors:

- The country has a federal system of government with six states, two self-governing territories and a number of smaller territories. Under the Constitution, State and Territory Governments retain responsibility for the protection and preservation of their citizens and exercise control over most of the functions essential for effective disaster risk management;
- Local government, because of its close links with the community, plays a key role in disaster risk management, as do the many community and voluntary organisations;
- The federal government, known as the Commonwealth Government, provides guidance and support to the States and Territories in developing their disaster risk management capabilities. It also provides physical and other assistance to requesting States and Territories when they cannot reasonably cope with an emergency or disaster. Under the Constitution, the Commonwealth Government is allocated responsibility for external affairs matter, including the provision of humanitarian assistance overseas;
- Australia is large, 7, 682,300 km² (almost as big as mainland USA), and subject to a wide range of natural hazards that vary in importance according to geographical location;
- The population is relatively small, just over 20 million in 2004, and predominantly urban, living in or close to the major cities;
- Most of the population lives close to the east, south-east and south-west coasts.

National Disaster Risk Management Arrangements

The basis of the national system for managing major emergencies and combating disasters is a partnership between Commonwealth, State or Territory and local governments, and the community. The goals of this partnership are to:

- minimise vulnerability to hazards;
- protect life, property, and minimise suffering during emergencies and disasters; and
- facilitate rehabilitation and recovery.

There are four elements to this national system:

1. **Australian Emergency Management Committee (AEMC)** - The AEMC is the peak national consultative forum in emergency management. It is chaired by the Director General, Emergency Management Australia (DGEMA) and comprises chairpersons and executive officers of State and Territory emergency/disaster management organisations. The Committee meets annually to coordinate Commonwealth and State and Territory interests in national emergency management. Five national advisory groups dealing with Emergency Management Principles and Practice, Emergency Management Training, Community Awareness, Communications and Information Systems, and Civil Defence support the AEMC.

A working party of the AEMC with limited delegated powers, known as the Australian Emergency Management Executive Group (NEMEG), meets twice yearly to review disaster and emergency management policies and agree the agenda for the AEMC.

2. **State and Territory Emergency/Disaster Management Organisations** - Each State and Territory has established a peak committee of senior members of appropriate departments and agencies to consider emergency management matters. The names and functions of these organisations differ, but they are basically responsible for ensuring that proper plans and arrangements are made at State or Territory and local government level to deal with emergencies and disasters. Details of the organisations are given in the relevant sections of this manual.
3. **Commonwealth Emergency Management Organisation** - The Commonwealth Minister responsible for disaster and emergency management matters is the Attorney General. The agency through which the Minister exercises this responsibility is Emergency Management Australia (EMA). The senior interdepartmental body responsible for providing policy advice and for overseeing interdepartmental arrangements for providing recovery assistance to the States and Territories is the Commonwealth Counter Disaster Task Force (CCD/TF). Details of these organisations are given in the relevant section of this manual.
4. **Commonwealth Financial Assistance** - Through a Commonwealth - States agreement for financial relief under the Natural Disaster Relief Arrangements (NDRA), the Commonwealth reimburses States and Territories in accordance with a funding formula for expenditure on agreed eligible measures.

NATIONAL EMERGENCY MANAGEMENT STRATEGY

The Commonwealth, States and Territories, through the National Emergency Management Committee, have endorsed the following National Emergency Management Strategy as a guide for development of emergency management in Australia.

Development - Reduce risk to the community from natural and technological hazards through the continuing development of emergency management capabilities.

Partnerships - Encourage a national approach to emergency management through cooperative partnership arrangements embracing all levels of government and the community.

Education and Training – Develop and promote emergency management education and training to meet the needs of the community.

Community Awareness - Develop a national approach to fostering and enhancing the community's awareness of risks, and encourage involvement in prevention or mitigation, preparedness, response and recovery strategies.

Civil Defence – Promote and support the development of an Australian civil defence capability that is responsive to threats, in accordance with the national civil defence policy.

COMMONWEALTH EMERGENCY MANAGEMENT ARRANGEMENTS

COMMONWEALTH EMERGENCY MANAGEMENT POLICY

In 1995 the Commonwealth Government released a statement of its policy on emergency management. The text of the statement is as follows:

COMMONWEALTH EMERGENCY MANAGEMENT POLICY STATEMENT

While recognising that the Constitutional responsibility for the protection of lives and property of Australian citizens lies predominantly with the States and Territories, the Commonwealth accepts that it has a broad responsibility to support the States in developing emergency management capabilities. The Minister for Defence will exercise Commonwealth responsibility for emergency management matters through Emergency Management Australia.

Comprehensive and integrated emergency management is based on a partnership between the Commonwealth and the States and Territories. In the development of Commonwealth capabilities the principles of the All Hazards Approach, the Comprehensive Approach, the All Agencies Approach, and the Prepared Community will be followed.

On request, the Commonwealth will provide and coordinate physical assistance to the States in the event of a major natural, technological or civil defence emergency. Such physical assistance will be provided when State and Territory resources are inappropriate, exhausted or unavailable.

The Commonwealth recognises that the effects of emergencies last long after the immediate effects of the physical impact have been relieved. Through the Commonwealth Counter Disaster Task Force and the multiplicity of Commonwealth agencies, it will support State and Territory measures to facilitate the recovery of communities from these effects. It will also provide financial assistance to the States and to individuals to assist in the recovery from disasters under arrangements that will be determined from time to time.

The Commonwealth will continue to provide support to the States and Territories with the development of emergency preparedness and mitigation activities. In particular it will facilitate education, training, research, public awareness, information collection and dissemination activities. It will also provide specialised warning and monitoring services for meteorological and geological hazards as appropriate.

The Commonwealth recognises the necessity of cooperating with the States and Territories to encourage further standardisation of emergency management procedures and equipment. Through Emergency Management Australia and other organisations the Commonwealth will encourage and facilitate such standardisation.

The Commonwealth acknowledges that there is a need for development of policy coordination and support programs to facilitate expansion of existing State and Territory emergency management capabilities to provide an effective civil defence organisation. Planning for the transition to a war

footing needs to be undertaken during peacetime. Functions associated with continuity of government and civilian support for the war effort will be the subject of separate Commonwealth and State consideration and consultation.

The Commonwealth will provide physical and financial assistance to other countries in the event of a major emergency. It will also assist in the development of emergency management capabilities, especially to countries in Australia's region of interest.

The Commonwealth will ensure that appropriate measures are taken to comply with Australia's emergency management obligations under international law.

COMMONWEALTH EMERGENCY MANAGEMENT ORGANISATIONS

The following agencies have a role to play in implementing the Commonwealth policy:

Commonwealth Counter Disaster Task Force

The Commonwealth Counter Disaster Task Force (CCDTF) is a senior interdepartmental committee, chaired by the Department of the Prime Minister and Cabinet, comprised of representatives of Commonwealth government departments and agencies with a significant role to play in the provision of disaster relief or rehabilitation assistance. It is responsible to the Attorney General. On the advice of the Director General EMA, the Chair may activate the CCDTF during the response and recovery phase of a disaster in support of EMA activities.

The role of the CCDTF is to:

- Coordinate policy advice and oversight inter-departmental arrangements for the provision of Commonwealth Government assistance;
- Ensure that well-based and integrated advice is provided to responsible ministers; and
- Recommend any special inter-governmental arrangements that might be required.

Emergency Management Australia

Emergency Management Australia (EMA) is the Commonwealth agency responsible for reducing the impact of natural and human caused disasters on the Australian community. It is also the lead agency for coordinating Commonwealth disaster response.

Functions. EMA's continuing functional responsibilities are:

- To coordinate Commonwealth physical support to the States and Territories and Australia's region (as an agent for AusAID) in times of disaster;
- To enhance national emergency management capabilities by:
 - developing Commonwealth Government and national emergency management policies, plans and programs;
 - developing national emergency management education and training curriculum programs;
 - delivering emergency management education and training;
 - developing and delivering emergency management information services;
 - generating and fostering community disaster-awareness in partnership with the States and Territories;

- providing financial support for the development of capabilities through the Commonwealth Government's State Support Package program;
 - supporting the development of Australia's civil defence capability;
 - developing emergency management principles and practice; and
 - fostering emergency management research.
- To support the development of overseas emergency management capabilities, particularly in Australia's region.

EMA is organised into two main elements: an office in Canberra, ACT, responsible for policy, planning, coordination (including emergency response coordination), general management and finance; and the Emergency Management Australia Institute (EMAI) at Mount Macedon in Victoria which is responsible for emergency management training, education, studies and research.

National Emergency Management Coordination Centre. EMA operations and coordination tasks are conducted from the National Emergency Management Coordination Centre (NEMCC) in Canberra. The small EMA permanent staff in the NEMCC is assisted in its duties by Emergency Management Liaison Officers (EMLOs) nominated by appropriate Commonwealth departments, agencies and statutory authorities to act as points of contact and facilitate departmental response to tasking by EMA.

Requests for Commonwealth Government assistance after disasters are channelled through nominated State and Territory Government contact points and the NEMCC to the Director General, EMA. When a response is approved, the NEMCC is responsible to the Director General for coordinating the arrangements for its effective provision. In the urgent stage of an emergency requests are passed by telephone to reduce response times and the response is arranged on the same basis. Confirmatory written messages follow at a later stage.

Emergency Response Plans. To provide a framework for response operations, EMA maintains four Commonwealth emergency response plans. These plans, which guide the response to disasters and emergencies in Australia and overseas, are designed to cover most major natural, human-caused and technological emergencies and disasters. The Plans are:

COMDISPLAN	For the provision of Commonwealth assistance after disaster within Australia
AUSASSISTPLAN	For the provision of Australian assistance to overseas disasters
COMRECEPLAN	For the reception of large numbers of evacuees from an overseas disaster
AUSCONPLAN	For the response to the re-entry of radioactive space debris
SPRED	

Four specialised national hazard-related plans are maintained by appropriate Commonwealth agencies, on behalf of the Commonwealth and States and Territories. These plans cover national search and rescue arrangements (Australian Maritime Safety Authority), pollution of the sea by oil (Australian Maritime Safety Authority), management of communicable diseases in Australia (Department of Health and Aged Care) and major outbreaks of exotic animal diseases (Department of Agriculture, Fisheries and Forestry).

Emergency Response Funding Arrangements. Emergency and immediate post-disaster assistance coordinated by EMA is usually provided at no cost to States and Territories.

Commonwealth departments are required to respond to the limit of their operating budgets before approaching the Department of Finance for further allocation of funds if necessary.

National Registration And Inquiry System. To facilitate a rapid response to inquiries from Australia and overseas about people affected by a disaster in Australia, EMA sponsors a computer-based national disaster victim registration and inquiry system known as the National Registration and Inquiry System (NRIS). When NRIS is activated, victim information registered by the disaster-affected State or Territory is entered on the national computer network of the Commonwealth Department of Health and Ageing and may be accessed from any other terminal linked to that network. After a disaster, designated emergency service computers within each State or Territory can supplement the normal terminals linked to the network.

Civil Defence. Civil defence is an integral part of national security. The Commonwealth has a civil defence policy coordination and support responsibility, which is exercised through EMA. Support provided includes assistance with civil defence training.

The Commonwealth Government's position is that the Australian civil defence capability is based on existing emergency/disaster management organisations that would be expanded to meet the threat if the need arises. Civil defence planning must be carried out during peacetime in conjunction with the Australian Defence Force.

The functions of civil defence are:

- to protect the civilian population against the dangers of hostilities;
- to help the civilian population to recover from the immediate effects of hostilities; and
- to provide conditions necessary for survival of the civilian population.

Australia has ratified the 1977 Protocols Additional to the Geneva Conventions,

The Emergency Management Australia Institute. The Emergency Management Australia Institute (EMAI) at Mount Macedon, Victoria, is the training, education, studies and research arm of EMA. Its charter is to strengthen Australian emergency risk management capabilities by providing education and training; conducting activities that foster national cooperation and understanding; undertaking research into selected aspects of emergency management; and facilitating the exchange of emergency management information.

Activities conducted by the Institute may include:

- training and education courses delivered residentially or by extension;
- promotional, awareness and problem-solving activities conducted as workshops or seminars;
- post-disaster impact studies and other forms of applied research; and
- consultancies in selected aspects of emergency management.

Each year, the Institute conducts a range of activities designed to improve national capacity for coping with major emergencies and disasters. These activities are directed at either:

- developing particular knowledge, skills and attitudes in individuals and groups who contribute to emergency management and counter-disaster arrangements; or

- stimulating action that will result in an improvement in a specific aspect of the national emergency risk management capability.

The Emergency Management Australia Library. The EMA Library at EMAI is a national resource which, through its collection and various services, promotes and supports all aspects of emergency management. The primary focus of the Library is to provide national and international emergency management information for EMA staff, participants in EMAI activities, researchers, and the Australian emergency management community. Its staff maintain a comprehensive collection of multi-disciplinary emergency management material, which is supported by extensive information networks. Most of the collection is catalogued on a computer database and is fully searchable by subject, keyword, author, title and date.

OTHER COMMONWEALTH DEPARTMENTS AND AGENCIES WITH EMERGENCY MANAGEMENT ROLES

Many other Commonwealth Government departments and agencies have specific roles in relation to emergency risk management. These include:

Department of Finance and Administration

Under administered by the Department of Finance and Administration, the Commonwealth provides funding assistance to States and Territories aimed at alleviating the financial burden associated with provision of natural disaster relief and infrastructure restoration. Through these arrangements, the Commonwealth undertakes to reimburse the States and Territories for expenditure in accordance with a set formula, for a range of eligible relief measures.

Department of Family and Community Services and Centrelink

The Commonwealth provides direct financial assistance to individuals affected by emergency situations. The Department of Family and Community Services, through Centrelink, the Commonwealth Services Delivery Agency, maintains existing payments to clients, provides income support payments to eligible persons whose income has been affected by the emergency. It also provides information, counselling and referral services. Forms of special payments can be made to those people who ordinarily would not qualify for income support.

Department of Health and Ageing

The Department of Health and Aged Care is the lead Commonwealth agency with responsibility for communicable disease outbreaks.

Department of Agriculture, Fisheries and Forestry

The Department of Agriculture, Fisheries and Forestry (AFFA) is the lead Commonwealth agency for animal disease emergencies. The Department coordinates the national response to an animal disease emergency with the States/Territories and Commonwealth supporting agencies and manages export trade policy issues. The primary responsibility for the emergency response rests with the government of the affected State or Territory.

The Commonwealth/States Cost Sharing Agreement for certain animal disease provides for assistance to a State/Territory affected by one of 12 specific animal diseases that have major implications for Australia's trade in livestock and animal products covered by this agreement. The Commonwealth contributes 50 per cent of the cost of the eradication campaign and the States/Territories collectively contribute the remaining 50 per cent on an agreed pro-rata basis.

The Department of Agriculture, Fisheries and Forestry (AFFA) is responsible for the operational aspects of human quarantine at points of entry to Australia, based on policy advice from the Department of Health and Aged Care.

Department of Defence

Although the Department of Defence has no direct responsibility for any aspect of emergency management, it controls a wide range of personnel and resources that are ideally suited to respond to emergencies and disasters. For this reason it is frequently called upon by EMA to deploy these resources when State or Territory authorities seek Commonwealth assistance.

The Department of Defence resources most frequently activated are personnel, equipment, stores, supplies and facilities. The Commonwealth may deploy these resources when action is needed to preserve human life, alleviate suffering, prevent extensive loss of animal life or prevent loss or damage to property, and State or Territory resources cannot meet the need. They may also be made available if assistance is required in a civil emergency or for disaster recovery not directly related to the saving of life and property. In this circumstance, cost recovery is normally sought, as State or Territory or commercial resources should be available to perform such tasks.

Geoscience Australia

Geoscience Australia is part of the Department of Industry, Tourism and Resources. Its role includes identifying natural geological hazards and advising on mitigating the risk in the Australian region.

Geoscience Australia can provide rapid information on the parameters of local and regional earthquakes. Permanent networks of seismographs and accelerographs are maintained throughout the continent to provide information on the ground response to earthquakes. In addition to maintaining the National Earthquake Database, Geoscience Australia undertakes special hazard assessment studies.

Bureau of Meteorology

The Bureau of Meteorology is the national meteorological authority for Australia and is an agency of the Department of the Environment and Heritage. It is responsible for the provision of meteorological and related services in support of the safety, security and general welfare of the community; for maintaining the basic meteorological infrastructure necessary to ensure the continuity and integrity of the national climate record; and for observing and researching the behaviour of Australia's weather and climate.

A key element of the Bureau's role is to provide weather, hydrological, climate and consultative services that monitor, warn of and advise on the potential impacts of natural hazards. These include tropical cyclones, weather conducive to extreme fire risk, severe local storms, gales, floods, drought and seismic sea waves.

The Bureau provides Regional Forecasting Centres, Tropical Cyclone Warning Centres (Brisbane, Darwin and Perth) and Flood Warning Centres. Many monitoring and warning activities are carried out in partnership with other Commonwealth, State and Local Government agencies and media and community groups.

Australian Maritime Safety Authority

The Australian Maritime Safety Authority (AMSA) is responsible for aviation and maritime search and rescue operations in the Australian jurisdiction and for the protection of Australia's marine environment. These activities are conducted by Australian Search and Rescue (AusSAR) and the Marine Environmental Protection Service (MEPS), which are agencies within AMSA.

Australian Agency for International Development (AusAID)

The Australian Agency for International Development (AusAID) is the agency responsible for administering Australia's overseas development assistance program. An integral part of this program is the humanitarian relief program, administered by AusAID's Humanitarian and Emergency Services (HES) Section, that provides emergency and refugee relief assistance. AusAID also manages development programs that assist countries, particularly Pacific island countries, to develop their disaster risk management capacity.

STATE AND TERRITORY EMERGENCY MANAGEMENT ARRANGEMENTS

The Governments of the States and Territories that make up the Commonwealth of Australia have direct responsibility for the protection of life and property of their populations. These governments raise and maintain emergency services and can call upon a wide range of other resources to support them. State and Territory Governments also retain prime responsibility for risk management activities within their borders and work with the Commonwealth Government on national risk management

Each of the States and Territories has a slightly different government structure and administrative arrangements. Accordingly each has its own emergency management system. Most have laws and regulations relating to emergency and risk management. These are supported by relevant plans and procedures at State and Territory and local government levels. Although arrangements, titles and procedures vary to reflect the different administrative arrangements, the systems are very similar. Regular exchange of information, particularly across State and Territory boundaries, supports the adoption of common approaches and standards.

All States and Territories have allocated responsibility for emergency and risk management to a nominated Minister. The Minister is supported by a high-level council and/or committee, with representation from relevant departments and agencies, responsible for providing advice on all aspects of prevention of, preparation for, response to and recovery from emergencies

and disasters. These committees are also responsible for coordination of activities between departments and agencies, for planning and for resource allocation.

As appropriate, similar arrangements are in place at local government level with nominated officials carrying prime responsibility and committees with similar responsibilities being established and meeting regularly.

Non-government and community organisations are included in State and Territory disaster risk management arrangements with many being allocated specific coordination and operational responsibilities in relevant plans as well as participating in advisory and coordination committees.

NATIONAL COORDINATION ARRANGEMENTS

The Australian Emergency Management Committee (AEMC) is the peak national consultative forum in emergency risk management in Australia. Chaired by the Director General of Emergency Management Australia, it includes representatives of key Commonwealth Departments with involvement in disaster risk management, senior emergency management representatives from the States and Territories and the Australian Local Government Association. The Committee meets annually to coordinate Commonwealth and State and Territory interests and is supported by four national advisory groups with relevant membership dealing with Education and training, Community Awareness, Communications and Information Systems, and Civil Defence.

The role of the AEMC is:

- Promote emergency management as a mainstream critical public safety issue on the national strategic policy agenda
- Encourage ongoing and effective national emergency management capability coordination and cooperation within and across all jurisdictions and with other national bodies (eg National Counter Terrorism Committee)
- As a matter of priority, oversee the implementation of the recommendations of a recent High Level Group Report from the Council of Australian Governments (the highest political coordination forum) including the key areas of: natural disaster mitigation programs; natural disaster relief and recovery arrangements; data collection; land use planning, development and building control regimes; community awareness, education and warnings; emergency management volunteers; response operations and indigenous communities.
- Ensure emergency management and mitigation implications are considered by the Australian Government, State and Territory and local governments in the formulation of relevant future policy and programs
- Share and disseminate best practice examples and lessons on domestic and international emergency management developments
- Develop issues requiring consideration at Ministerial level for submission to the Council and the existing Local Government and Planning Ministers Council.
- Identify strategic national emergency management issues and provide advice to governments on these
- Maintain effective working relationships with other national forums and bodies with emergency management responsibilities

The AEMC is supplemented by a working party with delegated powers, known as the National Emergency Management Executive Group (NEMEG) which is also chaired by the Director General of Emergency Management Australia and includes the executive officers of the State and Territory emergency and disaster organisations. This working group meets twice yearly to review disaster and emergency risk management policies and agree the agenda for the AEMC.

Other national committees that address disaster risk management issues from time to time include the Australian Police Ministers Council, the National Land Use Planning Council, the Public Safety Industry Training Advisory Board, and the Australasian Fire Authorities Council. A national critical infrastructure protection body addresses the resilience of key buildings and major community lifelines to the impact of hazards. Issues considered include security and electrical and information redundancies as well as building standards.

At Commonwealth Government level there is a senior interdepartmental committee known as the Commonwealth Counter Disaster Task force while a number of States and Territories have established State Mitigation Committees.

OPERATIONAL SUPPORT ARRANGEMENTS

Arrangements are in place under which the Commonwealth Government provides assistance to States and Territories during emergencies and disasters when their resources are unable to cope with the needs of the situation. Such assistance can include activation of the resources of the Australian Defence Force or of other government agencies. Agreements have also been made between adjacent States and Territories both to deal with events that transcend geographical boundaries and to provide mutual support in times of need. These are underpinned by national measures to encourage standardisation of terminology, procedures and equipment.

TRAINING AND EDUCATION

Australia has agreed a range of national industry competency standards to assist portability of qualifications between different agencies and government sectors. Training to these standards is provided by Registered Training Organisations that have been approved nationally as meeting appropriate training standards using approved courses. Emergency management competency-based training is provided on a national basis by the Emergency Management Australia Institute at Mount Macedon in Victoria and on and on a State and Territory Basis by emergency management agencies that have obtained status as Registered Training Organisations. Successful completion of a number of agreed courses from the Public Safety Training package can assist in the completion of studies for a Graduate Certificate in Emergency Management.

Tertiary qualifications in emergency management are offered through a number of tertiary institutions around the country and some of these qualifications can be obtained by distance education.

PUBLIC AWARENESS

Public awareness programs are continuously being conducted throughout the country. A number are national programs aimed at raising generic hazard awareness and providing

information on impact mitigation and preparedness measures. These programs are conducted through, and in cooperation with, State and Territory emergency management agencies. These agencies work closely with individual communities, enhancing the local relevance of the programs and adding location-specific elements. States and Territories also conduct their own programs, these being regularly improved by the shared knowledge gained from regular meetings of national advisory groups.

The educational curricula at primary and secondary levels in a number of States and Territories contain disaster risk management-related elements. Specific programs are designed to support these elements, which have proved to be very successful channels for transferring awareness messages into the home.

The assistance of the electronic and print media is regularly sought in raising awareness of hazards and of mitigation and preparedness measures. Increasing public interest in the impact of global warming, the El Niño phenomenon and environmental issues has been a factor in the improved coverage of risk-related issues with informed print articles and ever-improving radio and television documentary coverage proving both popular and valuable.

The media is also a key participant in warning systems and there is widespread public disquiet when, as in the 2003 bushfires, media promulgation of warnings is perceived to be inadequate. The Commonwealth Government has a memorandum of understanding with the national broadcaster (The Australian Broadcasting Corporation) to give priority to delivery of information to the public in times of emergency or disaster.

COMMUNITY INVOLVEMENT

There is broad community involvement in disaster risk management in Australia, particularly in rural areas. The relatively small population in a large continent has led people to become more involved in meeting community needs that cannot be met by government. Volunteers play a significant role in providing all manner of community services from planning committees to emergency services. Trained volunteers provide a majority of the staff of rural fire services, ambulance services and rescue services. State and Territory Emergency Services, services with a role in support of the statutory emergency services as well as specific roles in relation to floods, earthquakes and other hazards, are almost completely staffed by volunteers. Volunteers in various community organisations also have key roles in the provision of welfare and support services for those affected by disasters as well as providing training and education functions to the general public.

Communities are also being encouraged to participate in risk assessment activity. An example is the Tasmanian Emergency Risk Management Project in which specialist community groups including local health officers, fire officers, agricultural experts and others join local government affiliated groups in making assessments. Risks are identified, and evaluated then mitigation strategies are developed. Response and recovery plans are prepared and ratified through a similar community centred approach.

TRADITIONAL KNOWLEDGE AND PRACTICES.

State and territory and local government agencies involved in emergency management activities consult with indigenous communities and involve them in risk assessment and mitigation and planning in the same way as other communities. Aboriginal liaison Officers

are employed by many of the agencies and their expertise has been sought increasingly in recent years, particularly in collecting, transferring and implementing traditional mitigation practices.

The Australian Emergency Management Committee has established a Remote Indigenous Advisory Committee whose role is to:

- provide strategic advice on the research, development and training needs of the emergency management sector in relation to remote indigenous communities;
- coordinate resource sharing and build synergies between the States and Territories working with remote indigenous communities, and
- facilitate collaborative work on projects relating to remote indigenous communities as a vehicle for sharing expertise across States and Territories and also between *researchers and practitioners*

MULTICULTURAL EMERGENCY RISK MANAGEMENT

Australia is a multicultural society in which many languages are spoken and in which communication in English language cannot be presumed to meet all needs. Many migrants come from countries with very different cultures and from societies with very different emergency risk management practices. Traditions also differ markedly as do the degree of dependence on government and the expectations of the government role in relation to hazards. To meet these challenges, Emergency Management Australia, in consultation with a group of multicultural communities and government agencies has developed Guidelines for Emergency Managers working with Cultural and Linguistically Diverse Communities. This is a key tool for emergency risk management agencies working to meet the needs of a diverse community.

NATURAL DISASTER MITIGATION PROGRAM

Introduced in 2004 to identify and address natural disaster risk priorities throughout Australia. Funds are available for natural disaster mitigation works, measures and related activities that contributed to safer, more sustainable communities.

In 2002, the Council of Australian Governments commissioned a review of Australia's approach to natural disaster relief, recovery and mitigation. The resulting report, *Natural Disasters in Australia: Reforming Mitigation, Relief and Recovery Arrangements*, made a number of findings and recommendations regarding those arrangements. In particular, it found that the only national programme supporting disaster mitigation measures was the Regional Flood Mitigation Programme. Other than for flood mitigation, Commonwealth, State and Territory financial assistance was not available nationally to implement mitigation measures identified by disaster risk management studies. As a consequence, natural disaster risks that were identified through disaster risk management studies too often went untreated.

This led to the establishment of the Natural Disaster Mitigation Programme, which represents a fundamental shift in focus towards cost-effective, evidence-based disaster mitigation – a shift beyond disaster response and reaction, towards anticipation and mitigation. It provides an opportunity for all levels of government, working in partnership with each other, to reduce the immense toll that natural disasters wreak on Australia's communities.

During the period 2004-2005, the Australian Building Codes Board has undertaken to review Australian Building Codes to assess the suitability of current practices to resist the impact of a wider range of natural hazards including bushfire, earthquake, flood, storm, cyclone, storm surge, landslide, tsunami, meteorite strike and tornado. Previously codes concentrated on building resistance to domestic fire and, according to the region, tropical cyclone and earthquake.

THE CITIES AND CRITICAL INFRASTRUCTURE PROJECT

The Cities and Critical Infrastructure Project (formerly known as the Cities Project) is a national project that undertakes applied research to assess the risks from natural and anthropogenic hazards to Australian communities. The risks assessed include earthquakes, floods, severe winds, bushfires, landslides and coastal erosion. The Cities and Critical Infrastructure Project works closely with its partners who often include State and Local Government emergency management and planning departments, and infrastructure agencies such as water, gas, and electric power utilities. The Cities and Critical Infrastructure Project is a key interface between the risk modelling activities of Geoscience Australia's Risk Research Group and the Australian community. Studies have been carried out in five major centres of population along the east coast of Australia and attention is now moving elsewhere. The current major activity of the Cities and Critical Infrastructure Project is in Perth, Western Australia.

The Canberra Bushfires



The weeks following the firestorms that struck Canberra on January 18 provided the Cities and Critical Infrastructure Project with a unique opportunity to collect crucial data concerning building damage and fire behaviour. The data will provide information about the impact of this disaster and also assist accurate modelling of future events and their consequences.

Using Global Positioning System (GPS) units, digital cameras and palmtop computers with ArcPad GIS, a large team from the Cities Project recorded comprehensive information on **431** suburban properties that suffered damage to the primary residence by fire

and/or wind. Over one thousand photos were also taken and linked to the GIS database. See table below for a break-down of these destroyed or damaged properties.

Damage State	Chapman	Curtin	Duffy	Giralang	Holder	Kambah	Lyons	Rivert	Torrans	Weston
Destroyed	77	3	221	1	35	28	4	13	2	6
Heavy Damage	2	1	2	-	1	4	-	-	-	-
Medium Damage	3	-	1	-	-	-	-	-	-	-
Light Damage	11	-	6	-	-	2	-	-	-	-

Superficial	3	-	2	-	-	2	-	-	-	-
SUB TOTAL	96	4	232	2	36	36	4	13	2	6

The large percentage of homes that were completely destroyed (91%), compared to the small percentage that showed lesser damage (9%), indicates the rapid movement and ferocity of the fire storm. Moreover, the figures show that, once ignition was established in buildings they were, with few exceptions, completely destroyed.

The unique meteorological conditions associated with the approaching fire front caused extreme wind conditions in localised areas in south-western Canberra. These fierce winds uprooted trees, downed powerlines, blew in house windows, stripped tiles from roofs, and even embedded pot plants in house roofs ahead of the fire front. The statistics show that 5% of damaged houses were severely damaged by wind alone, while another 5% were damaged by both wind and fire.

The Cities Project's data is being used by other agencies for a variety of purposes. The data is presently being integrated with other scientific data (such as data on fire spread and intensity) collected by the CSIRO Fire Research Group.

All the data collected by the Project will help emergency managers, planners and engineers to develop appropriate policies and regulations for future fire management. Most importantly, this information will allow other communities to learn from the ACT's experience.

NATIONAL RISK ASSESSMENT PROJECT

This five-year project, which commenced in 2004, will provide a national picture of natural disaster risks in Australia. It is being developed by the Australian Government in collaboration with State and Governments, leading academics and other stakeholders. The research findings will help inform the allocation of funding under the new Natural Disaster Mitigation Programme.

EARLY WARNING SYSTEMS

Early Warning Systems are available for a number of hazards:

- **Meteorological Hazards** The Bureau of Meteorology maintains three tropical cyclone warning centres, in Perth, Darwin and Brisbane, that provide appropriate warnings throughout the season. The Bureau also provides strong wind, thunderstorm, flood, drought and other hazardous weather warning services.
- **Fire Hazard** Supplementing fire weather warnings, fire authorities in all States and Territories monitor vegetation density, ground litter volume and vegetation dryness to assess fire danger and provide appropriate warnings as well as restrictions on the use of fire in the open air.

- ❑ **Tsunami Hazard** Australia receives tsunami warnings from the Tsunami Warning Centre in Hawaii. These are promulgated by the Bureau of Meteorology.
- ❑ **Geological hazards** Geoscience Australia has an Earth Monitoring Group that monitors seismic, geodetic and magnetic activity in Australia and Antarctica. Data are freely available to the international community. The data are used for determining the origin and nature of seismic events, providing earthquake alerts and identifying space weather events.
- ❑ **Human disease** Health services throughout Australia monitor national and international disease risks and provide early warnings of possible outbreaks, supported by details or appropriate precautionary measures that can be taken.
- ❑ **Exotic agricultural disease and pests** Agriculture is a major contributor to the Australian economy so, in addition to stringent quarantine measures, agriculture authorities monitor agricultural activities and provide warnings of outbreaks of disease, pest infestation and other related hazards.
- ❑ **Security** As in any other country, police and intelligence authorities provide warnings of potential threats to personal and property security.

Warnings are distributed widely through the electronic and print media.

INTERNATIONAL DEVELOPMENT ACTIVITIES

Australia has always accepted that it has a responsibility to provide humanitarian assistance to countries affected by major disasters. Since the early 1980s, it has also provided support to regional countries with building their disaster risk management capacity. Each year, through the programs administered by the Australian Agency for International Development (AusAID), direct developmental assistance is provided to the Pacific Island countries either on a bilateral basis or through support of regional programs including those conducted by the South Pacific Applied Geoscience Commission (SOPAC), non-government organisations and the Red Cross movement. Many of these programs are shown in *****.

In addition, Australia provides regular funding support for disaster risk management development activities throughout the Asia-Pacific region by its core funding contributions to the Asian Disaster Preparedness Center in Bangkok.