Australia

National progress report on the implementation of the Hyogo Framework for Action

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Strategic goals 1

Area 1

The more effective integration of disaster risk considerations into sustainable development policies, planning and programming at all levels, with a special emphasis on disaster prevention, mitigation, preparedness and vulnerability reduction.

Strategic Goal Statement:
To prepare and implement strategies that ensure capabilities to assess and consider disaster risk are included as an integral component of all operational management and decision making processes. The strategies must be able to be used readily across all jurisdictions and by all agencies.

To improve disaster mitigation methods, employ practical levels of acceptance for methods and deliverables; support the objectives of risk management through development of tools, guidelines and databases that assists all stakeholders to conduct risk assessments. In addition, to foster the development of systems for coordinating, sharing, aggregating, and making available consistent information on risk that is essential to support risk management decisions.

Area 2

The development and strengthening of institutions, mechanisms and capacities at all levels, in particular at the community level, that can systematically contribute to building resilience to hazards.

Strategic Goal Statement:
To improve national resilience by developing community capacity and resilience to emergencies and disasters through better engaging them in the emergency management process. The development of strategic partnerships, advancing community capacity and resilience, enhancing emergency management capability, and identifying ways to better manage the consequences of disasters will assist all participants to operate with agility and adapt to the changing nature of emergencies.

To improve disaster risk reduction outcomes through the development of business and human resource policy initiatives that will recognise innovation, and develop, encourage, and support all levels in their approach to hazard resilience capacity building.

Area 3

The systematic incorporation of risk reduction approaches into the design and implementation of emergency preparedness, response and recovery programmes in the reconstruction of affected communities.

Strategic Goal Statement:
To strengthen existing arrangements and where possible identify new strategies to strengthen recovery programmes which involve protecting public health and safety, restoring essential services and providing emergency/disaster relief to businesses and individuals affected by the consequences of natural, technological and human-caused emergencies and disasters.

To integrate existing strategies for emergency and disaster mitigation, education and training, research, consequence management, continuity management and emergency information management. The aim being to where possible and appropriate ensure that national approaches are taken toward achieving an effective response to disasters.

Priority for action 1

Ensure that disaster risk reduction is a national and a local priority with a strong institutional basis for implementation.

Core indicator 1

National policy and legal framework for disaster risk reduction exists with decentralised responsibilities and capacities at all levels.

Level of Progress achieved:
4: Substantial achievement attained but with recognized limitations in key aspects, such as financial resources and/ or operational capacities

Description:
Australia's federal system of government sees all three levels of government (federal, state and local government) involved in differing activities on disaster risk reduction. All levels of government within Australia recognise the role of business entities and the broader community in reducing risk, and engage with them as part of taking a holistic approach to disaster risk reduction.

In December 2003, the Council of Australian Governments (COAG) approved the recommendations of the review "Natural Disasters in Australia: Reforming mitigation, relief and recovery arrangements". The review represents a holistic approach to disaster management in Australia across state and federal governments, and is applicable to disasters of all types: natural, technological and human-caused. By taking an "all hazards approach", the arrangements developed for natural disasters will be consistent with future directions taken for other emergencies or events.

The Ministerial Council for Police and Emergency Management (MCPEM) oversees national disaster management, seeking to develop effective collaboration and coordination of federal, state, territory and local government action.

The MCPEM is advised by the Australian Emergency Management Committee (AEMC), Australia's peak consultative emergency management forum. This committee comprises chairpersons and executive officers of State and Territory emergency management committees, the Director General of Emergency Management Australia, representatives of the Australian Local Government Association and the New Zealand Director of Civil Defence and Emergency Management.

Some disaster risk reduction MCPEM achievements include:
• continuing to work closely with the COAG Climate Change and Water Working Group in emergency management related areas.
• working with the Local Government and Planning Ministers' Council on land use, building and development planning issues as they impact emergency management; and
• working towards implementing the National Emergency Management Strategy for Remote Indigenous Communities (Keeping Our Mob Safe). This Strategy is critical to prepare vulnerable and isolated Indigenous communities from serious disaster.

Context & Constraints:
A continuing challenge for the future will be bringing together sometimes competing aspirations for emergency management between the three layers of government in Australia, and more fully engaging the private sector and non-government agencies.

Core indicator 2

Dedicated and adequate resources are available to implement disaster risk reduction plans and activities at all administrative levels

Level of Progress achieved:
4: Substantial achievement attained but with recognized limitations in key aspects, such as financial resources and/ or operational capacities

Description:
Natural Disaster Mitigation Program (NDMP)
The NDMP was established in 2003 04 and aims to create safer, sustainable communities better able to withstand the effects of floods, storms, bushfires and other rapid onset natural disasters. Projects that qualify for funding include natural disaster risk management studies, construction of flood levees and early warning systems.

Working Together to Manage Emergencies
The Australian Government's 'Working Together to Manage Emergencies' initiative was implemented in order to build Australia's national preparedness for emergencies. The initiative committed:
• $30 million over four years to establishing a Local Grants Scheme (LGS) to assist local government to develop and implement emergency risk management initiatives, identify vulnerabilities with a view to enhancing protective measures for critical infrastructure and provide emergency management and security awareness training for local government staff; and
• $16 million over four years to establish a National Emergency Volunteer Support Fund (NEVSF) to boost the recruitment, retention and training of volunteer organisations at the frontline of emergency management.

Bushfire Mitigation Program
The BMP was introduced in 2004 05 with $15 million committed over three years for the construction, maintenance and signage of effective fire trail networks. In April 2007, the BMP was extended to 30 June 2011 with additional funding of $20 million ($5 million per year).

All three spheres of government provide funding under the NDMP and BMP. Generally, the Australian Government contributes up to one third of approved project costs and the relevant state or territory government is required to match this funding, but may contribute more, with local agencies making up the balance.

Context & Constraints:
A major challenge for these programs is the expected impact of climate change on the frequency, severity and distribution of natural disasters in future. A review of the BMP is due to be undertaken in 2010.

Core indicator 3

Community Participation and decentralisation is ensured through the delegation of authority and resources to local levels

Level of Progress achieved:
4: Substantial achievement attained but with recognized limitations in key aspects, such as financial resources and/ or operational capacities

Description:
The key elements of future emergency management at the national level are the mitigation of disaster impact, the promotion of community safety, and an investment in community resilience. These are

undertaken through a whole-of-government, multi-agency, and "all hazards" approach.

Emergencies and disasters rarely conform to jurisdictional boundaries. Local governments will always have a key role in the response to and recovery from an emergency or disaster event, usually in a broader state, territory or even national context.
Community engagement roles undertaken by local governments are seen as very important and community attitudes appear to be very supportive.
Australia has a long and proud tradition of volunteerism and one of the most important elements of the volunteer movement is the emergency management and response sector which has more than 500 000 volunteers. They provide frontline response capabilities against our major natural hazards of floods, storms, cyclones and bushfires. Volunteers are particularly active at local level with schools and community groups, and their extensive involvement in mitigation preparedness programs has enhanced their effectiveness and the overall value to the Australian Community.
The Australian Emergency Management Volunteer Forum, supported by Emergency Management Australia was formed 2001, as part of the International Year of Volunteers. The purpose of the Forum is to provide a national forum representative of the volunteer emergency management sector, to facilitate better communication between the organisations within it, and to provide advocacy for the sector.
The objectives of the Forum are to foster communication, to share information, provide advocacy, particularly on behalf of the non-government organisations and to focus on the issues States and Territories, as well as providing day to day support in lesser incidents.

Context & Constraints:
A significant issue for emergency management in Australia is its ability to maintain a strong, active and willing volunteer community into the future. Busy lives and intergenerational changes mean that people are less likely to volunteer, or if they do, then it is less likely to be on the life-long, continuous basis of the past. The emergency services volunteer cohort is ageing. At the same time, community expectation of support by, for example, the State Emergency Services (SES - largely made up of volunteers), is increasing.

Core indicator 4

A national multi sectoral platform for disaster risk reduction is functioning.

Level of Progress achieved:
4: Substantial achievement attained but with recognized limitations in key aspects, such as financial resources and/ or operational capacities

Description:
In December 2003, the Council of Australian Governments (COAG) approved the recommendations of the review "Natural Disasters in Australia: Reforming mitigation, relief and recovery arrangements". The review represents a holistic approach to disaster management in Australia across state and federal governments, and is applicable to disasters of all types: natural, technological and human-caused. By taking an "all hazards approach", the arrangements developed for natural disasters will be consistent with future directions taken for other emergencies or events.

In January 2005, the COAG released its response to the National Inquiry on Bushfire Mitigation and Management, 2004 report (the Bushfire report) and tasked the Ministerial Council for Police and Emergency Management - Emergency Management to oversee the implementation of the response to the report.

The report made recommendations on: community education and preparedness; research; information and analysis; risk modification; readiness; response; and recovery. A number of the recommendations

were consistent with the recommendations of the Natural Disasters report, on which work was already underway.

Through the implementation of the two COAG reports, significant reform and change to emergency management arrangements have been effected, beyond the standard continuous improvement model. The states and territories have primary responsibility for the protection of life and property and each has legislation for emergency management. One of the major changes resulting from the two reports has been greatly improved national cooperation through which the Australian, state, territory and local governments have contributed time, effort and resources towards a consistent approach nationally to how Australia manages disasters, including a focus on mitigation, relief and recovery.

Context & Constraints:
A continuing challenge for the future will be bringing together sometimes competing aspirations for emergency management between the three layers of government in Australia, and more fully engaging the private sector and non-government agencies.

Priority for action 2
Identify, assess and monitor disaster risks and enhance early warning

Core indicator 1

National and local risk assessments based on hazard data and vulnerability information are available and include risk assessments for key sectors.

Level of Progress achieved:
4: Substantial achievement attained but with recognized limitations in key aspects, such as financial resources and/ or operational capacities

Description:
The Natural Disaster Mitigation Program (NDMP) was established in 2003 04 and aims to create safer, sustainable communities better able to withstand the effects of floods, storms, bushfires and other rapid onset natural disasters. Projects that qualify for funding include natural disaster risk management studies, construction of flood levees and early warning systems.

The National Hazard Impacts Program (NHIP) supports reform commitments set out in the 2003 COAG review "Natural Disasters in Australia: Reforming mitigation, relief and recovery" to implement a national programme of systematic and rigorous disaster risk assessments, and contribute to the development of a nationally consistent approach to data collection, research and analysis to ensure a sound knowledge base on natural disasters and mitigation.

As part of the Disaster Mitigation Australia Package (DMAP), NHIP has the lead role in developing models, tools and data to support a National Risk Assessment Framework for natural hazards. NHIP's research requires the development and integration of scientific results across several technical disciplines and for a diverse range of hazards. The primary focus is on earthquake, severe wind (including tropical cyclone) and tsunami in Australia, with additional advice and data integration for landslide, flood and bushfire hazards.

The Australian Government is developing a risk assessment 'toolkit': an online resource that will provide a range of risk information including reports, hazard and exposure data, models and maps to support best-practice risk assessments across Australia.

Context & Constraints:
A challenge for the future may be the need for all stakeholders to balance conflicting priorities and advice with demands for limited resources

Core indicator 2

Systems are in place to monitor, archive and disseminate data on key hazards and vulnerabilities

Level of Progress achieved:
4: Substantial achievement attained but with recognized limitations in key aspects, such as financial resources and/ or operational capacities

Description:
Geoscience Australia monitors and assesses earth-surface processes which pose a risk to Australia. It gathers data and develops tools for use by governments and other authorities to help them make Australia as safe as possible from natural hazards.
Proactive steps against hazards include:
• Recognising which areas have the greatest hazard potential;
• measuring the likelihood of various hazards occurring in these priority areas;
• modelling the impact of hazards;
• estimating the potential loss to communities; and
• collecting data when a hazard occurs to help prepare for future events.

Further refinement and better use of risk assessment is dependent on the parallel enhancement of information including data (in both quality and quantity). The Emergency Management Information Development Plan has been developed through work led by the Australian Bureau of Statistics in conjunction with states and territories. The plan outlines priorities required to bring national consistency to the gathering of emergency information. It highlights gaps in emergency management information required to support policy, planning and accountability. The implementation of the plan is a priority for the National Spatial Information Management working group. The aim of this work is to gather the necessary information to understand the full impacts of costs of emergencies, devise better models and tools to allocate investment across prevention, preparedness, response and recovery, and to assess the impact of emergencies on the community.

The 'National Risk Assessment Framework for Sudden Onset Natural Hazards' has been developed by the National Risk Assessment Advisory Group (an AEMC working group). The aim of the Framework is to establish a nationally consistent approach to the assessment of risk across Australia down to local level. Guidelines which will form the basis for assessments under this Framework are being drafted and will be submitted to the AEMC for endorsement later in 2008.

Context & Constraints:
Research into the effects of disasters on communities has highlighted significant gaps in knowledge on what is really meant by 'community safety'. Further research could contribute to enhanced knowledge and mutual understanding of constructs such as community centred and community safety.

It is required to have a methodology for assessing resource needs and priorities within emergency management, tools to facilitate emergency management policy exploration and decision support, and a framework for evaluating the effectiveness of emergency service investment to optimise community risk treatment

Core indicator 3

Early warning systems are in place for all major hazards, with outreach to communities.

Level of Progress achieved:
4: Substantial achievement attained but with recognized limitations in key aspects, such as financial resources and/ or operational capacities

Description:
The Australian Government is currently assessing the availability of current and emerging technologies which are capable of delivering a national emergency warning system.

The Bureau of Meteorology's Head Office Weather Services Policy Branch coordinates Forecast Offices in each State and Territory and has close links with Australian Government and State emergency services and disaster preparedness organisations.

The Bureau's Early Warning Services comprise the following:
(a) Tropical Cyclone Warnings
• Provided for cyclone prone areas. Planning and operation of the tropical cyclone warning service is closely linked to, and coordinated with, emergency services organisations to maximise the effectiveness of community preparedness and response.
 (b) Severe Thunderstorm Warnings
• The Bureau provides forecasts of severe thunderstorms, as well as severe weather warnings
 (c) Fire Danger Warnings
• The fire weather warning service provides public, routine forecasts of fire danger during the fire season and fire weather warnings when the fire danger is expected to exceed a certain critical level.
• It provides fire management authorities and emergency services with detailed routine forecasts, fire weather warnings and operational forecasts to assist in combating ongoing fires. This service includes special forecasts for hazard reduction burns and other advice to assist the assessment and management of fire risk.

The Australian Tsunami Warning System aims to provide a comprehensive tsunami warning system for Australia, capable of delivering timely tsunami warnings to the Australian population in an effective way.

As part of a coordinated national emergency plan, a distinctive audio signal has been adopted to alert the community to the broadcast of an urgent safety message relating to a major emergency/disaster. The Standard Emergency Warning Signal (SEWS) is a wailing siren sound which is used across Australia to attract attention to a range of imminent hazards through a variety of media.

Context & Constraints:
Effective emergency warning systems alert, inform and reassure people. Emergency managers recognise that: basic warning information needs are consistent and predictable across cultures, abilities and ages; presentation needs vary; people do not act on a single warning message (corroboration is required); authoritative, factual and timely warnings are necessary to ensure that those most at risk take appropriate action; over-alerting can cause complacency; dissemination through multiple media including telecommunications, internet, broadcast media and sirens is required to ensure that warnings are accessible to the widest possible audience including vulnerable members of our community; and using different warning methods for different threats can create confusion and reduce effectiveness.

Core indicator 4

National and local risk assessments take account of regional / trans boundary risks, with a view to regional cooperation on risk reduction.

Level of Progress achieved:
4: Substantial achievement attained but with recognized limitations in key aspects, such as financial

resources and/ or operational capacities

Description:
Australia works with bilateral, multilateral and regional partners to reduce the risk of, and respond to disasters and humanitarian emergencies in Africa, Asia and the Pacific. Through building strong partnerships, Australia supports the strengthening of capabilities at regional, national and local levels to prevent, mitigate, prepare for and respond to disasters.

Australia is building the capacity of Pacific and Indian Ocean nations to respond to tsunami warnings, including through funding travel of developing country partners to attend regional meetings and workshops.

The Bureau of Meteorology, with support from SOPAC is assessing the capacity of 14 Pacific island countries to receive and respond to tsunami warnings from the Hawaiian PTWC. Progress has been made on the development of a tsunami hazard map for the southwest Pacific through a partnership between Geoscience Australia (GA) and SOPAC. GA is also working with technical agencies in the Philippines and PNG to build their capacity to analyse natural hazard risk.

Australia is currently co-chair of the APEC Taskforce for Emergency Preparedness with Indonesia. APEC's strengths in emergency preparedness and response lie in regional cooperation, multi-sectoral participation, private-sector partnerships, and political buy-in. APEC can play a constructive role in enabling the region to better prepare for emergencies. Australia also worked with Indonesia to develop ASEAN Regional Forum Strategic Guidelines for Humanitarian Assistance/Disaster Relief.

Australia provides ongoing support to the IFRC's International Disaster Response Laws, Rules and Principles (IDRL) Asia-Pacific program which aims to address operational challenges in international disaster relief operations.

Australia contributes to regional advocacy on DRR through partnerships with the Asia-Pacific Program of the UN ISDR and the World Bank's Global Facility for DRR. Australia bilaterally supports national governments to implement DRR activities and supports capacity development of NGOs to reduce disaster risk.

Context & Constraints:
A study of Disaster Risk Management Needs in the Asia Pacific in 2007 found that there is a lack of coordination between regional stakeholders for a variety of reasons, including: lack of resourcing and capacity in some organisations limiting their ability to either lead or participate in regional fora, unwillingness by some stakeholders to realign existing programs with those of other stakeholders, lack of knowledge about global and regional policy reforms and, generally, insufficient understanding about the priorities and programs of other stakeholders.

This lack of coordination results in actual, or potential, duplication of effort in a range of areas, including: regional networks and meetings, knowledge management, capacity building and training, and risk assessment and hazard mapping.

Priority for action 3
Use knowledge, innovation and education to build a culture of safety and resilience at all levels

Core indicator 1
Relevant information on disasters is available and accessible at all levels, to all stakeholders (through

Level of Progress achieved:
4: Substantial achievement attained but with recognized limitations in key aspects, such as financial resources and/ or operational capacities

Description:
Australasian Libraries in the Emergency Sector (ALIES) is a cooperative information network which aims to serve the common interests of emergency management agencies.
ALIES supports the information requirements of the emergency sector by promoting and facilitating the sharing of knowledge and resources within Australia and New Zealand. Their aim is to:
• Promote and support the professional status of emergency management agency libraries and information services, and the use of information resources, facilities and professional networks.
• Provide opportunities for the exchange of knowledge, experience, skills and resources throughout the network
• Provide a mechanism for contributing to wider policy issues affecting emergency management practices.
AusDIN Is the Australian Disaster Information Network. The AusDIN Portal is designed to be a one-stop-shop for emergency management information for communities, schools, media, researchers and emergency management practitioners.
It will provide access to a wide range of information including local emergency management networks, spatial information, reports, warning, alerts and general information and disasters data.
It is a multi-agency initiative to establish a national knowledge and information network of people and systems to serve the emergency management community in the Australian region. It also supports the development of governance arrangements for general emergency management data, information and knowledge through development of best practice, guidelines, sponsoring of workshops and consideration of national issues.

Context & Constraints:
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Core indicator 2

School curricula , education material and relevant trainings include disaster risk reduction and recovery concepts and practices.

Level of Progress achieved:
5: Comprehensive achievement with sustained commitment and capacities at all levels

Description:
Emergency Management Australia (EMA) has also been prominent in the development of primary and secondary school curriculum-based materials and resource kits. Resources for students, teachers and principals can be accessed via the EMA website. EMA has a dedicated school officer to ensure that the material developed meets the needs of the Australian school community.

In February 2007, EMA commissioned the development of a school education learning object resource. The resource is designed for middle year students (ages 10 - 15). Dingo Creek (a fictitious Australian town) is a learning object available via the internet on the EMA school education webpage, to engage students in the process of identifying risks from natural disasters to their immediate community and interrogating the emergency risk management process to mitigate the impacts of natural disaster on the Australian environment.

Emergency Management Australia's (EMA) education and training activities are managed from the Institute at Mount Macedon in Victoria. Activities include the identification and development of best practice in emergency management, and development and delivery of accredited education and training programs, many of which are derived from the National Emergency Management Competency Standards.

Geoscience Australia monitors and assesses earth-surface processes which pose a risk to Australia. It gathers data and develops tools for use by governments and other authorities to help them make Australia as safe as possible from natural hazards. This information is available and is an excellent source of information for students and the general community.

Proactive steps against hazards include:
• Recognising which areas have the greatest hazard potential;
• measuring the likelihood of various hazards occurring in these priority areas;
• modelling the impact of hazards;
• estimating the potential loss to communities; and
• collecting data when a hazard occurs to help prepare for future events.

Context & Constraints:

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Core indicator 3

Research methods and tools for multi-risk assessments and cost benefit analysis are developed and strenghtened.

Level of Progress achieved:
4: Substantial achievement attained but with recognized limitations in key aspects, such as financial resources and/ or operational capacities

Description:
The National Risk Assessment Framework is designed to improve our collective knowledge about natural hazard risk in Australia to support emergency risk management and natural hazard mitigation. The main goal for the National Risk Assessment Framework is to support the development of an evidence base for effective risk management decisions. Related goals are to:
• improve the value of the risk information produced by improving methods, and employing minimum levels of acceptance;
• develop tools, guidelines and databases that assists all stakeholders to conduct risk assessments;
• foster the development of systems for coordinating, sharing, aggregating, and making available consistent information on risk; and
• to improve emergency management decision making through the development of the above tools and systems.

The 'National Risk Assessment Framework for Sudden Onset Natural Hazards' has been developed by the National Risk Assessment Advisory Group. The aim of the Framework is to establish a nationally consistent approach to the assessment of risk across Australia down to local level. Guidelines which will form the basis for assessments under this Framework are being drafted and will be submitted to the Australian Emergency Management Committee (AEMC) for endorsement later in 2008.

These guidelines will augment the existing minimum standard for the Risk Management Standard AS/NZS 4360 which has been adopted for emergency/disaster management for use in all government sponsored programs.

Development continues on producing tools to enable consistent costing of the impact of disasters on infrastructure (including housing). Nationally consistent costing of disaster impacts provides powerful information that will inform priority decisions on preparedness and mitigation works. An AEMC working group is currently developing National Rapid Impact Assessment Guidelines. A national workshop to further these efforts is to be held with a view to developing nationally consistent practices and procedures to undertake initial assessments of disaster affected areas.

Context & Constraints:

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Core indicator 4

Countrywide public awareness strategy exists to stimulate a culture of disaster resilience, with outreach to urban and rural communities.

Level of Progress achieved:
4: Substantial achievement attained but with recognized limitations in key aspects, such as financial resources and/ or operational capacities

Description:
The Australian Government advocates that engaging local communities in emergency management, as well as increasing involvement and awareness at a grass roots level, is a critical step in improving national preparedness for emergencies and disasters of all types.

There are a wide variety of freely available community awareness and education publications from all levels of government. These provide background information as well as practical advice on preparation for, and coping with major hazards including severe storms, floods, cyclones, tsunami and earthquakes. These publications are produced in collaboration with subject matter experts.

All states and territories have public education awareness campaigns.

National review of community education awareness and engagement programs designed to enhance community safety for natural hazards due for completion December 2008. After the completion the National Community Safety Working Group (NCSWG) will identify appropriate means of disseminating principles and creating capacity within jurisdictional emergency services agencies to implement the outcomes.

The Ministerial Council for Police and Emergency Management has tasked the National Community Safety Working Group to investigate a national approach to community education that aims to develop individual and community resilience. This would constitute a paradigm shift from a dependant community to building more resilient communities and individuals.

Emergency Management Australia (EMA) has developed curriculum-based materials and resource kits to support studies in relevant curriculum areas at both primary and secondary school levels. Resources for students, teachers and principals can be accessed via the EMA website. EMA has a dedicated school education officer to ensure that the material developed meets the needs of the Australian school community.

Context & Constraints:
The emergency management sector considers that there is a need for a fundamental shift from a community dependent on government services to a community that more closely participates in emergency planning, preparedness, response and recovery and is, to some degree, self-reliant.

As commissioned by the Ministerial Council, the AEMC is considering the feasibility and implications of a paradigm shift in governments' messages regarding preparedness in the event of emergencies, including catastrophic disaster. When complete, this research will inform a national policy approach aimed at efficacious and more direct involvement by the community in emergency management.

Priority for action 4
Reduce the underlying risk factors

Core indicator 1

Disaster risk reduction is an integral objective of environment related policies and plans, including for land use natural resource management and adaptation to climate change.

Level of Progress achieved:
4: Substantial achievement attained but with recognized limitations in key aspects, such as financial resources and/ or operational capacities

Description:
In 2007 the Council of Australian Governments (COAG) endorsed a National Climate Change Adaptation Framework as the basis for jurisdictional actions on adaptation over the next five to seven years.
The Framework recognises that climate change is likely to increase the risk of natural disasters in a number of regions of Australia and that bushfire, floods and storms are a feature of Australia's variable climate. Climate change is also likely to increase the frequency and/or severity of extreme events.
One of the identified areas of action under the Adaptation Framework is natural disaster management. Climate change impacts need to be factored into natural disaster management, risk assessment, risk reduction, emergency services planning, and recovery management, especially for areas more vulnerable to extreme events.
The Framework identifies the following potential areas of action: a) research to improve knowledge on the nature and expected extent of changes to risk profiles for events such as bushfires, flooding, cyclones, storm surges, wind and hail damage; b) incorporate climate change impacts into planning for natural disaster response management, in particular the risk and changing behaviour from bushfires, flooding, cyclones, storm surges, wind and extremes in temperature. Among other things this will include improving information for emergency services and communities to foster awareness of climate change and adaptation responses.
The Framework also recognises that risks should be managed by those best equipped to understand the context and likely consequences of action, and there is a clear need to build capacity at local and regional scales. There is an important role for the community in addressing climate change risks, and under the Framework, governments will pursue a partnership approach to adaptation to manage risks and identify the part communities and individuals can play.

Context & Constraints:
Australia is a federation and imposes a range of complications not experienced by other nations. The shared responsibility for emergency management between the Australian Government and the states and territories can provide challenges for achieving the efficient use of resources and imposes a need for high level sophisticated coordinated policies and programs.

Core indicator 2

Social development policies and plans are being implemented to reduce the vulnerability of populations most at risk.

Level of Progress achieved:
4: Substantial achievement attained but with recognized limitations in key aspects, such as financial resources and/ or operational capacities

Description:
All levels of government have funded the Natural Disaster Mitigation Program (NDMP), directing funding primarily to local mitigation projects. The NDMP commenced in 2003-2004. To 2006-2007 it had invested over $100 million into mitigation projects. A wide range of natural disaster mitigation works, measures and related activities have been implemented including natural disaster risk management studies, disaster mitigation strategies, disaster warning systems, community awareness and readiness measures, land and building purchase schemes in high risk areas, investment in disaster resilient public infrastructure, and structural works to protect against damage (eg, cyclone shelters, flood levees and retarding basins, bushfire asset protection zones) with priority given to funding cost-effective projects with high returns.

A project to enhance community resilience to natural and man-made disasters amongst culturally and linguistically diverse communities, through increased engagement between these communities and the emergency management sector is being implemented nationally by Emergency Management Australia. This project has been funded by the Department of Immigration and Citizenship. Its aims are to: raise culturally and linguistically diverse (CALD) communities' awareness of emergency management; enhance community resilience to the effects of disasters; and increase CALD community engagement in emergency management volunteer activities. This project is funded for four years (2006-2010) and is a component of the Australian Government National Action Plan (NAP) to Build on Social Cohesion, Harmony and Security.

Context & Constraints:
Emergencies disproportionately affect the disadvantaged and socially excluded in Australian society, including: indigenous communities; people from linguistically diverse backgrounds; and people with disabilities. Emergency planning and arrangements need to cater for the many as well as for the few, and this means social inclusion is a fundamental premise of all such work.

Core indicator 3

Economic and productive sectorial policies and plans have been implemented to reduce the vulnerability of economic activities

Level of Progress achieved:
4: Substantial achievement attained but with recognized limitations in key aspects, such as financial resources and/ or operational capacities

Description:
The Trusted Information Sharing Network (TISN) is a forum in which the owners and operators of critical infrastructure can work together by sharing information on security issues which affect critical infrastructure. The network is made up of a number of groups for different business sectors.

The Critical Infrastructure Protection Modelling and Analysis Program (CIPMA) is a flexible decision making tool that can provide vital information for Government and business operators of critical infrastructure. This tool allows planners, operators and responders to gain a clearer picture of critical vulnerabilities and develop prevention and preparedness plans that will allow for an appropriate response and a quicker recovery in the event of a disaster.

In addition to TISN, the CIPMA Program is another key component of the Australian Government's

cooperative efforts with business and State and Territory Governments to enhance the protection of critical infrastructure and strengthen the resilience of Australian society and its economy. The CIPMA Program is a computer based capability which uses an 'all hazards' approach to undertake computer modelling to determine the consequences of different disasters and threats (human and natural) in critical infrastructure.

The extensive amount of data held under this capability could assist analysis of the impact of climate change on key infrastructure that coastal communities rely on each day.

Context & Constraints:

In some parts of Australia, up to ninety per cent of critical infrastructure is privately owned or operated on a commercial basis. Other critical infrastructure is owned by the Australian Government or State and Territory governments. Examples of critical infrastructure that communities rely on include essential services such as electricity, gas, water, transport, health services, communications and finance and banking systems.

CIP brings together a significant number of existing strategies and procedures that deal with prevention, preparedness, response and recovery arrangements for disasters and emergencies. It is not a new discipline; rather, a blending of existing specialisations such as law enforcement, emergency management and national security and defence. CIP relies on the active participation of the owners and operators of infrastructure, regulators, professional bodies, industry associations, all levels of Government and the public to identify critical infrastructure, analyse vulnerability and interdependence to protect from and prepare for all hazards.

Core indicator 4

Planning and management of human settlements incorporate disaster risk reduction elements, including enforcement of building codes.

Level of Progress achieved:

4: Substantial achievement attained but with recognized limitations in key aspects, such as financial resources and/ or operational capacities

Description:

Land use planning can be critical in reducing the impacts of natural disasters. The Australian Local Government Association commissioned a detailed report examining the potential contribution of leading edge land use practices to all-hazards risk management. The report, Local Government Land Use planning and Risk Mitigation, provides a clear, detailed analysis of:

• the potential contribution of land use planning to risk management

• the constraints faced by local government in risk management

• recommendations to improve the integration of land use planning and risk management by local government

The Australian Building Codes Board (ABCB) has been directed to incorporate natural hazard and specific bushfire material into building codes and guides. Improvements have been achieved through the development and implementation of building control regimes that better identify hazards and mitigation measures. Education and awareness modules are delivered by the ABCB every February/March to the industry to complement building code amendments. Jurisdictions also publish building and planning guidelines, circulars and practice notes and information brochures for relevant industry. In addition, the Risk Based Land Use Planning Course, delivered by Emergency Management Australia is now a nationally accredited course which attracts Planning Institute of Australia Continuing Professional Development Points.

The Ministerial Council for Police and Emergency Management will work closely with the Local Government and Planning Ministers' Council to facilitate a ready exchange of emergency management information and inputs to planning, development and local government issues in the context of adapting emergency management regimes to meet predicted impacts of climate change.

Context & Constraints:
In the future, incorporation of climate change factors into building codes and land use planning will be imperative.

Core indicator 5

Disaster risk reduction measures are integrated into post disaster recovery and rehabilitation processes

Level of Progress achieved:
4: Substantial achievement attained but with recognized limitations in key aspects, such as financial resources and/ or operational capacities

Description:
The Australian Government helps to facilitate the early provision of assistance to disaster affected communities through the long standing Natural Disaster Relief and Recovery Arrangements (NDRRA) administered by Emergency Management Australia.
Under NDRRA the Australian Government will reimburse a state government half of its expenditure on eligible personal hardship and distress relief assistance to victims (such as emergency food, accommodation, clothing and replacement of essential household items); psychological and financial counselling and certain long-term recovery measures, once expenditure from an event exceeds $240,000.
Should a state exceed certain other thresholds, in any one financial year, the Australian Government reimburses up to 75 per cent of eligible state expenditure for all eligible state natural disaster relief and recovery, including measures such as public infrastructure restoration and concessional loans for small businesses and primary producers.
A considerable effort by the Australian Building Codes Board (ABCB) has been directed to incorporating natural hazard and specific bushfire material into building codes and guides. Improvements have been achieved through the development and implementation of building control regimes that better identify hazards and mitigation measures. The ABCB has revised the Australian Standard for wind loads on buildings. Final preparations are underway for a proposal to amend the Building Codes of Australia to require certain buildings to be designed to resist more severe earthquakes than is currently the case. Another report has been completed in preparation for deriving an Australian Standard for building construction in flood prone areas. A non-regulatory handbook has also been produced by ABCB to provide guidance on construction in landslip prone areas.

As part of the National Climate Change Adaptation Framework, the Local Government and Planning Ministers' Council is coordinating a national report on the extent to which planning and development systems are responsive to the impacts of climate change.

Context & Constraints:
Climate change adaptation considerations for the future may include (but not be limited to): planning requirements for coastal development accounting for set backs from coastlines; reviewing building construction standards for cyclone-prone areas; planned retreat strategies for highly flood-prone areas; and strengthening engineering specifications for roads, bridges and ports subject to more intense storms.

Core indicator 6

Procedures are in place to assess the disaster risk impacts of major development projects, especially infrastructure.

Level of Progress achieved:
4: Substantial achievement attained but with recognized limitations in key aspects, such as financial resources and/ or operational capacities

Description:
Nationally agreed principles for post disaster rapid assessment are being developed with a view to standardizing the rapid assessment process across jurisdictions and agencies. The benefits of this strategy would be:
• provision of information from one source for multiple purposes
• consistency of language and approach for reporting
• harnessing intrastate, interstate and national capacity to develop a national impact assessment capability

The Critical Infrastructure Protection Modelling and Analysis (CIPMA) Program is the flagship of the Australian Government's Critical Infrastructure Protection (CIP) initiative. The CIPMA Program uses an 'all hazards' computer modelling approach to determine the consequences of disasters and threats to critical infrastructure.

CIPMA modelling can highlight vulnerabilities of critical infrastructure and test the business continuity planning of industry and Government at all levels. Any analysis derived from CIPMA tasking is provided back to infrastructure owners to improve the resilience of their assets. The priority sectors for CIPMA at present are banking and finance, communications, energy and water with plans to capture other critical sectors in coming years.

The CIPMA Program is a flexible decision making tool that can provide vital information for Government and business operators of critical infrastructure. This tool allows planners, operators and responders to gain a clearer picture of critical vulnerabilities and develop prevention and preparedness plans that will allow for an appropriate response and a quicker recovery in the event of a disaster, including from the impacts of climate change on coastal communities.

Context & Constraints:
CIPMA's strengths are in modelling and analysing the impact of particular events on critical infrastructure. As such, it is best suited to support the prevention and preparedness planning phases of decision making in areas such as emergency management and critical infrastructure protection. Despite this focus, CIPMA's flexibility would allow it to make a more limited, but still useful contribution, in the response and recovery phases of emergency management by supporting ongoing planning. For example, if infrastructure was damaged due to a natural disaster within an area that had been modelled by CIPMA, the program would be able to run the scenario and determine the estimated recovery time of the infrastructure damaged or destroyed, the estimated cost of recovery and the flow-on effects of a critical infrastructure service disruption within and across sectors.

Priority for action 5
Strengthen disaster preparedness for effective response at all levels

Core indicator 1

Strong policy, technical and institutional capacities and mechanisms for disaster risk management, with

a disaster risk reduction perspective are in place.

Level of Progress achieved:
4: Substantial achievement attained but with recognized limitations in key aspects, such as financial resources and/ or operational capacities

Description:
The Council of Australian Governments has adopted the Model Arrangements for Leadership during Emergencies of National Consequence. These arrangements describe how Australian heads of government would work together in relation to policy, strategy and public messaging, in support of an affected State or Territory.

The Australian Government works directly with state and territory emergency management organisations, to actively enhance emergency management capability nationally. Through programs such as the Urban Search and Rescue Capability Development Program, the Chemical Biological and Radiological Enhancement Program and the Australian Tsunami Warning System Project, to name a few.

Federal funding provided to the National Aerial Firefighting Centre is also strengthening Australia's national aerial firefighting capability. Cooperative inter-governmental arrangements enable the leasing and sharing of specialised firefighting aircraft on a national basis. Under these arrangements, aircraft can be quickly redeployed to areas experiencing high fire risk increasing the level of protection afforded to threatened communities.

The Australian Government is currently developing an Australian Emergency Coordination System which will provide a commonly understood framework and standard terminologies to simplify emergency response coordination. The system will operate at the strategic level of coordination.

This work is constantly evolving in response to Australia's changing emergency management needs, brought on by social, environmental, economic and political change both globally and nationally. Through discussion of these issues within national-level working groups, gaps in national capability are identified and serve as the basis for a strategic approach to capability development activities of national significance.

Context & Constraints:
A continuing challenge for the future will be bringing together sometimes competing aspirations for emergency management between the three layers of government in Australia, and more fully engaging the private sector and non-government agencies.

Core indicator 2

Disaster preparedness plans and contingency plans are in place at all administrative levels, and regular training drills and rehearsals are held to test and develop disaster response programmes.

Level of Progress achieved:
5: Comprehensive achievement with sustained commitment and capacities at all levels

Description:
State and territory governments have primary responsibility for emergency management in their jurisdictions and have well tried and tested plans in place.

Contingency plans are in place to meet State and Territory requests for Australian Government

assistance arising from any type of emergency or disaster. These plans include the Commonwealth Government Disaster Response Plan (COMDISPLAN), which details procedures for provision of Australian Government assistance through Emergency Management Australia (EMA) in the event of an emergency/disaster in Australia.

EMA maintains a number of hazard-specific contingency plans including:
• managing the reception of persons evacuated into Australia due to disasters or civil unrest in neighbouring countries
• repatriating and providing care for Australians injured or killed in mass casualty events overseas
• coordinating the response to an aviation disaster within Australia

A number of other national plans are maintained by EMA.

In addition to coordinating Australian Government operations support to the States and Territories, EMA works to enhance plans and arrangements through involvement in a range of multi-agency, multi-jurisdictional exercises. These exercises cover the full spectrum of events including counter-terrorism, mass casualty and major natural disasters.

Australian Government agencies participate in high-level consequence management committees and working groups aimed at identifying and establishing best practice in consequence management.

Context & Constraints:
A continuing challenge for the future will be bringing together sometimes competing aspirations for emergency management between the three layers of government in Australia, and more fully engaging the private sector and non-government agencies.

Core indicator 3

Financial reserves and contingency mechanisms are in place to support effective response and recovery when required.

Level of Progress achieved:
4: Substantial achievement attained but with recognized limitations in key aspects, such as financial resources and/ or operational capacities

Description:
The Australian Government helps to facilitate the early provision of assistance to disaster affected communities through the long standing Natural Disaster Relief and Recovery Arrangements (NDRRA). Under the NDRRA the Australian Government will reimburse a state government half of its expenditure on eligible personal hardship and distress relief assistance to victims (such as emergency food, accommodation, clothing and replacement of essential household items); psychological and financial counselling and certain long-term recovery measures, once expenditure from an event exceeds $240,000.
Should a state exceed certain other thresholds, in any one financial year, the Australian Government reimburses up to 75 per cent of eligible state expenditure for all eligible state natural disaster relief and recovery, including measures such as public infrastructure restoration and concessional loans for small businesses and primary producers.
Australian Government Disaster Recovery Payment (AGDRP) gives residents short-term financial assistance if individuals are adversely affected by a major or widespread disaster.
AGDRP is payable to eligible Australian residents who are adversely affected by a designated natural or non-natural disaster, whether within Australia or offshore. The assistance is made up of a payment to the claimant and an additional amount for each dependent child.

To activate these payments The Minister for Department of Families, Housing, Community Services and Indigenous Affairs must be satisfied that the event is a major disaster and that had such a significant impact on individuals that a government response is required.

Context & Constraints:
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Core indicator 4

Procedures are in place to exchange relevant information during hazard events and disasters, and to undertake post-event reviews

Level of Progress achieved:
4: Substantial achievement attained but with recognized limitations in key aspects, such as financial resources and/ or operational capacities

Description:
The introduction of enhanced relief and recovery arrangements better support community recovery from natural disasters and provide more consistent natural disaster relief and recovery assistance nationwide. Key features of the enhanced arrangements include:
• provision for cost shared funding for a community recovery fund, and recovery grants for small business and primary producers;
• partial reimbursement to States and Territories for expenditure on financial counselling for affected individuals;
• funding to upgrade infrastructure to more resilient standards; and
• small grants for voluntary non-profit bodies and needy persons.

Emergency Management Australia (EMA) is working with Geoscience Australia to implement natural disaster risk assessment and data collection reforms stemming from the 2002 COAG review Natural Disasters in Australia - Reforming mitigation, relief and recovery arrangements with the aim of achieving a better-informed whole of government approach to the management of risks posed by natural hazards. Post-disaster assessments are now undertaken after natural disaster events of significance and the findings incorporated into improved disaster management processes to deal with future events.
The Australian Government fosters the sharing of national and international issues, key lessons learned, best practice and innovation through the initiation, chairing or sponsoring to topical emergency management forums.

Context & Constraints:
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Drivers of Progress

a) Multi-hazard integrated approach to disaster risk reduction and development
Levels of Reliance:
Significant and ongoing reliance: significant ongoing efforts to actualize commitments with coherent strategy in place; identified and engaged stakeholders.

Do studies/ reports/ atlases on multi-hazard analyses exist in the country/ for the sub region?:
Yes

If yes, are these being applied to development planning/ informing policy?:
Yes

Description (Please provide evidence of where, how and who):
The National Climate Change Adaptation Research Facility is funded over five years from the Commonwealth Department of Climate Change. The Facility is one of only a handful of research institutions around the world focussing specifically on how we adapt to the physical impacts of climate change and climate variability. Emergency Management Australia is leading the process to identify research priorities for the Disaster Management and Emergency Services theme under the research facility program.

A number of targeted climate change vulnerability assessments for Australia have commenced. The initial key assessments are considering coastal vulnerability, infrastructure, biodiversity and agriculture, conducted through the Australian Government Department of Climate Change in cooperation with the states and territories and local government.

More comprehensive risk identification and vulnerability assessments at a regional level (based on quality information and data) need to complement this effort to provide Australia with a detailed picture of the risks we face. It will enable us to make informed decisions about disaster preparedness, mitigation, response and recovery and more effectively target effort and resources nationally.

b) Gender perspectives on risk reduction and recovery adopted and institutionalized
Levels of Reliance:
Partial/ some reliance: Full acknowledgement of the issue; strategy/ framework for action developed to address it; application still not fully implemented across policy and practice; complete buy in not achieved from key stakeholders.

Description (Please provide evidence of where, how and who):
The Australian Government has a coherent agenda on social inclusion. Our ongoing focus on building individual and community resilience for emergencies supports this agenda as it will have significant flow on effects in other areas of community need.

c) Capacities for risk reduction and recovery identified and strengthened
Levels of Reliance:
Significant and ongoing reliance: significant ongoing efforts to actualize commitments with coherent strategy in place; identified and engaged stakeholders.

Description (Please provide evidence of where, how and who):
The Australian Government fosters and administers active partnerships with a network of government agencies, local government, volunteers, non-government and community organisations, businesses, professional bodies, individuals and international agencies. Together, these agencies develop and deliver best practice emergency management in Australia.

Retaining, enhancing and sharing knowledge within the emergency management sector is an important part of Australia's emergency management capability. The Australian Government works on an ongoing basis with all stakeholders to actively enhance emergency management capability nationally. This is done through programs such as the Urban Search and Rescue Capability Development Program, the Chemical Biological and Radiological Enhancement Program and the Australian Tsunami Warning System Project.

Emergency Management Australia's work is constantly evolving in response to Australia's changing emergency management needs, brought on by social, environmental, economic and political change

both globally and nationally. Through discussion of these issues within national-level working groups, gaps in national capability are identified and serve as the basis for a strategic approach to capability development activities of national significance.

Emergency Management Australia will be working with all stakeholders to consider the most efficient option for the future directions of mitigation support. The Australian Government strongly believes that a comprehensive national mitigation program is a sound investment for the future.

d) Human security and social equity approaches integrated into disaster risk reduction and recovery activities

Levels of Reliance:
Significant and ongoing reliance: significant ongoing efforts to actualize commitments with coherent strategy in place; identified and engaged stakeholders.

Description (Please provide evidence of where, how and who):
The Australian Government is committed to a social inclusion and active citizenship agenda to ensure all Australians can participate in the economic and social life of the nation. This agenda and the people it serves can be severely affected by disasters. Emergency management can contribute to whole-of-government processes to build more resilient, safer and cohesive communities, and also provide a safety net following disasters.

Keeping Our Mob Safe: A national emergency management strategy for remote Indigenous communities developed in response to an identified need for a practical approach by government at all levels and by Indigenous communities to address the community emergency management priorities of remote Indigenous Communities. The strategy provides a strategic direction for emergency management and a framework for a coordinated and cooperative approach to risk assessment, decision-making and resource allocation. Its stated focus on preparedness and prevention also enables government to address deficiencies effectively in remote Indigenous communities before they face emergencies.

A project to enhance community resilience to natural and man-made disasters amongst culturally and linguistically diverse communities, through increased engagement between these communities and the emergency management sector is being implemented nationally by Emergency Management Australia. This project has been funded by the Department of Immigration and Citizenship. Its aims are to: raise culturally and linguistically diverse (CALD) communities' awareness of emergency management; enhance community resilience to the effects of disasters; and increase CALD community engagement in emergency management volunteer activities.

The Australian Government helps to facilitate the early provision of assistance to disaster affected communities through the long standing Natural Disaster Relief and Recovery Arrangements (NDRRA) and the Australian Government Disaster Recovery Payment (AGDRP) which gives residents short-term financial assistance if individuals are adversely affected by a major or widespread disaster.

e) Engagement and partnerships with non-governmental actors; civil society, private sector, amongst others, have been fostered at all levels

Levels of Reliance:
Partial/ some reliance: Full acknowledgement of the issue; strategy/ framework for action developed to address it; application still not fully implemented across policy and practice; complete buy in not achieved from key stakeholders.

Description (Please provide evidence of where, how and who):
The Australian Government, as part of its social inclusion agenda, is exploring ways to develop a new

and stronger relationship with the not-for-profit sector, based on partnership and respect. One way to do this is through a National Compact - an agreement between the Australian Government and the not-for-profit sector that outlines how the two will work together to improve and strengthen their relationship, now and into the future.

The Australian Government's social inclusion agenda is a whole-of-government approach to provide opportunities for all Australians to participate in the life of the nation. The agenda recognises the critical role the not-for-profit sector plays in delivering services, advising and developing social policy, and advocating on behalf of marginalised groups. A strong relationship between the government and the sector will be crucial to the success of the agenda and related reforms.

Volunteers play a vital role in the emergency management sector and the Australian Government is in the process of developing appropriate options to ensure their long term attraction, support and retention by funding and administering the National Emergency Volunteer Support Fund which provides assistance for volunteer organisations to help boost the recruitment, retention, skills and training of volunteers.

f) Contextual Drivers of Progress

Levels of Reliance:

Significant and ongoing reliance: significant ongoing efforts to actualize commitments with coherent strategy in place; identified and engaged stakeholders.

Description (Please provide evidence of where, how and who):

The draft Australian Emergency Management Arrangements incorporates the new national recovery principles as endorsed by the Community and Disability Services Ministerial Council and the COAG agreed Model Arrangements for Leadership during Emergencies of National Consequence. The arrangements describe in broad terms how disasters are managed in Australia, including catastrophic disasters. This may be supported by a more detailed description of disaster plans to be completed in the near future.

The development of a national incident management system, called the Australian Emergency Coordination System, to facilitate interoperability between Australian Government, state and territory emergency operation centres is being finalised for implementation in order to provide commonly understood reference framework and standard terminologies nationally.

National emergency management policy groups, the Ministerial Council and its Standing Committee, the Australian Emergency Management Committee were established in 2004, resulting in ongoing collaboration and coordination of government activity across Australia.

Future outlook

Area 1

The more effective integration of disaster risk considerations into sustainable development policies, planning and programming at all levels, with a special emphasis on disaster prevention, mitigation, preparedness and vulnerability reduction.

Overall Challenges:

The current complex, uncertain environment includes the likelihood that climate change will exacerbate existing disaster risks. Bushfires, floods and storms may become more intense and possibly more frequent.

Government policy on climate change includes the development of adaptation options and incorporation of risk management approaches into public and private sector activity. The Government is also committed to update and improve the Australian Disaster Mitigation package to take into account severe weather and storms due to climate change.

Adjusting emergency management strategies in the medium- to long-term is an integral part of this national climate change adaptation program.

Future Outlook Statement:
A major influence for the future development of emergency management in Australia is the predicted impacts of climate change and our need to adapt emergency management planning and approaches to manage the disasters we can't avoid. The implementation of the National Climate Change Adaptation Framework is being accelerated through the COAG Working Group on Climate Change and Water. This includes the development of strategies to be identified under the Disaster Management and Emergency Services National Adaptation Research Plan which will identify knowledge gaps and inform policy development.

Area 2

The development and strengthening of institutions, mechanisms and capacities at all levels, in particular at the community level, that can systematically contribute to building resilience to hazards.

Overall Challenges:
The emergency management sector considers that there is a need for a fundamental shift from a community dependent on government services to a community that more closely participates in emergency planning, preparedness, response and recovery and is, to some degree, self-reliant.

As commissioned by the Ministerial Council, the AEMC is considering the feasibility and implications of a paradigm shift in governments' messages regarding preparedness in the event of emergencies, including catastrophic disaster. When complete, this research will inform a national policy approach aimed at efficacious and more direct involvement by the community in emergency management.

The private sector has a direct interest in boosting community resilience. A more resilient community, including a resilient business sector, will ensure better economic outcomes after a disaster.

Future Outlook Statement:
Australia has culturally and economically diverse communities and gaps between outcomes for indigenous and non-indigenous communities. To bridge these divides, emergency management agencies must work with other sectors to ensure all elements of communities are engaged. Current challenges such as security and climate change can be addressed by allowing communities to participate in how national policies are applied to suit their individual community characteristics. More resilient communities will also be better able to cope with such challenges, and will be more functional on a day-to-day basis. Australia believes that the progression of all of the innovations and strategies identified in this paper/report will stand our nation in good stead to deal with the future risk environment.

Area 3

The systematic incorporation of risk reduction approaches into the design and implementation of emergency preparedness, response and recovery programmes in the reconstruction of affected communities.

Overall Challenges:
A continuing challenge for the future will be bringing together sometimes competing aspirations for emergency management between the three layers of government in Australia, and more fully engaging the private sector and non-government agencies.

Future Outlook Statement:
Australia is continuing to reform its approach to managing disaster risk to improve the resilience of individuals, communities, businesses and countries in our region. Such resilience will enable societies to adapt to change, reduce their exposure to risks, and allow them to 'bounce back' from disasters. State and territory governments have primary responsibility for managing domestic disaster risk. The Australian Government will continue to provide national leadership, funding and coordination for state and territory governments, ensures the nation can manage disaster risks, that there is equity and a consistent level of service delivery across the nation and that the costs of disasters are shared equitably.

The strategic outcome and community benefit of successfully managing disaster risk is an increase in the resilience and a reduction in harm to our society, environment and economy.