

Recent developments in emergency management

by Doug Angus, Director, Disaster Management Service Unit, Queensland Department of Emergency Services

Incidents and disasters, which may be generically described as emergencies, are quantitatively and qualitatively different.

At the scene of an incident, police establish control, the fire service puts out the fire and rescues the trapped, and the ambulance service treats the injured and transports them to hospital.

Most importantly, no agency *directs* another. They generally work together to well-established protocols, usually without direction from higher authority. There is generally little significant 'off-site' coordination of the response.

When a disaster occurs, however, things are very different:

- there be no 'site' — floods, cyclones and bush fires affect wide areas
- access to the impact area is often difficult for some time
- it is difficult to discover what has happened and to identify the extent of the problem
- the problems faced generally exceed response capacity with a consequent need for 'off-site' coordination involving a much wider range of organisations
- initial response will not necessarily be from police, fire and ambulance. In a disaster much of the initial rescue, first aid and casualty transportation is done by the survivors.

In short, disasters are not large scale incidents. They require a very different response that must be reflected in a comprehensive planning process and an operational management system developed to deal with large-scale events.

Inter-agency policy coordination

Queensland arrangements

The disaster management arrangements in Queensland, as contained in the SCDO act and set out in the state disaster plan, recognises that disaster management is a 'whole of government' issue involving shared responsibilities between the state and local government, and involving Commonwealth support and incentives to achieve national congruity.

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It is a local government responsibility to identify local hazards and to implement intervention strategies that will reduce community vulnerability to an acceptable level of risk, subject to a shared responsibility with state government for resource provision, cost sharing and technical advice.

It is a state government responsibility to provide overall policy direction to encourage effective loss prevention strategies and to provide hazard and vulnerability research and technical support. This is managed through a committee system at state, disaster district and local government levels, supported by professional disaster management officers from the Disaster Management Service of the Department of Emergency Services.

The purpose of this structure is to coordinate all resources necessary to plan for and counter the effects of disaster and to provide advice and assistance to government on all matters with respect to disaster management.

The Central Control Group (CCG) is the peak policy body in the state, chaired by the Director General of the Department of the Premier and Cabinet. It has the role of coordinating whole of state resources necessary to ensure all steps are taken to prepare for and counter the effects of disaster and to give advice to government on all disaster management issues.

Twenty three Disaster District Control Groups (DDCG) have been established, based on police districts, for the purpose of implementing comprehensive disaster management policies, coordinating operations and preparing counter disaster plans for the district.

Each Local Government Counter Disaster Committee (LGCDC) is responsible for developing comprehensive counter disaster arrangements within its area of responsibility, preparing plans, co-ordinating operations, and establishing a local emergency services.

In addition to this committee system, the CCG has assigned lead agency responsibilities for functional and threat specific arrangements based on the core business of specific departments and existing legislative responsibilities.

These functional and threat specific arrangements include:

- *community recovery* (Department of Families, Youth and Community Care)
- *transport and transport engineering* (Department of Transport)
- *medical, mental and environmental health* (Department of Health)
- *emergency supply* (Department of Public Works and Housing – Procurement)
- *communication* (Department of Public Works and Housing – QTEL)
- *building engineering services* (Department of Public Works and Housing – QBUILD)
- *coordination* (Department of Emergency Services)
- *exotic animal diseases* (Department of Primary Industries)
- *pollution of the sea by oil* (Department of Natural Resources)
- *bushfire* (Queensland Fire and Rescue Authority).

There is also a number of threat specific coordination committees for hazards not covered by specific legislation provisions, namely:

- Queensland Tropical Cyclone Coordination Committee (QTCCC)
- Queensland Flood Coordination Committee (QFCC)
- Queensland Geohazards Coordination Committee (QGCC).

Commonwealth arrangements

Australia's emergency management arrangements reflect the fact that under the constitution, State and Territory governments each have responsibility for protection and preservation of lives and property. They exercise control over most of the functions essential for effective disaster prevention, preparedness, response and recovery.

National arrangements

The basis of the national system is a partnership between Commonwealth, State and Territory and local governments, and the community. The goals are to minimise vulnerability to hazards, protect life and property and to facilitate recovery and rehabilitation.

Elements of the national system

There are five elements of the national system, namely:

Commonwealth Financial Assistance

This is managed through a Commonwealth–State agreement for financial relief to the States and Territories under the National Disaster Relief Arrangements (NDRA). Under this agreement the Commonwealth reimburses States and Territories in accordance with a formula for expenditure on agreed eligible measures;

Commonwealth Counter-Disaster Task Force

The CCDTF is a senior interdepartmental committee that is activated in the event of a disaster causing major social and economic dislocation incapable of being dealt with under normal Commonwealth–State arrangements.

National Emergency Management Committee

The NEMC is the peak consultative forum. It is chaired by the Director General of Emergency Management Australia, and comprises the chairpersons of the State and Territory emergency management organisations. This committee meets annually to coordinate Commonwealth and State interests in national emergency and disaster management

Emergency Management Australia

Federal Cabinet approved the establishment of the Natural Disaster Organisation (now EMA) within the Department of Defence in 1974. The function is to:

- enhance national emergency management capabilities
- coordinate Commonwealth physical support to the States and Territories and Australia's region of interest
- support the development of overseas emergency management capabilities.

State and Territory Emergency Management Organisations

Each State and Territory has established a peak body to consider and manage emergency management matters.

A major challenge, certainly from a Queensland perspective, in respect to

the Commonwealth–State interface arrangements, is the use of NEMC to deal with both coordinated incident management arrangements and 'whole of government' disaster management arrangements.

Queensland's representation on the NEMC is drawn from the Central Control Group, which does not have a direct responsibility for emergency management issues. These are the direct legislative responsibility of statutory response agencies.

A more effective national coordinating process to deal with issues of an incident management nature needs to be derived, either at the Commonwealth (NEMC) level or by way of 'whole of state' coordination within Queensland.

Applying risk management to disaster management

More Queenslanders are vulnerable to disasters than ever before. There have been rapid demographic and infrastructure changes on flood plains, coastal foreshores and bushfire prone areas. Many Queenslanders lack knowledge about hazards and what action they can and should take, there is community complacency about risk, and public safety and disaster risk are not prime considerations for public policy decisions.

Recent national developments

The 1994 Senate Standing Committee Report stated that disaster management arrangements in Australia were too response focused and identified the need for a change in emphasis to provide a more comprehensive and integrated approach. The report emphasised the need to focus on areas of prevention, preparedness planning, training and recovery.

The Senate Standing Committee Report coincided with the release of the *Australian/New Zealand Risk Management Standard* (4360, 1995). A risk management workshop, conducted at AEMI to consider whether this standard could enhance the formulation and delivery of emergency management services in Australia, concluded that emergency management could be promoted more effectively through such a risk management analysis and decision making process. This recommendation has been accepted by the NEMC, and as a consequence *Guidelines for Applying Risk Management in a Disaster Management Context* will be released later this year, following acceptance by Standards Australia.

NEMC endorsed the development of a *National Disaster Mitigation Strategy* in September 1996. A subsequent national workshop identified that the benefits to be derived from such a strategy included the reduction in human suffering and loss of life, as well as economic and social benefits in the short, medium and long term, which would outweigh the cost of adoption.

Natural Disaster Relief Arrangement guidelines have been redrafted by the Commonwealth Department of Finance and agreed to in principle by State and Territory governments. These draft guidelines incorporate the requirement for State and local government agencies to demonstrate acceptable disaster mitigation efforts as a condition for obtaining funding to assist with the restoration and repair of public assets.

Consequential initiatives

As a consequence of the identified need to broaden the focus of disaster management, and to incorporate the concept of disaster mitigation based on a disaster risk management methodology, there are a number of concurrent supporting initiatives being pursued:

- *Competency Standards*. Revised National Emergency Management Competency Standards, incorporating a disaster risk management methodology, are scheduled for release later this year.
- *Curriculum*. National Emergency Management Training Curriculum, as derived from the competency standards, is being developed and will be available for release shortly.
- *Publications*. A review of all EMA produced publications and training support material is being undertaken progressively with a view to incorporating concepts of mitigation and risk management. This is expected to be completed by the end of 1998.

Queensland initiatives

Queensland has embarked on a number of initiatives complementary to the overall national direction.

Queensland Disaster Coordination Group

Following CCG's endorsement of the development of a National Mitigation Strategy, the acceptance in principle of the revised NDRA arrangements, and the adoption of a Disaster Risk Management Methodology, a decision has been taken to establish a 'whole of government' Disaster Coordination Group to develop policy options for consideration

by the CCG in respect to those policy issues and others.

Local government protocols

The development of protocols between the Local Government Association of Queensland and the Department of Emergency Services are in the final stages of negotiation. The purpose of these protocols is to better define the relationship between the State government and local governments with emphasis on a shared responsibility relative to comprehensive disaster management.

Floodplain management

To date Queensland does not have a floodplain management policy. Action is now in hand however, to develop such a policy and to incorporate in it considerations of public safety and risk management on a 'whole of floodplain' basis.

Integrated Planning Bill

An Integrated Planning Bill is now before parliament. This legislation will replace the existing Local Government (Planning and Environment) Act 1990. Significant effort is being made to have issues of disaster mitigation and risk management addressed in the Bill as they relate to zoning and land use management, building codes and regulations, and compensation provisions associated with zoning changes.

Disaster risk management study

A flood risk management study has been commissioned for the Murweh Shire (Charleville) with a view to developing a comprehensive disaster plan designed to reduce community vulnerability to an acceptable level. The outcome of this study will be used as an example for other Local Governments in respect to the adoption of a holistic disaster risk management approach, and as input to the development of the State Floodplain Management Policy.

Spacial information management

Successful risk assessment is reliant on access to appropriate information. In recognition of this, action is being taken to promote the use of spacial information management techniques as applicable to a disaster management process, especially at the local government level. Efforts are also being made to link this to the concept of a *Lead Information Management Functional Agency* under the Department of Natural Resources as a component of the State Disaster Plan.

Disaster risk management training

A series of disaster risk management workshops in 1997 for key staff of the Emergency Services Division, lead functional agencies and local government officials.

Competency standards and their implications

National Competency Standards

Nationally-agreed Emergency Management Competency Standards (NEMCS) were first released in 1995. These standards are currently being reviewed in accordance with Australian National Training Authority (ANTA) requirements, and the opportunity is being taken to incorporate the previously mentioned *Guidelines for Disaster Risk Management* into these competency standards.

This will provide both full-time and part-time professional disaster managers with a planning tool and a sample methodology to facilitate logical decision-making based on an analysis of the relevant factors. There is a need for a competency-based assessment process suitable for use within the framework of the NEMCS. This is a challenge in the light of the unique profile of disaster risk management.

Disaster management practices bring into the assessment environment many agencies that do not have a regular emergency management role e.g. Commonwealth, State and local government, volunteer agencies, community groups and industry.

Consequently, the assessment process must deal with a broad cross section of attitudes, abilities, and a diverse appreciation of emergency and disaster management.

Assessment procedures therefore, must be capable of administration within a range of settings and organisations and will require the identification of a range of assessment approaches suitable to the various components of the NEMCS.

A preliminary analysis (EMA 1997) of assessment requirements in respect of the elements of the NEMCS has been conducted and has identified that:

- workplace projects and assignments will need to be considered as an assessment method in respect to these elements containing generic management expertise
- assessment by observation will be of limited use due to practical and administrative constraints
- written tests, particularly when undertaken in conjunction with a

period of training, must be regarded of limited value in assessing competency relative to workplace performance

- the development of procedures to access personal portfolios from candidates depicting prior performance should be considered as an assessment method
- a policy of combining assessment approaches will be necessary.

Clearly the combination of geographic and agency distribution will require the seeking of innovative ways to provide emergency managers with equitable access to assessment.

The resources needed to meet this challenge will be significant. Nevertheless, if properly developed, the resultant system of assessment will contribute greatly to the efficiency and ongoing development of a National Emergency Management capability.

Curriculum

A total review of emergency management education and training in Australia is being undertaken in the light of changes to NEMCS. The current curriculum is based on a prevention, preparedness, response and recovery (PPRR) model. A curriculum derived from the new NEMCS, incorporating disaster risk management methodology, is likely to overcome a significant weakness of the PRRR approach, by providing a holistic process rather than one anchored in discrete processes.

In recognition of the need for a comprehensive national training program, a project has been set up through Swinburne University with ANTA funding to develop an appropriate curriculum framework, based on NEMCS. The aim is to allow emergency managers to achieve nationally recognised qualifications, with flexible entry points incorporating credit transfer, recognition of prior learning, and flexible exit at the following levels:

- *Advanced Diploma* level, providing competence at senior management level in a multi-agency and multi-jurisdictional environment
- *Diploma* level, providing competencies to operate at middle level with responsibilities for team coordination, specialist knowledge and skill in planning for and evaluating risks.

Lessons in emergency management

The overriding factor influencing a need for change in disaster management is that, given the increasing pressure for accountability in government and to do

more with less, we can no longer continue to focus only on disaster response and recovery as an effective means of managing disaster risks.

More emphasis must be placed on promoting activities that serve to reduce community vulnerability to disasters. This can be known as hazard mitigation, which in its simplest sense is risk management. It is the key to reducing the costs of disaster, personal suffering and economic disruption. We can and should learn from lessons elsewhere.

Approaches in other countries and States of Australia

USA

In response to unacceptable loss of life and property from recent disasters, and the prospect of increasing catastrophic loss, the USA has developed a National Mitigation Strategy through the Federal Emergency Management Agency (FEMA) to try to reduce these losses.

This tries to engender a fundamental change in the public perception of hazard risk and mitigation, and to demonstrate that mitigation is often the most cost-effective and environmentally sound approach to loss reduction.

The foundation of this strategy is the strengthening of partnerships at all levels of government and the private sector, and the empowering of individuals to fulfill their responsibilities of ensuring a safer community.

The strategy has four major initiatives in the areas of hazard identification and risk assessment:

- applied research and technological transfer
- public awareness, training and education
- incentives and cost sharing
- leadership and coordination.

FEMA's vision of the future is simple. They look forward to a time when people think of mitigation in the same way as they think of seatbelt usage in cars — as a necessity. They want people to consider risk reduction needs as part of their daily lives, expect their local and state officials to take action to protect their homes, businesses and infrastructure, understand their risks and to think 'mitigation' when they build a house or purchase property, and when they vote (Krimm 1997).

Most importantly they want communities to take appropriate action to reduce the loss of life, injury, economic costs and disruption that all too often accompany floods, hurricanes, wildfires, earthquakes and other hazards.

They want those who knowingly choose to accept greater risk to accept responsibility for their choice.

New Zealand

The New Zealand Government's interest in emergency risk management dates back to 1985 with the transfer of responsibilities to local authorities. The central government put in place policies designed to encourage more effective public safety and loss prevention strategies (Helm 1996).

The idea was that the central government would accept shared responsibility for restitution of damage only if the local authority concerned had done its part to mitigate and manage risk to its assets.

By obliging local government and other asset owners to accept a share of the responsibility for restoring damaged infrastructure, the central government's intentions were to transfer some risk to limit its potential financial exposure and to shift the focus to loss prevention and better overall risk management.

Recent reviews of emergency services and disaster planning have highlighted a problem of uneven practices where some local governments are well advanced in their planning while others are much less so.

As New Zealand moves towards improving its national and local disaster management system, it is clear that risk analysis will provide powerful new instruments to deal with particular hazards in regard to allocating resources, helping set priorities, and setting standards for public sector safety issues.

Australian States and Territories

The following comments do not reflect State or Territory policy perspectives in relation to disaster mitigation and risk management. They merely reflect the expressed views of emergency management officials as to the current situation.

New South Wales

The Commonwealth's stance on NDRA and mitigation is unlikely to have a major effect on flood hazards in NSW.

They have had an extensive flood-plain management strategy in place for a number of years, which has had a positive influence on flood mitigation in the form of structural works (e.g. levees, stream clearing and straightening). It has also had a marked influence in land-use zoning, cost-benefit studies and response planning.

The view is that they have always employed a risk management approach using the PPRR concept, and that the

changes inherent in the incorporation of a risk management approach into competency standards and training curriculum may unnecessarily complicate that which is considered to be an already successful approach to comprehensive disaster management.

Victoria

Victoria has produced a *Community Emergency Risk Management Model* based on the Risk Management Standard. They have undertaken several projects at local government level involving the application of the risk management process. A particular project based in Geelong is being used as a national case study.

All seventy-eight local government bodies in Victoria have embraced the concepts of risk management and the process was used as the basis for audit of local government emergency plans.

A *Community Emergency Risk Management Facilitators' Package* has been developed and staff are being trained in this. A training program has been instituted that specifically addresses the issue of risk management as it applies to the State's emergency management arrangements. There is a high level of acceptance of the risk management approach.

Victoria has not made heavy demands on NDRA funding arrangements in the past but is using the Commonwealth's stance as a means of adding further impetus to disaster mitigation and local government's adoption of risk management.

South Australia

South Australia is still considering the issues of disaster mitigation and risk management. A Mitigation Committee has only recently been formed under the State Disaster Committee.

Commonwealth-State NDRA arrangements have little effect in SA.

Western Australia

Commonwealth-State NDRA arrangements are of limited significance to Western Australia. The state as a whole is moving to reduce the level of reliance on Commonwealth support.

A recent review of emergency management arrangements focused on the need to adopt a more comprehensive whole of government approach based on a risk management process.

The recommendations contained in the consultant's report are yet to be endorsed in full or in part by the Government.

Tasmania

Tasmania considers the adoption of a risk management approach to be useful, although they have not yet determined how this might be applied.

NDRA arrangements are of little significance to Tasmania and the significance of a national disaster mitigation strategy to the State is not yet clear.

There is concern that some confusion has been created within existing emergency management arrangements as a result of the flood of draft guidelines in circulation. There is also a view that the current tertiary-level courses on offer could be more helpful in furthering disaster management expertise.

Summary

There is clear evidence of an increasing focus on a holistic approach to disaster management from a public administration and public safety perspective, both within Australia and overseas.

This has come about from increasing pressure for accountability in government, the need to do more with less, and a realisation of the ever-increasing exposure to disaster risk.

In Australia the impetus for this change can be traced to the 1994 Senate

Standing Committee Report that drew attention to the need for greater focus on prevention, preparedness planning, training and recovery.

The Commonwealth, through EMA and the Department of Finance, has adopted a position of leadership and coordination in the management of this change.

Development in Australian States has been variable, but generally positive in respect of broadening the approach to disaster management.

Queensland, due to its high exposure to natural disaster events in particular, is supportive of the need for change and is embracing wholeheartedly the concepts of hazard mitigation based on a risk management methodology.

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Helping communities to manage their own recovery

By Andrew Coghlan, National Training Consultant, Disaster Recovery.
Presented to the Emergency Recovery Forum, 26-27 November 1997

A recovery management forum was held at the City of Darebin Arts and Entertainment Complex in Victoria on 26 and 27 November 1997.

Mindful of the potential threat of bushfires during the 1997-98 summer, the aim of the forum was to provide participants from a range of agencies with a greater awareness of the recovery process following a disaster. In particular the importance was stressed of individuals and communities being supported in the management of their own recovery.

The forum was jointly sponsored by the Victorian Department of Human Services and Emergency Management Australia and attracted 300 participants during the two days. Participants were drawn from a wide range of agencies, including local government, various State Government agencies and representatives of the non-government sector.

The program

The forum began with an overview of emergency management arrangements within Victoria. Speakers from a number of agencies addressed key aspects, focusing on recovery and the applicability of the Principles of Recovery Management. Later in the program consideration was also given to the different management styles that may be used during the recovery process and their compatibility with these principles.

The overview of emergency management arrangements was followed by a description of the potential bushfire risk during the 1997-98 summer. Two presentations highlighted current and anticipated weather conditions throughout Victoria and strategies being used by the Country Fire Authority to address the current threat. The City of Melbourne also provided a presentation on the broader applicability of risk management in an emergency or disaster context.

The remainder of the forum featured a series of presentations from recovery managers and service delivery staff from a range of different agencies. Presentations addressed a number of broad themes, including:

- bushfire
- media role in recovery
- public health emergencies
- non-natural disasters.

Two presentations on the Dandenong Ranges bushfires of January 1997 highlighted management at the local government level and the critical role of community development officers in supporting and encouraging the recovery of individuals and communities. These presentations were particularly timely given the current threat of bushfire and the upcoming anniversary of the fires. Discussion of the proposed anniversary events, which include the

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