

# **GLOBAL DISASTER INFORMATION NETWORK (GDIN) 2001 CONFERENCE**

**THE HON DR BRENDAN NELSON MP,  
PARLIAMENTARY SECRETARY TO THE  
MINISTER FOR DEFENCE**

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Let me begin by extending a very warm welcome to Australia to all of our international delegates - and a welcome to Canberra to all.

On an international stage, the recent earthquake in Gujarat in India shows the dramatic and extensive effects of disasters. The cost in lives, injuries, damage to community infrastructure, and disruption to business can be enormous.

There are not many good things one can say about disasters - they all bring destruction, suffering and trauma to people's lives. But they do bring about two positive aspects of the human condition that I observe.

The first is the feelings of sympathy and support that ordinary people show to their fellow human beings who are affected by these events, whether they be local or far away. Today, we see and hear about these events far quicker than ever before, and the images can have significant and lasting impact. So there are signs of humanity and compassion in the tragedies.

The second positive aspect is bound up in the people, like yourselves, who are dedicated to reducing the impact of these events on other people's lives. I realise that you are not just dealing with images on the nightly news - you are dealing in and with the real thing. Though life can be hard and at times so cruel, the value of life and our society lies in the way we deal with adversity.

I understand this is the reason why you are here: that there is a common purpose from wherever you hail - and I commend you all for your dedication and commitment.

As we are all aware, the breadth of devastation caused by major disasters - particularly the human toll - is staggering. Some particularly revealing statistics warrant reflection:

In the year 2000, Munich Reinsurance recorded 850 natural disasters, two hundred more than the average for the 1990s. As a result of these disasters, around 10,000 people died and economic losses totalled more than US\$ 30bn. The event that was considered the year's greatest disaster was the flooding in Mozambique that left 500,000 homeless. In our region, the tsunami that hit Papua New Guinea in July 1998 killed more than 2,200 people.

When we look at disasters in Australia, over the past 23 years the annual average cost to the community has been \$1.14bn. Last year in Australia, natural disasters - heatwave, floods and cyclones - cost \$1.5bn and the lives of 42 people.

There is a long list of communities in Australia that have been affected by disasters and others are at risk of disaster in the future.

Given this history and the scope for events on a large scale, treating the risk through mitigation, response, and post disaster recovery is a significant area of community and government activity.

There is a role for many people in community safety. In fact one could argue that everybody has a role - from governments, emergency service personnel, landuse planners, developers, the media, through to academics, and of course, the community.

It is clear that all the people involved in disaster management require information to play their particular role effectively.

Why information? Because good information means that people can make better decisions when dealing with disasters. In turn, better decisions will result in fewer deaths, fewer injuries, less trauma, and fewer environmental losses. In short, decisions based on good information can reduce the impact of disasters - a goal we all share.

Examples of disaster related information needs include:

- ❑ Firefighters needing to know real time, local meteorological information such as wind shifts or weather fronts;
- ❑ Householders needing to know how they can reduce their risks, by cleaning the gutters in case of bushfire or taking refuge in high winds or listening for broadcast warnings;
- ❑ Developers needing to know which are the high risk areas for flood or bushfire and what building codes they should apply;
- ❑ Emergency response planners needing to know what the hazards are in the local area, how many people live here and who might need support in the event of an evacuation; and
- ❑ Data providers and the IT industry needing to know what information disaster managers need so they can tailor their products to meet these demands.

The list is endless. But in each case, those involved need timely information in the right format, enabling them to make a positive difference in disaster and emergency risk management.

The Global Disaster Information Network (GDIN) mission statement is aimed at just this need:

"The right information in the right format, to the right person, in time to make the right decision"

New information technologies have an important role to play in helping emergency managers meet their demanding and dynamic information requirements.

There is the Internet - or information superhighway as it was heralded - which provides the capacity to link the users with the providers of data and information services. Users can tap into a wide variety of sources of information, and providers can deliver their data and services far more readily.

On the other hand, Internet access, while growing, is limited around the world, and we will need to continue using conventional technologies, phones, faxes, and personal contact, when these are the only modes of communication available.

In addition there are Geographic Information Systems (GIS) - which provide us with a capability to synthesise different types of data to create a picture of risk. The Australian Geological Survey Organisation's Cities Project has exploited this technology in the development of multi-hazard risk assessment models and their application to Australian communities.

The disaster information necessary for these models includes a wide range of geographic and spatial information including: landscape (topography, waterways, vegetation, land use); infrastructure (lifelines, buildings, residences); and census data.

Another important area of technology application has been the rapid development of remote sensing imagery from satellites and aircraft. This is imagery which enables people involved in emergency management to gather photographic, infrared and radar images of areas of the world prone to disasters.

These images can provide a birds-eye view of the areas prone to disasters, coupled with essential information such as the ground levels or the moisture in the vegetation. Of course, for areas that have already been affected, imagery can show the extent of a flood or cyclone, bushfire hotspots or smoke plumes.

Building and maintaining safer local communities requires those with the technical expertise or access to relevant data to act in a cooperative fashion - both technically and personally. For example, countries and organisations with sophisticated GIS and remote sensing capabilities need to ensure that countries without such facilities have access to the benefits of such technology.

One of the true benefits of GDIN is that it has brought together people with expertise and motivation, like yourselves, to address this challenge.

As the Parliamentary Secretary to the Minister for Defence, I have a lead responsibility for the Commonwealth Government's emergency management efforts and am here today representing the Minister and the Federal Government.

As a measure of the Government's commitment to emergency management, I would like to mention several initiatives that we have put in place.

The first is the Disaster Risk Management Studies Program run by the Department of Finance and Administration. This program supports State and Local Government to develop sound assessment of community risks and to evaluate community options for managing that risk.

The Bureau of Meteorology is an integral element of Australia's emergency management system. The information they provide to Australian citizens and emergency management organisations, such as weather forecasts, flood and cyclone warnings, and longer term climate projections, is vital to Australia's capability to combat severe weather events and flooding.

The Australian Geological Survey Organisation has provided a significant contribution to a number of aspects of disaster management, particularly through Dr Wally

Johnson, Chief of the Geohazards and Geomagnetism Division. In addition to the Cities Project that I mentioned earlier, the Australian Geological Survey Organisation has been working with Emergency Management Australia to establish the Australian Disaster Information Network or AusDIN.

AusDIN is a consortium of Commonwealth agencies, State emergency authorities, Universities, and private enterprise representatives working together to develop an information network to provide information for emergency management purposes (in risk assessment, mitigation, planning, response, recovery).

The focus of AusDIN will be an internet based service providing accessibility to data and information services for a wide variety of people involved in emergency management. AusDIN is being developed within the international framework provided by GDIN, and it is planned to be linked to and from GDIN information systems.

But the AusDIN internet service is just one part of a wider, comprehensive undertaking to improve the management of information for emergency management purposes. Other non-technical approaches are also being developed including fostering networks and forums for people involved in the provision of information relevant to managing emergencies.

Also involved in the provision of information in Australia is the Bureau of Transport Economics, which has just released the results of its study on quantification of the economic effects of disasters, and from which I cited some statistics earlier. This study is part of a broader research activity that will explore the benefits of disaster mitigation and enable disaster prevention and mitigation initiatives to be properly assessed.

Understandably, Emergency Management Australia, or EMA, has identified that managing information is a vital part of its future. EMA has an important role in developing national emergency management capabilities. Importantly, these capabilities must now also extend to the management of disaster information.

In the past, EMA has provided community awareness information and developed manuals of best practice in emergency management. I note that these manuals are widely used across Australia and the world.

EMA is a progressive organisation and has a strong record of providing training and education for emergency managers through the Australian Emergency Management Institute at Mount Macedon in Victoria.

It is recognised that new challenges arise in emergency management from time to time and a requirement to develop new techniques and philosophies emerges.

One of these is disaster information management. EMA has begun the process of developing this capability by engaging the critical State and Commonwealth agencies to build a nationwide approach to the development of a disaster information management strategy which meets the needs of the Australian community.

EMA is intimately involved in all the initiatives I have mentioned earlier. It is also embarking on a major initiative to build the research base - the Risk and Community Safety Research Initiative which is a collaborative venture involving EMA, the Royal Melbourne Institute of Technology and the Australian National University.

I am also pleased that EMA is playing a critical role in the development of GDIN and in particular the Asia Pacific Regional Working Group of GDIN. This continues the vital contribution that EMA made to the International Decade for Natural Disaster Reduction during the 1990s - Australia accepts it has a responsibility to provide assistance to countries in our region.

To that end, AusAID provided over \$1.5m in funding to the South Pacific Applied Geoscience Commission towards the development of disaster management capabilities in the region.

You can see that many of the initiatives that I have mentioned have a strong emphasis on information management. This is what makes GDIN so important. It provides a forum for cooperation and interchange to use information management to further the cause of more effective disaster management.

The result of your deliberations will, I am sure, lead to safer and more sustainable communities in Australia and world-wide.

When we begin to think of international cooperation, it is worthwhile remembering that the United Nations has dedicated this year as the International Year of Volunteers - a year in which we recognise and support the role of volunteers, who provide a significant contribution to emergency management in Australia, and in many parts of the world, as members of volunteer and non-government organisations.

Over the next two financial years the Commonwealth Government will provide \$270,000 for emergency volunteer initiatives. This will include a major conference forum to be held later this year and will help State and Territory emergency managers recruit, train and retain volunteers.

The GDIN initiative has the full support of the Government and Australia will continue to support its development, largely through Emergency Management Australia.

The support given to this initiative by Conference sponsors AusAID, the Australian Bureau of Meteorology, and the Australian Geological Survey Organisation indicate the support for GDIN within Australia at an organisational and working level. The attendance of so many experienced delegates from other countries indicates the global support for GDIN.

I commend the GDIN initiative to you and the program of this conference. I note that the theme of the conference is "Scoring Goals" and I understand that one of the planned goals of this week will be the GDIN Business Plan.

You might also consider how we can build on goals scored in the past and how we might be in a position to score goals in the future.

In considering those issues during your discussions this week, I suggest you address the following questions:

- How can we improve the flow of disaster information from those countries or areas who have it to those who most urgently need it? and
- What have we learned from disasters since GDIN was initiated and what have we subsequently implemented?

I look forward to hearing about the successes of the conference, and with those challenges ahead of you, I formally declare GDIN2001, the Global Disaster Information Network Conference 2001, open.