



# National Organisational Resilience Framework Workshop The Outcomes

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Mt. Macedon Victoria, Australia*

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# 1 FOREWORD

During 2007 industry representatives of Australia's Trusted Information Sharing Network for Critical Infrastructure Protection (TISN) asked the Australian Government to support a national workshop to explore the concept of organisational resilience. This report summarises the issues discussed at the workshop. Already the results of this workshop are being discussed in the UK, New Zealand, Canada and the USA.

A special thanks to the Attorney-General's Department Critical Infrastructure Protection Branch and Emergency Management Australia for their provision of logistical and intellectual support which enabled the workshop to occur.

Workshop participants were very lucky to have been addressed by Ken Senser (Wal-Mart), David Simmon (Mississippi Power Company), Tim Cousins (Tim Cousins & Associates), Dr Erica Seville (University of Canterbury), and Professor Paul t'Hart, (Australian National University). All these speakers freely gave of their time to support this initiative.

It is anticipated that this initial work will lead to the development and implementation of further initiatives. A number have already commenced such as the conduct of a national All Sectors TISN Forum (7-8 May 2008) and development of a Resilience Maturity Model. Work on the Resilience Maturity Model is being lead by the Banking and Finance Infrastructure Assurance Advisory Group (BAAG). This is expected to be in exposure format by May 2008.

A special thanks also to all the workshop participants who enthusiastically gave their energy and intellectual ideas to enable this workshop to succeed. The network developed and ideas generated will be of significant support to those who attended.

David Parsons

Chair – National Organisational Resilience Framework Workshop

## 2 RESILIENCE WORKSHOP

In December 2007 the Attorney-General's Department Critical Infrastructure Protection Branch and Emergency Management Australia co-sponsored a workshop to explore the concept of organisational resilience.

The workshop had three objectives:

- To create a network of key leaders on organisational resilience thinking
- To produce a discussion paper on organisational resilience, and
- To develop a set of activities that would enhance the resiliency of Australian infrastructure owners and operators.

The workshop was conducted at the request of industry members within the TISN. The workshop was organised by a working party comprising:

- Peter Whelan, Alinta
- Alex Webling, Attorney-General's Dept
- Kylie Sugar, Attorney-General's Dept
- Peter Brouggy, Banking and Finance IAAG
- David Harris, Dept of Infrastructure (VIC)
- Dianne Cooper, Emergency Management Australia
- Michael Tarrant, Emergency Management Australia
- Peter Shepherd, Sydney Ports
- Bruce Angus, Sydney Water
- David Parsons, Sydney Water
- Kellie Phillips, Telstra
- Robert Oldfield, QBE Insurance Group

The Workshop was held at the Emergency Management Australia Institute at Mt Macedon from 5-7 December 2007, and was addressed by a number of invited subject matter experts including:

- Paul t'Hart, Australian National University
- David Simmon, Mississippi Power Company
- Tim Cousins, Tim Cousins & Associates
- Erica Seville, University of Canterbury
- Ken Senser, Wal-Mart

Workshop participants came from across Australia representing industry, government and academia:

- Lawrence Cox, ANZ Bank
- Tim Killesteyn, Attorney-General's Dept
- Mike Rothery, Attorney-General's Dept
- Jacqui Hardy, Attorney-General's Dept
- Bill Hannan, Business Continuity Institute
- Helen Foster, City West Water
- Robbie Sinclair, Country Energy
- Patrick Hagan, Defence Science Technology Organisation
- Mary Milne, Dept of Agriculture, Fisheries and Forestry
- David Reid, Dept of Defence
- Grant Whitehorn, Dept of Defence
- Alice Zamecka, Dept of Emergency Services (QLD)
- Beryl Janz, Dept of Families, Community Services and Indigenous Affairs
- Will Allan, Dept of Families, Community Services and Indigenous Affairs
- Martin Breuker, Dept for Families and Communities (SA)
- Ronnie Faggotter, Dept for Families and Communities (SA)
- Jim Gifford, Dept for Families and Communities (SA)
- Toula Koletsos, Dept of Human Services (VIC)
- Christine Miller, Dept of Industry Tourism and Resources
- Josh Cosgrove, Dept of Industry Tourism and Resources
- Bill Brodie, Dept of Justice and Community Safety (ACT)
- Richard Davis, Dept of the Prime Minister and Cabinet
- David Vincent, Dept of Transport and Regional Services
- Nick Barker, Emergency Management Australia
- Samantha Flack, Emergency Management Australia
- Matthew Harper, Emergency Services Authority (ACT)
- Alison Cottrell, James Cook University
- Murray Day, Justice Institute of British Columbia
- Carl Gibson, Latrobe University
- Andrea Kirk-Brown, Monash University
- Karyn Bosomworth, RMIT
- Philip Newitt, SA Police
- Sherene Daniel, Standards Australia
- James Titterton, State Water
- Lee Hutchison, Sydney Catchment Authority
- Steve Hancock, Sydney Catchment Authority
- Doug Hocking, VIC Police

### 3 WHY RESILIENCE

Prior to 11 September 2001, Australian organisations had undertaken work in the fields of enterprise risk management, business continuity management, emergency management, crisis management, physical security and cyber security. Following the World Trade Centre attacks, organisations renewed their efforts with new vigour and focus. These efforts were accompanied by the publication of a vast range of standards, handbooks and manuals across the world. In addition, there has been a significant growth in the employment market for people with knowledge and skills within these individual specialist areas.

In response to September 11 the Australian Government's actions paralleled those of many international governments, and a Critical Infrastructure Protection Program was established. This program brought industry and governments together to improve the protection of Australia's critical infrastructure. Initially there was a strong focus on terrorist risk while acknowledging the requirement to take an all hazards approach in line with Australia's existing emergency management doctrine.

Australia's Critical Infrastructure Protection Program has provided significant improvements in the protection of Australia's critical infrastructure. However the term critical infrastructure protection has also provided some constraints. These constraints include:

- often being perceived to be about the protection of an asset rather than the delivery of a service
- often associated as being purely a security approach rather than an approach requiring continuity of systems
- often limited to protection of an asset instead of a process involving partnering with the emergency management community to achieve community response and recovery objectives, and
- often perceived as focussed on terrorism rather than all hazards.

Therefore a concern has been expressed that there is now a requirement to commence the development of the next generation of thinking in relation to critical infrastructure protection. Across the world there is extensive research and development taking place around the concept of resilience. Resilience provides the opportunity to develop an approach that allows organisations to work both independently and interdependently to ensure the continuity of business objectives at the time of disruption events such as natural disaster, industrial accidents and terrorism acts, while improving partnerships with emergency management services to assist communities.

In addition, many organisations are establishing integrated enterprise risk management, security, business continuity and emergency management programs to achieve cost efficiencies. In many cases one person is leading all these functions. It is therefore desirable to establish how these portfolios should work together to achieve the optimal outcomes for organisations.

It has also been noted by those within the resilience arena that there have been many organisations that have successfully faced disruptive events and successfully responded to and recovered from them without extensive planning. One example is Bankstown City Council.

Bankstown City Council had no plans in place when the council offices burnt down in the early hours of the morning on 1 July 1997. The response was well organised, staff highly motivated and services quickly restored. This, as with many other examples demonstrates that having a plan is not the sole key to surviving severe business disruptions. In the case of Bankstown Council the immediate effective leadership, devolved decision making, supportive external agencies created through years of partnering, and a highly motivated workforce created through a good human resource recognition program resulted in a strong recovery from the event. The recovery operation was called "Operation Phoenix" and inspired staff to win against all odds.

## 4 WHAT IS RESILIENCE

Resilience is not a plan, or a checklist. The capacity of resilience is found in an organisation's culture, attitudes and values. In creating appropriate knowledge, culture, attitudes and values, an organisation builds its capacity to survive the turbulence created by low frequency and high consequence risks.

*“...Resilience is not something you do .....it is something you are...”*

**Dr Erica Seville**

*“...Resilience is the capacity for complex systems to survive, adapt, evolve and grow in the face of turbulent change. The resilient enterprise is risk intelligent flexible and agile...”*

**Opstal**

Resilience is the capability of an organisation to minimise the impact of severe disruption events on the business, the ability to “bounce back”. A highly resilient organisation would use disruption events as a focus to strengthen and grow the organisation.

Resilience capability is strongest in an organisation that:

- anticipates and understands emerging threats
- understands the impact of threats on the business, supply chain, the community in which they operate and upon employees lives
- develops and maintains supportive partnerships with critical stakeholders in their supply chain, sector and community
- responds to and recovers from disruptions as a unified whole of organisation team
- adapts to disruptions and reacts flexibility to restore routine functioning and strengthen the organisation
- ensures staff are willing and able to support the organisation to achieve objectives in times of adversity
- articulates clear organisational objectives and establishes a strong sense of purpose in response to and recovery from a disruption, and
- leads with clear direction while enabling devolved problem solving.

*“...Resilience advances a company's speed and flexibility by crafting an integrated first line of defence and an offensive strategy to guard the entire extended enterprise against new, unavoidable risks that are the by-products of interdependent operations...”*

**Starr, Newfrock, Delurey**

## 5 HOW RESILIENCE HELPS AN ORGANISATION

Being resilient can provide organisations with a competitive advantage. Following a disruption an organisation with a higher degree of resiliency may:

- return to pre disruption profits faster
- use the event as an opportunity to improve its effectiveness
- reduce the cost of its disruption to insurers resulting in reduced insurance premiums
- reduce exposure to uninsured losses
- negate the requirement for increased regulation to meet community expectations

- enhance its reputation, and
- increase staff morale.

The organisation’s resilience program could be used as an effective organisational development program. The positive connotation associated with resilience would draw positive staff input and provide the platform for business improvement activities.

*“...A resilient organisation effectively aligns its strategy, operations, management systems, governance structure and decision support capabilities so that it can uncover and adjust to continually changing risks, endure disruptions to its primary earnings drivers, and create advantages over less adaptive competitors...”*

*Starr, Newfrock, Delurey*

*“...A well-managed crisis can actually leave your organisation stronger, more resilient and better tuned to the world than it was before...”*

*Luke Corbett, Chairman and CEO, Kerr-McGee Corporation Blythe*

## 6 WHAT RESILIENT ORGANISATIONS LOOK LIKE

Resilience is not necessarily something new but is about applying good organisational leadership practices in a business disruption context. Typically staff in resilient organisations:

- pull together to work as a team in times of adversity (one in, all in)
- know what needs to be achieved
- have supportive networks with stakeholders and suppliers
- adapt quickly and with enthusiasm to challenges, and
- foresee developing threats.

### 6.1 BEHAVIOURS

In a resilient organisation the types of behaviours displayed include:

NORMAL BUSINESS	DISRUPTION EVENTS
Articulate clear organisational objectives and establish a strong sense of purpose	Articulate clear operational objectives and establish a strong sense of purpose in response to and recovery from a disruption
Understand their operating context	Understand their threat context and maintain effective situational awareness
Understand their supply chain to achieve cost savings	Understand their supply chain for vulnerabilities and understand alternative supply chain options

NORMAL BUSINESS	DISRUPTION EVENTS
Understand their customers to increase sales	Understand their customer vulnerabilities to enable effective sales restoration
Understand stakeholders expectations to develop a good reputation	Partner with stakeholders to gain their support and tolerance in a disruption event
Lead with clear direction while empowering line managers	Lead with clear direction while empowering devolved problem solving to teams
Work as a whole of organisational team to achieve business objectives	Work as a whole of organisational team to achieve response and recovery objectives
Use diverse teams to create innovation and lead change	Use diverse teams to adapt to disruptions and react flexibility to restore routine functioning and strengthen the organisation
Ensure high levels of staff morale	Ensure staff are willing and able to support the organisation to achieve objectives in times of adversity

In general a resilient organisation would be described as having:

- connections (horizontal and vertical linkages)
- optimism
- unity
- effective communication
- survivor instincts
- interdependency understanding
- cohesion
- ability to bounce back
- shared vision
- innovation
- self reliance
- flexibility
- determination
- preparation
- strong spirit
- awareness of its strengths and vulnerabilities
- strong social capital
- vigilance
- leadership
- informed view
- resourcefulness
- learning organisation
- forward approach to thinking
- intuition
- collaboration
- situational awareness
- rehearsals, exercises, practices, and
- an anti-silo mentality.

## 6.2 Mississippi Power - “Always on”

On 28 August 2005, Mississippi Power had a workforce of 1,250 employees. In the period directly following Hurricane Katrina, Mississippi Power deployed 11,000 workers from across North America. This enabled them to repair their system and restore services to all customers in 12 days. How would you describe Mississippi Power’s approach? “One in all in” – everyone is a part of the crisis team. We found that Mississippi Power was:

- a “family” company of 1200 employees that had family support teams to ensure staff were able to give their best
- sector mutual aid plans
- devolved decision making
- plans, can do attitude and a willingness to escalate effort to meet the challenge, and
- valued community networks.

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We find that a resilient organisation typically floats to the top in times of adversity. A resilient organisation builds its resilience capacity before it is needed. A resilient organisation:

- is adaptive and can work with or in spite of uncertainty
- is willing to change and plans to do so
- puts change and adaption in its vision
- foresees the future and acts on it
- focuses on the mission at hand
- ensures staff know what to do
- understands their supply chain
- understands their interdependencies
- makes and seizes opportunity in times of crisis
- strengthens the resilience of staff
- values the resilience of the community within which they operate
- thinks outside the box
- capitalises on adversity and change, and
- responds rapidly to redirect agency resources to operational priorities.

*“...It is not the strongest of the species that survives, nor the most intelligent that survives. It is the one that is the most adaptable to change...”*

Charles Darwin

*“...More than education, more than experience, more than training, a person’s level of resilience will determine who succeeds and who fails. That’s true in the cancer ward, its true in the Olympics and its true in the boardroom...”*

Dean Becker

*“...create inherent resilience by designing in diversity, efficiency, adaptability and cohesion...”*

Fiksel

*“...conceptualisation of resilience as the ability to respond to singular or unique events; to make “the extraordinary ordinary...”*

Kendra & Wachtendorf

## **7 WHICH BUSINESS UNITS CONTRIBUTE**

Everybody in an organisation has a part to play in creating a resilient organisation. However there are business units that have significant parts to play in providing information to support senior management in creating a resilient organisation.

Business Units such as enterprise risk management, business continuity management, physical and IT security, emergency management, occupational health and safety and human resources all hold parts of the information and the strategies required to create a resilient organisation. These business units can provide information on threats, vulnerabilities, command procedures, staff resilience, external stakeholder relationships as well as sector and community resilience strategies.

However many other business units such as marketing, media, operations and government relations also hold parts of the puzzle. In addition every manager has information about their staff and processes that enable decisions to be made that enhance resilience.

The resilience challenge is to create a culture that enables ideas and knowledge to be bought together, coalesced and acted upon.

*“...In a truly resilient organisation when a crisis occurs there is ‘plenty of excitement but there is no trauma*

*Response to crisis is automatic, spontaneous, reflexive...”*

**Hamel & Välikangas**

*“...Resilient organisation characteristics:*

- *Communicate obsessively*
- *Decision making at lowest level*
- *Strong believed value system*
- *Staff passionate about organisation’s mission*
- *Empowerment*
- *Condition for disruption...”*

**Yossi Sheffi**

## **8 QUESTIONS THE CEO SHOULD ASK**

A CEO who wanted to conduct a quick assessment of their organisation’s level of resilience should be able to ask these questions and find ready answers:

1. What are our key vulnerabilities?
2. What are our critical interdependencies?
3. How do we monitor for new threats and incorporate them into our risk practices?
4. What strategic changes are occurring in our threat environment?
5. Who would be our leadership team in times of crisis?
6. How do we ensure all business units work in a united way during a crisis?
7. Who decides what our operational priorities are during a serious disruption?
8. How would we ensure all our staff were informed of our immediate priorities during a crisis?
9. Do we have a program ready to build and maintain staff morale during response and recovery to a crisis?
10. Are mutual aid agreements in place with our sector peers?
11. Which key stakeholders would support us in times of adversity, who would attempt to undermine us?

*“...Every business is successful until its not. What’s amazing is how often top management is surprised when ‘not’ happens...”*

**Hamel & Välikangas**

*“...Resilient organisations are sensing, agile, networked, prepared, consider outrageous possibilities, learning how to survive before the fact...”*

**Starr, Newfrock, Delurey**

*“...On the day of the terrorist attacks on New York’s WTC, 1779 employees of Marsh & McLennan Companies had office space in the twin towers, and another 129 were visiting that day. From his office at MMC HQ in midtown, CEO Jeffrey Greenberg watched as the second plane hit. By the time the towers fell, he had gathered a team of his colleagues to begin to outline how the company would respond.*

*We decided that we should aim not simply to repair but to improve what we’d lost in the way of systems, property and data.*

*Because of the extraordinary talent and commitment of our people, along with the Disaster Recovery plans we had in place, MMC's ability to serve clients rebounded quickly after September 11, and the company has been performing well since.*

*Our Disaster recovery plans did not envision the sort of crisis we suffered or prepare us for it completely but it very much mattered that we had those plans.*

*You cannot anticipate the precise shape of a disaster. In a moment the key becomes adaptability. Suddenly, our management priorities were different. We had to do things differently – for example, communicate with unaccustomed frequency and with different mechanisms. My leadership approach had to match the needs of the moment. In a crisis, you understand the need for flexibility in facing all situations you had not anticipated'..."*

Jeffrey Greenburg, CEO, Marsh & McLennan Companies

## **9 RESILIENCE AND SOCIETY**

The concept of resilience can be applied to individuals, organisations, sectors and communities. These four units integrate to create a resilient society. Many of the themes that underpin resilience apply equally across these four. For example networks and linkages are critical for resilience. This can be applied to individuals in social networks, organisations within industry networks, sectors within interdependency networks and communities within a regional, state or national context. The degree of resilience achieved in any one unit will however be dependent on that achieved by the other units. The units are interdependent.

*"...This capability was most evident during Hurricane Katrina, when Wal-Mart was able to bring 66% of its stores in the affected region back into operation within 48 hours, and 93% within 7 days..."*

Opstal

In the case of Wal-Mart the priority was to reopen stores in areas where people were returning to their homes. This was very important as Wal-Mart sold the goods required by people in the community to re-establish their lives.

## **10 IMPLEMENTING A RESILIENCE PROGRAM**

### **10.1 CHALLENGES**

A number of challenges have been identified to implementing an effective resilience program in organisations. These challenges included:

- resilience is a culture or attitude not a process or framework - what you do is what you are
- identifying organisational breaking points
- understanding your supply chain and operating environment to be situationally aware
- integrating the various areas of planning that contribute to resilience
- understanding resilience may be a common goal but there are different approaches to getting there
- resilience requires communication, collaboration, cooperation
- resilience is a concept that needs to exist throughout an organisation
- the implementation of resilience requires champions to drive the change
- resilience is currently a strategic idea and we need to develop the skills to drive it

- resilience requires partnering between many professional areas of expertise
- the current silo areas of risk specialties can be a hindrance to developing resilience in an organisation
- many organisations lack a constant high threat environment to motivate them to implement resilience
- management will require education on the concept of resilience, and
- achieving resilient communities requires an overhaul to the role / interaction relationship between emergency services and industry.

*“...Advice to CEOs - You have to filter out the filterers. Most likely, there are people in your organisation who are plugged tightly in to the future and understand well the not-so-sanguine implications for your company's business model. You have to find these people. You have to make sure their views are not censored by the custodians of convention and their access is not blocked by those who believe they are paid to protect you from unpleasant truths. You should be wary of anyone who has a vested interest in your continued ignorance, who fears that a full understanding of what's changing would expose his own failure to anticipate it or the inadequacy of his response...”*

*Hamel & Välikangas*

## 10.2 GOVERNANCE STRUCTURES

Traditional risk programs such as business continuity, security and enterprise risk management often tend to follow process, achieve documentation, aim for compliance, strive to be easily auditable and fail to create cultural change. These programs are spread across the organisation and frequently operate within silos. The various risk programs often lack a uniformity of purpose, creating further silos. The management structure would typically result in each program reporting to different part of the organisation with various abilities to influence the organisation.

An organisation may endeavour to create a holistic approach to resilience through the creation of a resilience round table or steering committee with senior management support. This may be an enhancement of an existing group such as an enterprise risk management, business continuity or security steering committee. The key differences will be communication, collaboration and coordination. The focus may initially be internal then as maturity occurs an outward view can be taken.

Some of the steps to be considered include:

- integrate risk and business components into a common purpose
- remove the silos
- coordinate a linked big picture
- build upon existing programs such as enterprise risk management, business continuity and strategic planning
- develop key performance indicators that are outcomes based and aligned, and
- integrate management approach in both direction and strategy.

## 10.3 COMMUNITY AND EMERGENCY MANAGEMENT

The effectiveness of community response to disasters is highly dependent on the ability of organisations to function in times of severe community disruption. Emergency services are organisations that need to function effectively when their supply chains are disrupted. This could be a disruption to fuel supplies telecommunications systems, electricity or water supplies.

Many aspects of emergency response to community needs are undertaken by non traditional emergency services. This includes non-government organisations supplying disaster welfare needs, essential service utilities, stores reopening and supplying building repair supplies or food retailers restocking basic food supplies.

It is therefore essential that an “all agencies approach” be taken in building an effective response system to meet community needs during and post disaster.

It is imperative for communities that the agencies themselves are resilient in the in face of disaster and work collaboratively.

*“...A resilient emergency response was achieved through integrating the adaptive capacity of the response organisation with the resources of New York City, private entities, and government at all levels. Availability of resources – which fostered redundancy of capability, pre-existing relationships that eased communication challenges as the emergency developed, and the persistence of organisational schema for response integration and role assignments were among the attributes that contributed to resilience following the attack...”*

**Kendra & Wachtendorf**

## 10.4 HELP TO BUILD RESILIENCE

How can we build resilience in Australia? The workshop explored ideas around creating resources to support resilience programs, creating capable resilience champions and ensuring resilience leadership.

### Resilience resources

- continue to develop Australia’s Critical Infrastructure Protection Modelling and Analysis Program as a tool to enhance resilience planning and exercising
- conduct a literature review of materials and research
- develop a framework for societal resilience
- explore linkages between individual, organisational, sector and community resilience
- define and describe resilience
- establish a resilience website / blog / newsletter
- partner and exchange information with international resilience development teams
- explore the impediments to resilience
- develop a certification or accreditation program for resilience
- integrate resilience into triple bottom line reporting
- explore the interconnections between security, business continuity and emergency management
- develop metrics and measures to assess resilience in an organisation
- develop a resilience maturity model
- clarify how resilience meshes within AS/NZ 4360
- continue to develop interdependency understanding between sectors
- conduct briefings on developing hazards, and
- national resilience awards program.

### Resilience champions

- develop the capability of Australia’s resilience champions
- develop skills of resilience champions eg business continuity management, crisis management, security
- continue the business continuity management training at Emergency Management Australia Institute
- bring resilience champions together to enhance resilience thinking
- conduct a resilience conference involving a wide range of areas
- engage business schools in resilience and include in curricula
- ensure the concept of resilience is incorporated into tertiary management programs
- bring together industry peers to discuss resilience
- develop a resilience champions network
- conduct master classes on resilience

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- conduct CEO briefings on best practices in resilience using national and international speakers
- find a national leader/coordinator for resilience
- create a resilience round table, this could include modifying the Community of Interest or establishing a Business / Government round table

*“...Resilient issues:*

- *interdependencies*
- *situational awareness*
- *intelligence & analysis*
- *aligned culture and strategy*
- *resilience accountability and measurement...*”

**Starr, Newfrock, Delurey**

*“...In the long history of humankind (and animal kind too) it is those who have learned to collaborate and improvise most effectively have prevailed...”*

**Charles Darwin**

## **11 SUMMARY**

Many businesses programs such as enterprise risk management, business continuity management and crisis management have failed to achieve a high level of resilience or survivability for an organisation. This may be because many of these programs are based on process steps and 'check boxes' rather than changing attitudes and culture.

In many cases these programs are seen as an 'add on' to an organisation, and not an integrated philosophy.

To become resilient an organisation must **want to be resilient** and live the values and attitudes that ensure survival in times of adversity.

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