



Natural Hazards Research Australia

Incorporating the Bushfire and Natural Hazards CRC

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Australian Government
Department of Home Affairs

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To whom it may concern

Subject: Alternative Commonwealth Capabilities for Crisis Response Discussion Paper

Please find enclosed a submission by Natural Hazards Research Australia addressing the questions raised in the discussion paper.

If you have any questions or wish to further discuss, [REDACTED]

Yours sincerely,

[REDACTED]

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Chief Executive Officer

Natural Hazards Research Australia

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Acknowledging the primary role of state and territories in emergency response, what longer-term capacities and capabilities does the Commonwealth need to develop to meet the challenges of the evolving strategic environment?

Due to several factors already outlined in the discussion paper from the Department of Home Affairs, Australia's natural hazard risk is expected to worsen, placing increased demands on emergency management capability and capacity. This will necessitate a whole-of-community, all-hazards, whole-of-nation approach to emergency management.

Research and innovation are key to building a more productive and effective emergency management capability. Capability planning must focus on the long-term. This could include the development of a future national emergency management capability blueprint to guide research and investment in the next generation of capability, incorporating industry and research collaborations. Such a blueprint would also consider future national emergency management workforce needs.

National leadership is a key role of the Commonwealth:

- National coordination is an essential capability given that severe-to-catastrophic disasters require whole-of-nation response. National coordination can support decentralised decision making at local levels, enabling support of and integration with local efforts led by states and territories. Leadership on national disaster planning must be collaborative to provide for shared agreement across the Commonwealth, states and territories, local governments, NGOs, community members and businesses.
- Promotion of interoperable systems is an essential capability, both vertically and horizontally. This can be further enhanced, integrated and facilitated nationally through the development of standards and data sharing.

Natural Hazards Research Australia maintains a suite of research and evidence-based tools that can assist governments and organisations to better understand key capability gaps, such as the Capability Maturity Assessment Tool¹. Nationwide assessments similar to those undertaken in the United States National Preparedness Reporting would assist nationwide catastrophe planning.

At a national level, what are likely to be the key pressure points or challenges for the Commonwealth responding to competing and concurrent crises?

Coordination of support to multiple severe emergencies occurring concurrently or sequentially will pose significant challenges for the Commonwealth. This is also increasingly likely to occur whilst the Commonwealth is already supporting communities to recover from previous severe emergencies, or where severe emergencies are occurring concurrently, resulting in conflicting resource demands. In

¹ Gissing, A 2023. Measuring capability maturity for severe-to-catastrophic disasters. Australian Journal of Emergency Management, pp.26-29.

the absence of legislation, the Commonwealth's authority to exercise national leadership and coordinate Commonwealth, state and private assets depends on good will and cooperation².

Natural Hazards Research Australia's research demonstrates that compound disasters have increased in frequency in the last decade³. Specific challenges posed by compound disasters include:

- Government and emergency services resources might already be overwhelmed and exhausted by previous events. An international example of this occurred in 2017 in the United States when multiple hurricanes and wildfires nationally were said to have presented challenges on an unprecedented scale, including shortages in the availability of debris removal contractors and delays in removing debris. In addition, FEMA's workforce was overwhelmed, leading to the deployment of a large number of unqualified and inexperienced staff which further complicated response efforts⁴.
- In some cases, further vulnerability occurs when damage to weakened structures, including mitigation works, happens as a result of cascading extreme events – for example, a hail-damaged roof being inundated with heavy rainfall at a later date, resulting in further demands for Commonwealth support and expenditure.
- Infrastructure required for effective national response can be damaged by previous events, limiting the capacity to effectively respond and placing greater demand on scarce resources such as large aircraft.
- People may be displaced from their communities and as a result they might be exposed to subsequent natural hazards, creating ongoing impacts for Commonwealth support and expenditure.
- Communities might be experiencing ongoing trauma from previous events or from other underlying factors that may reduce their resilience, creating greater need for further Commonwealth support and expenditure.

How could the Commonwealth build community resilience and capability so they are better able to respond to and recover from national-level crises?

Community resilience can be built through investment in community organisations. Natural Hazards Research Australia's research examining the involvement of community organisations in disaster management found that the primary barrier to community organisation involvement was a lack of funding. Funding was an issue for almost all organisations regardless of their size, jurisdiction or structure. Other barriers nominated include:

² Eburn, M, Moore, C, Gissing, A 2019. The potential role of the Commonwealth in responding to catastrophic disasters, Bushfire and Natural Hazards CRC, Melbourne 2019.

³ Gissing, A, Timms, M, Browning, S, Crompton, R & McAneney, J. (2022) Compound natural disasters in Australia: a historical analysis, *Environmental Hazards*, 21:2, 159-173, DOI: 10.1080/17477891.2021.1932405

⁴ US Government Accountability Office. (2018). 2017 Hurricanes and Wildfires. <https://www.gao.gov/products/gao-18-472>

- A perception that there is a lack of awareness regarding the capabilities offered by community organisations and that community organisations are not recognised as players in disaster management.
- A government-centric approach to emergency services that does not recognise the role and value of community organisations, resulting in loss of collaboration opportunities.
- A lack of clarity amongst community organisations regarding what their roles are.
- Challenges in maintaining a trained and ready volunteer workforce.
- Inhibitors to government sharing information about those impacted by disasters with community organisations due to privacy concerns.

Addressing these barriers via funding, improved role clarity, training and skills development, acknowledgement and greater visibility of the capability of community organisations would assist to enhance capabilities offered and subsequently enhance community resilience⁵.

What changes in the current system are necessary to help Australia have the right capabilities and capacity to handle concurrent crises?

Australia must adopt a whole-of-community, all hazards, whole-of-nation approach to emergency management. Disaster management requires the knowledge, expertise and resources of government (Commonwealth, state and local), NGOs, business, First Nations groups and civil society to ensure effective prevention, preparedness, response and recovery (PPRR). The realisation that traditional approaches to PPRR are not as effective in the case of severe-to-catastrophic disasters must also be considered. Different non-linear, iterative, whole-of-system protocols and frameworks must be considered in light of the changing environment and impacts of climate change.

A whole-of-nation approach is key given that severe-to-catastrophic disasters will overwhelm the capacity of any single jurisdiction. This requires a focus on interoperability; that is, having common systems, procedures, equipment and training to ensure responses are efficient and effective.

Collaboration must be considered key to bolstering capability and capacity. For example, research has shown that the response to Hurricane Katrina in the US required 535 different organisations across different sectors, and that influential individuals in addition to official information sources on social media, were effective in amplifying and propagating information to build trusted situational awareness.

A whole-of-community approach is already being partially implemented in Australia, with community organisations and businesses contributing resources and expertise. Collaboration, though, is limited and ad-hoc, diminishing the value that partnerships could achieve. Traditionally, emergency management has been government centric and there is a need to further embrace capability from other sectors, through collaboration and information sharing, via a network of networks approach.

⁵ Gissing, A & George, s (2021) Community Organisation Involvement in Disaster Management. Bushfire and Natural Hazards CRC. Melbourne Australia

The role of emergency services in responding to a catastrophe must adjust from one which typically undertakes direct taskings to one which would facilitate, lead, support and enable community-led actions. An initial step would be to focus efforts on enhancing collaborations across government, community organisations, businesses and First Nations groups. The implementation of the approach would best be supported through the development of a framework defining collaboration mechanisms at different levels. The Commonwealth is uniquely placed to work with those organisations whose footprint spans multiple jurisdictions including large businesses and NGOs.

Strong involvement and collaboration from businesses and community organisations reduces the need for total reliance on government and resources and there are strong advantages in integrating their capabilities into collective disaster plans.

There is international evidence that demonstrates that the business sector can act more efficiently than government in some cases. For example, in responding to Hurricane Sandy (2012) in the United States, the business sector was able to move eight times the amount of food into affected areas compared with the combined efforts of government and non-government organisations⁶. Similarly, after Hurricane Katrina (2005), the retail store, Wal-Mart, frequently outpaced the United States FEMA by several days⁷. The business sector can also act with more flexibility than government, making faster decisions and acquiring, moving and disposing of resources rapidly taking advantage of their global networks and supply chains.

What models could the Commonwealth explore to replace or supplement support currently provided by the ADF during domestic crisis?

- **How could we harness the critical role of volunteers and civilian groups under this model?**

Volunteers

Natural Hazards Research Australia's research has found that ensuring the long-term sustainability of Australia's formal emergency response volunteer capacity is a key issue within the emergency management sector. Natural Hazards Research Australia continues to support research focused on developing and enhancing volunteering capability. Research has discovered creative and innovative suggestions to enhance volunteering, including strengthening incentives through direct remuneration for volunteers, tax incentives and volunteering leave arrangements with employers; and reducing compliance and regulation burdens on volunteers⁸.

⁶ Kaufman, D., Bach, R. & Riquelme, J. (2015) Engaging the whole community in the United States. Strategies for supporting community resilience. CRISMART, 41, 151-186.

⁷ Chandra, A., Moen, S. & Sellers, C. 2016. What role does the private sector have in supporting disaster recovery, and what challenges does it face in doing so?
Available: <https://www.rand.org/pubs/perspectives/PE187.html>

⁸ McLennan, B (2022) Emergency volunteering 2030: Views from emergency response volunteer representatives – Environmental scan report 4. Bushfire and Natural Hazards CRC. Melbourne, Australia

Natural Hazards Research Australia has now commenced a further research project titled Reimagining Emergency Management Volunteering – More than Words⁹. The research aims to:

- Reframe and reimagine emergency management volunteering challenges and opportunities in different ways compared to the past to reveal new kinds of solutions.
- Identify and undertake action research that supports volunteers and organisations to engage with and learn from many different perspectives and experiences, and to create opportunities to influence the sector toward investing in new, innovative, and sustainable approaches.
- Develop and refine a National Volunteer Sustainability Blueprint as a living document to guide strategic, national-level, and collaborative action to support emergency management volunteers (the people), volunteering (the activities) and volunteerism (the culture).

Civilian Groups

Natural Hazards Research Australia has completed research into the involvement of community organisations in emergency management¹⁰. Key findings of this research include:

- Resilience is the core business of most community organisations, with contributions of community organisations being viewed as both effective and valuable.
- Key strengths of community organisations include:
 - Access to local knowledge
 - Understanding of community needs
 - Focus on people who are vulnerable
 - Community trust
- 50% of community organisations have a high or very high appetite to become more involved in disaster management, although ultimately are resource-constrained.
- Government planning should work with community organisations to actively identify the range of organisations, their networks and needs. This activity should enhance awareness of the capabilities of different community organisations.
- Government and business should also pursue collaboration with community organisations to build community resilience, particularly when targeting the vulnerable and to leverage their local networks and knowledge.
- Efforts of community organisations can be undermined by disruption because of disasters. Specific efforts should be made to improve the business resilience of

⁹ <https://www.naturalhazards.com.au/research/research-projects/reimagining-emergency-management-volunteering-more-just-words>

¹⁰ Gissing, A & George, s (2021) Community Organisation Involvement in Disaster Management. Bushfire and Natural Hazards CRC. Melbourne Australia

community organisations as well as resourcing and co-ordinating efforts from the central and local perspectives.

First Nations Peoples

Natural Hazards Research Australia's research continues to identify opportunities to enhance collaboration between emergency managers and First Nations groups. A series of principles have been developed to enhance collaboration including:

- Equity and social justice: Land and emergency management agencies acknowledge First Nations peoples' rights to Country and should actively seek to partner with and enable First Nations peoples to make decisions about their Country.
- Self-determination: Land and emergency management agencies should actively support First Nations peoples' self-determination in all aspects of cultural fire and land management.
- Governance: Land and emergency management agencies should seek to understand the diversity of First Nations communities and ensure they are partnering with the right people for Country.
- Resourcing: Land and emergency management agencies should provide adequate, dedicated resources to enable meaningful partnerships with First Nations peoples so that they can fulfil their obligations to look after Country.
- Respectful learning: Land and emergency management agencies should work to respectfully learn about and enable cultural fire and land management approaches as First Nations peoples see fit, while implementing processes to protect First Nations peoples' cultural and intellectual property.
- Re-regulating fire and land: Land and emergency management agencies should reform, revise and adapt fire and land management processes, policies, regulations, and legislation to maximise the opportunities for First Nations peoples' participation in cultural fire activities.
- Education and cultural safety: Land and emergency management agencies should create an organisational culture that respects and celebrates diversity, including First Nations peoples' culture, knowledge, and practices.
- Accountability: Land and emergency management agencies should establish, improve, and report appropriate and effective measures of their success in partnership initiatives with First Nations peoples.
- Research: Land and emergency management agencies should support the research agendas of First Nations peoples¹¹.

Natural Hazards Research Australia is currently working to explore opportunities presented by Indigenous Ranger Groups in Northern Australia to bolster emergency management

¹¹ McKemey M, Neale T & Costello O (2021) Principles for enhanced collaboration between land and emergency management agencies and Indigenous peoples – green paper, Bushfire and Natural Hazards CRC, Melbourne,

capability¹². For example, First Nations researchers and their communities have shared their experiences of the recent Burketown flood. The Indigenous Ranger Groups and Carpentaria Land Council Aboriginal Corporation supported their community to respond, and highlighted how local First Nations knowledge and situational awareness can strengthen disaster planning and preparedness, and how existing governance structures and relationships with Traditional Owner groups can empower relief and recovery.

- **How do these models supplement, but not replicate, existing models operating at a state and territory and local level?**

Expansion of the utilisation of community organisations, businesses and First Nations groups through a whole-of-community approach complements traditional emergency management capability and models.

- **What role could industry / the private sector play? How can the Government attract increased investment in emergency management from the private sector?**

Natural Hazards Research Australia has completed research on the involvement of a range of different businesses in emergency management¹³. The research found:

- Large businesses acknowledged a role in ensuring their resilience and the safety of their staff. Businesses were motivated to invest in disaster resilience to keep employees, customers and neighbours safe and to reduce the risk of business disruption.
- Most businesses did not perceive a role for themselves in community disaster preparedness and believed they lacked the capabilities to do so.
- Most big businesses but few small businesses believed that they had a role in disaster response. These roles were to protect the safety of staff and customers, ensure the resilience of their operations and support any staff who volunteered with emergency services. Businesses were motivated to take this role by the need to ensure employee and customer safety and the resilience of their operations.
- Only a few businesses saw a role for themselves in supporting emergency services during disasters. Those that did had access to plant and equipment, and some were trained in emergency management.
- Large businesses believed they had a strong role in disaster recovery from both an internal and wider community perspective:
 - They saw they must lead the restoration of their business operations and infrastructure whilst maintaining the safety of their staff and customers. Restoration of business operations was seen to be critical to ensure that vital

¹² [Connecting Indigenous people and the emergency management sector – effective partnerships | Natural Hazards Research Australia](#)

¹³ Gissing, A & George S (2023) Business involvement in disaster management, Natural Hazards Research Australia, Melbourne.

supply chains recommenced, that people could return to their employment and local economies could commence recovery

- Businesses saw their role in provision of support to communities as: fulfilling obligations to customers; making cash donations, fund raising and managing public appeals; allowing staff to volunteer to support recovery efforts through corporate volunteering projects with community organisations; assisting to coordinate spontaneous volunteering; making product and service donations; providing specialist equipment and expertise; collaborating to ensure provision of necessities; providing flexibility to customers to be responsive to their needs; providing facilities for evacuation, recovery centres and accommodation; taking leadership and coordination roles in recovery; assisting to provide recovery information to community members; providing priority in their service provision to emergency management organisations and assisting in reconstruction activities.
- Large and small businesses were motivated to participate in disaster recovery to ensure the safety of their staff and customers, maintain market share, serve the community as a core part of their brand and values, ensure prosperity of economies that businesses rely on, build their brand; utilise a socially responsible brand to their advantage; and build staff motivation and satisfaction.
- The provision of support to communities was viewed as discretionary and dependent on the capability and type of business. Whilst businesses need to deliver profits to shareholders, it is not the sole objective driving business. Rather, the purpose of a business was regarded as more complex in serving multiple objectives. Social responsibility was seen to be a demand of customers, employees and external stakeholders. The ability to provide support to communities and act in a socially responsible manner is dependent upon a company's ability to afford to do so by making profits, that is, a balance must be achieved between profit-making and investing in communities.
- There are many strengths of involving large businesses in disaster management that include prior experience in disaster response and recovery; vast logistical capabilities and knowledge of supply chains; relevant resources such as plant and equipment and trained personnel; extensive and trusted national networks; collaborative approaches; diversity of capability and specialist expertise; flexibility, scalability and adaptation; local presence and connections.
- Barriers to further involvement in disaster management for larger businesses included lack of understanding of community needs and of how best to be involved; lack of existing relationships or disruption to relationships; lack of alignment between businesses and government, typified by a government centric approach; commercial resources being finite, with commercial realities to consider; different emergency management and operating arrangements in different jurisdictions; concurrent major disasters straining resources and lack of information-sharing between businesses. Barriers to small businesses included: lack of capability, not

being within the charter of their organisation, lack of relationships with government organisations and lack of knowledge as to how to engage.

- Some large businesses had an appetite to be more involved in disaster management, particularly to support communities. Appetite for involvement was context-dependent, driven by the expectations of customers and employees, dependent on businesses having a suitable role and alignment with company values. Few small businesses had any appetite for further involvement in disaster management.
- Some large businesses saw a risk to their businesses brand and reputation if they were not involved in disaster management. Some risks when businesses get involved included: not meeting community expectations; not adequately understanding the needs of impacted communities; partnering with organisations that were not credible; ensuring donations were effective; work, health and safety (WHS) of staff operating in disaster areas; undermining of local businesses and reducing the speed of local economic recovery and lack of insurance cover.

Lessons in collaboration and engagement can be gained from elsewhere. The United States has adopted an approach to incentivise business collaborations through information exchange and asking businesses what government can do for them to help them recover and ensure their continuity. This approach recognises that maintaining business continuity is key to reducing demands on government services. FEMA developed a virtual National Business Operations Centre that acts to exchange information between government and the business sector. During disasters, the National Business Operations Centre provides real-time situational awareness and ground-truthing on the needs of impacted communities. Further, FEMA created a business sector role within its National Coordination Centre to facilitate information-sharing with businesses. Regular forums are also held between government and business to promote this collaboration. The National Coordination Mechanism is Australia's equivalent framework that positively supports collaboration across government, businesses and NGOs¹⁴.

Are there sectors that could replicate the capabilities provided by the ADF?

Noting previously described Natural Hazards Research Australia research findings,¹⁵ there are models in which the business and existing emergency service sectors could be utilised to further assist in emergency management. Some examples include:

¹⁴ Buffone, J & Cameron R (2023) Coordinating Australia's response to natural disasters and national crises. [Available Online] [Coordinating Australia's response to natural disasters and national crises | The Strategist \(aspistrategist.org.au\)](https://aspistrategist.org.au)

¹⁵ Gissing, A & George S (2023) Business involvement in disaster management, Natural Hazards Research Australia, Melbourne.

- FEMA maintains contracting arrangements for debris removal, logistics and sheltering assistance¹⁶.
- Victorian State Emergency Services maintain panel arrangements of engineering experts to provide water modelling and geotechnical expertise¹⁷.
- Aerial firefighting arrangements between response agencies and the aviation sector are conducted through the National Aerial Firefighting Centre.

Likewise, the Commonwealth could maintain panel arrangements to access services from businesses.

What are the critical functions the Commonwealth Government should continue to perform in disaster relief and recovery, in support of local, state and territory governments?

It is important for the Commonwealth government to continue to resource and work with all stakeholders to coordinate effective disaster arrangements at both central and local levels. While private business, NGOs, First Nations groups and community groups all have a critical role to play in these arrangements, they must be jointly planned and enacted with stakeholders if they are to achieve the best possible outcomes for society. The Commonwealth is uniquely placed to take the lead in developing frameworks and approaches to “jointness” which will underpin effective risk awareness and management at all levels, and support capacity building for disaster response from central, regional and local perspectives.

What legislative, regulatory or policy changes could be undertaken to make it financially viable for other sectors to contribute to a Commonwealth crisis response capability?

Natural Hazards Research Australia has previously completed research on the potential role of the Commonwealth in responding to catastrophic disasters. A reference to this research is provided¹⁸.

¹⁶ [fema.gov/business-industry/doing-business](https://www.fema.gov/business-industry/doing-business)

¹⁷ [1926320.pdf \(floods.asn.au\)](https://www.floods.asn.au/1926320.pdf)

¹⁸ Eburn, M, Moore, C, Gissing, A 2019. The potential role of the Commonwealth in responding to catastrophic disasters, Bushfire and Natural Hazards CRC, Melbourne 2019.