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Here to help Strengthening the Defence role in Australian disaster management

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Executive summary

When natural disasters occur in Australia, the community and our political leaders expect the nation's full resources to be mobilised to the extent necessary to save lives and property. Objections that resources can't be deployed because of jurisdictional responsibilities or agencies having alternative priorities aren't acceptable to the community or to federal, state and local governments.

The Australian Government and the jurisdictions have committed to working collaboratively to develop integrated and flexible arrangements for countering disasters. All arrangements recognise that disaster response is primarily the responsibility of the states and territories. But they also recognise the reality: responses to large-scale disasters invariably have significant Australian Government components.

A frequent element in national disaster response has been the provision of assistance by Defence. This assistance includes high profile contributions such as occurred following Cyclone Tracy and the 2009 Victorian bushfires. The degree of focus by Defence on domestic disaster response reflects, however, Australian Government policy rather than the judgements of the Australian Defence organisation. Defence domestic disaster assistance is viewed as a secondary activity to its priority role of

warfighting and other international tasks. Defence assistance to domestic disasters isn't allocated a budget. Nor does it have detailed capability requirements.

Defence is likely to be used more frequently in the future to assist in domestic counter-disaster tasks. There will be larger and more frequent extreme weather events due to climate change; increased vulnerability of the growing populations in coastal developments and in bushfire-prone areas; continual reduction per capita in the number of volunteers and emergency services personnel; and growing community and political expectations to use military resources to support whole-of-government counter-disaster efforts.

To prepare for the increased demand on, and expectations for the use of, Defence in disaster management, three actions are required.

First, the Australian Government should clarify that domestic disaster assistance is an ADF Priority Task. Elevating domestic disaster assistance into a core Defence activity will ensure that this priority flows through the Australian Defence organisation.

Second, Defence should undertake a fundamental review of its domestic disaster assistance role with the goal of maximising its contribution to Australian disaster management. This requires that Defence's role in contributing to disaster management be

better defined. And it requires that Defence obtain the mix of inputs to achieve the defined capabilities. The required capabilities won't require significant force structure changes such as standing up of new capabilities or purchasing dedicated counter-disaster equipment. They are, however, likely to involve modifying existing organisations, policies and procedures, logistics and training.

Third, Defence and civil counter-disaster organisations, under the coordination of the Attorney-General's Department, should work together to facilitate the transfer of capability development, research and development and other skills to accelerate the development of the states and territories next-generation disaster management systems.

Defence has unique and substantial abilities that would be useful for counter-disaster organisations: developing future operating concepts; drafting effects-based planning regimes; creating seamless joint operation structures; evaluating operational and technology options; undertaking research and development; and crafting technology roadmaps.

The recommended three-pronged approach would ensure that Defence's domestic disaster assistance efforts meet changing public and political demands and expectations on Defence. And it would reduce the demand for its assistance over the long term as the jurisdictions become more capable.

These recommendations can only be implemented with additional resources being provided to Defence, federal, state and territory counter-disaster organisations.

Recommendations

1. *The Australian Government should clarify that domestic disaster assistance is a Priority Task of the ADF.*
2. *Defence should undertake a fundamental review of its domestic disaster assistance role to ensure it maximises its contribution to disaster management.*
3. *Defence and civil counter-disaster organisations, under the coordination of the Attorney-General's Department, should work together to facilitate the transfer of capability development, research and development and other skills to strengthen the jurisdictions' next-generation disaster management systems.*

Domestic disaster assistance: a frequent Defence task

Domestic disaster response is primarily the responsibility of the states and territories. When a disaster exceeds the resources of a jurisdiction, it can seek recovery assistance from the Australian Government. The Commonwealth facilitates national coordination through Emergency Management Australia (EMA) and assists with providing some capability enhancements to the jurisdictions.

The provision of assistance by Defence during Australian natural disasters is a common occurrence (see Box 1). Each year, there are about 30 instances where local military commanders help in local life-threatening situations. These might consist of providing assistance to the local SES with a sea search and rescue or help during local flooding. Most of these tasks are completed within 24 hours.¹

Several times a year, Defence provides longer duration assistance to prevent further loss of life or to reduce suffering. These tasks include the provision of shelters, fodder drops from helicopters, and transporting firefighters and equipment by helicopter into and out of remote areas. These activities normally occur following large disasters such as Cyclone Tracy (1974), the Ash Wednesday fires (1983),

Box 1: ADF involvement in the Victorian bushfires

The Black Saturday Victorian bushfires of 7 February 2009 claimed 173 lives, injured 822 people and destroyed 2,029 houses. The Victorian Government requested Commonwealth assistance on 8 February. The Prime Minister, together with the National Security Adviser, flew to Victoria that day to lead the Australian Government's response. By then, Headquarters Joint Operations Command (HQJOC) had already formed a Joint Task Force (JTF 662) to coordinate the on-ground Defence contribution. The Chief of Defence Force's Liaison Officer initially worked out of the Victorian Integrated Emergency Coordination Centre, before moving to the Department of Human Services. The liaison role involved maintaining five lines of communications: JTF 662, Defence Aid to the Civil Community (DACC) stakeholders, Victorian Bushfire Reconstruction and Recovery Authority (VBRR), the Victorian Government and the Defence Support Group (DSG). The liaison initially involved responding to events but evolved rapidly to anticipating requirements and making suggestions that maximised the Defence-generated outcomes.

The JTF 662 operated for seven weeks and the Defence contribution peaked at around 850 personnel per day in mid-February. The ADF assistance provided immediate support until more appropriate, long-term options became available. Under the transition to recovery and reconstruction, emergency services originally provided by the ADF were transitioned to local solutions, such as councils, state government agencies and commercial contractors. This transfer of responsibility was phased in over a number of weeks and was communicated clearly to the local communities.

Defence provided emergency sleeping arrangements for fire-affected families and emergency workers in Yea, Warragul, Marysville and Kinglake. Emergency workers were also accommodated at Defence establishments at the RAAF Base at East Sale, Simpson Barracks, Watsonia and the Puckapunyal Military Area.

Defence provided major support to the Kinglake Relief Centre through the provision of kitchen facilities, health and sanitation support, as well as water distribution and rubbish disposal.

Defence worked with Victorian agency officers to establish community support hubs (CSH) at Strathewen, Flowerdale, Narbethong, St Andrews, Pheasant Creek, Alexandra and Buxton. The CSHs offered integrated (Commonwealth, state, and local) government services in the affected communities and were used by various agencies as a central location to provide emergency services and advice to the communities. The ADF participated in the joint transport and logistics field assessment teams.

Joint Task Force 662 troops were involved in two search phases. The first was as part of the Rapid Impact Assessment in the first fortnight after the bushfires where troops searched approximately 120 square kilometres of fire-damaged areas that included around 1,300 houses. This included the townships of Kinglake, Flowerdale, Hazeldene, Marysville, St Andrews, Yarra Glen and Traralgon. The second phase was as part of the 'reasonable search' phase, where JTF 662 teams conducted thorough and methodical searches of 817 premises in Marysville, Strathewen, Castella, Toolangi, Chum Creek, Dixons Creek and Steeles Creek.

Box 1: ADF involvement in the Victorian bushfires (continued)

The Engineer Support Group, including seven heavy plant machines and two chainsaw sections, constructed more than 75 kilometres of firebreaks and cleared 35 kilometres of roads. They also helped clear unsafe trees from the affected communities. Specialist engineers assisted police with hazardous search tasks, including training searchers in safe procedures. A RAAF AP-3C Orion aircraft provided aerial imagery of

bushfire-affected areas during the first two weeks of the fires. Two RAN A109 helicopters provided rapid movement of personnel around the region.

Medical and counselling teams to support Joint Task Force personnel and residents in some of the affected communities were also deployed by Defence. Two Navy dentists provided forensic support to the Victorian state coroner until mid-2009.²

the Sydney hailstorms (1999), the Australian Capital Territory and Victorian fires (2003), Cyclone Larry (2006) and the Victorian bushfires (2009) (see Box 2). The category of Defence disaster assistance requiring the least number of calls is that of post-disaster, community recovery assistance, such as providing temporary bridges and restoration of roads. This is normally provided only once every few years.

Military assistance is used because Defence has capabilities that can't be provided by other organisations at the required time and location, and in sufficient quantities.³ Defence forces can contribute a vast array of capabilities:

- shelter, health and welfare (e.g. bedding and stretchers, meals, medical and public health assistance, power generation, chaplains, mortuary services, forensic investigation, and chemical, biological, radiological, nuclear and explosive responses)
- portable large-scale map printing and production facilities
- lift and mobility (e.g. search and rescue, amphibious mobility through its landing craft, bus transportation, air evacuation

of special-needs patients, and fuel and water transport)

- weight of numbers (e.g. large numbers of personnel removing fallen trees and tarping of damaged roofs)
- situational awareness (e.g. space-based imagery, night vision and sensor networks)
- engineering and public works
- planning, communication and logistic support (e.g. staging areas for supplies and shelters, vehicle refuelling, supply chain services, interagency planning support and radios)
- self-sustaining assets that don't rely on local resources.

Typically, immediate assistance is provided by military personnel on full-time service. They are available at very short notice. Part-time personnel may participate after they have been mobilised, but this can take several days. It is the intention of the Army to improve its Reserve Response Forces (RRF) to provide better disaster responses. The RRF is raised from within each of the six Army Reserve brigades.⁴ As of December 2009, there were 664 members of the RRF nation-wide:

16 in the Australian Capital Territory, 217 in New South Wales, 87 in South Australia, 105 in Queensland, 33 in Tasmania, 95 in Victoria and 111 in Western Australia.⁵

Large-scale Defence assistance is always provided as part of the Australian Government's provision of physical assistance to the jurisdictions in an emergency or disaster as detailed in the Commonwealth Disaster Response Plan (COMDISPLAN). The COMDISPLAN is based on the principle that Commonwealth assistance will only be provided when the resources of a state or territory government are inadequate, exhausted or can't be accessed in time. This means that Commonwealth assistance is the last resort, after the emergency services, local government and the private sector have been utilised. COMDISPLAN requires that requests for Defence assistance are channelled through the jurisdiction to EMA then to Defence. But it's now not uncommon for a premier (or chief minister) to place a request for Defence help directly with the Prime Minister, who may then direct Defence to provide assistance before the COMDISPLAN process is complete.

Defence's policy on assistance is detailed in *Defence Instruction (General) Operations 05-1: Defence Assistance to the Civil Community—Policy and Procedures*. It defines three types of disaster and emergency assistance known as Defence Assistance to the Civil Community (DACC) Categories 1 to 3 (see Box 2). The principles behind the policy are that the provision of DACC tasks are the exception rather than the rule; that Defence will always be in support of civil authorities; and that the ADF will maintain its military lines of command and control, rather than come under civilian leadership. Defence's role in disaster management is shaped by the Constitution, the *Defence Act 1903* and by a number of other Commonwealth laws.

The process for requesting and managing ADF assistance depends on the nature of the emergency. For emergencies where immediate action is necessary to save human life or property (i.e. DACC Category 1 tasks), the local ADF commander has the authority to provide assistance if it involves only their own resources following a request by the jurisdiction's local emergency representative.

For emergencies where there's direct threat to life and property and where it's expected that ADF assistance will be required for more than 24 hours (i.e. DACC Category 2), or where ADF assistance is required to help with the recovery (i.e. DACC Category 3), requests for assistance have to be made by the jurisdiction's emergency director/emergency management coordinator to EMA. EMA liaises directly with Headquarters Joint Operations Command (HQJOC), which in turn liaises with the Head of Military Strategic Commitments to seek approval for the mission from the Parliamentary Secretary to the Minister for Defence. On approval, the task is given to HQJOC to coordinate. To coordinate at the jurisdictional level, HQJOC will work with the Australian Defence Force Liaison Officer (ADFLO), who is permanently deployed to the jurisdiction's Emergency Coordination Centre. This ADFLO is normally under the responsibility of Joint Operations Support Staff (JOSS), but may be assigned to HQJOC for the duration of an incident. If the mission is significant, additional Liaison Officers will be provided by HQJOC and a Joint Taskforce (JTF) may be established to coordinate Defence activities on the ground.

Defence is not provided with a budget for DACC tasks. DACC Category 1 and 2 tasks aren't cost-recovered from the jurisdictions. Given that Category 2 tasks can last for many weeks, the costs to Defence can be many millions of dollars. DACC Category 3 tasks are cost-recovered. But these tasks only occur once every few years.

Box 2: DACC Disaster and Emergency Assistance Categories⁶

Defence classifies its disaster assistance into the following three DACC categories.

Category 1: Assistance where immediate action is necessary to save human life, alleviate suffering, prevent extensive loss of animal life or prevent widespread loss of, or damage to, property in a localised emergency situation. The activities are not expected to be required for more than 24 hours. Activities are approved by the local ADF commander and use only the local commander's own resources. There is no cost recovery for the provision of the assistance.

Examples of DACC Category 1 activities are:

- assistance during local flooding
- helicopter rescue of civilians trapped by flood waters or injured during a bush walk
- controlling a bushfire in a local area adjacent to a military base
- extinguishing fires in local civilian housing.

Category 2: Assistance where action is necessary to save human life or alleviate suffering during a more extensive or continuing disaster following initial Category 1 assistance. The activities include providing assistance when there is a direct threat to property. The activities are expected to be required for more than 24 hours.

These activities are approved by Defence following a request from state emergency authorities through the EMA. The activities are coordinated by Headquarters Joint

Operations Command, and local coordination is generally provided by the deployment of an Australian Defence Force Liaison Officer (ADFLO). There is no cost recovery for the provision of the assistance.

Examples of DACC Category 2 tasks are:

- flood relief tasks including provision of shelter (tents/stretchers), airlift of food/equipment, fodder drops
- assistance during large bushfires
- post-earthquake assistance
- post-cyclone relief.

Category 3: Assistance associated with recovery from an emergency or disaster, not directly related to the saving of life or property.

These activities are approved by Defence following a request from state authorities through the EMA. They are coordinated by Headquarters Joint Operations Command, and local coordination is generally provided by the deployment of an ADFLO. Full cost recovery is normal, but variations can be sought.

Examples of DACC Category 3 activities are:

- the movement of supplies and equipment in the clean-up phase following a natural disaster
- the provision of personnel to assist with clean-up/repair
- temporary bridging following a bushfire
- restoration of roads following a flood.

There are no specific DACC dedicated forces or assets. Personnel and equipment used in DACC tasks are obtained from any relevant and available unit. The only DACC-specific staff are several people in Defence's Strategy, Coordination and Governance Executive. DACC training is provided to the Liaison Officers posted in each jurisdiction at its Emergency Coordination Centre.⁷ There's no DACC training for the vast majority of ADF personnel, although those units tasked with providing a DACC standby capability at peak periods, such as cyclone or bushfire watch over Christmas, will often undergo specific training for that role.

The peak periods for disasters, and hence for potential Defence support, are the cyclone and bushfire seasons in December and January. These months coincide with ADF posting cycles and leave periods, resulting in reduced manpower at these times. Providing standby forces during these periods places a significant strain on the ADF, especially when it's not able to reduce its tempo due to the demands of offshore operations.

Strategic guidance and domestic disaster assistance

In the 2008 *National Security Statement*, it's noted that one of the enduring capabilities of national security policy is having an ADF 'that is ready to respond when necessary, in a range of situations from combat operations to disaster relief'. Detailed strategic guidance establishing Defence's priorities are contained in the *Defence White Paper 2009*. The White Paper defined Defence's Principal Task as being to deter and defeat armed attacks on Australia by conducting independent military operations without relying on forces of other countries.⁸ Supporting domestic security and emergency response efforts is, somewhat confusingly, identified as a subset of Defence's principal task. Notwithstanding, these missions are accorded, by implication,

the highest priority in Defence's strategic guidance. The White Paper also identifies three other Principal Tasks and these, in descending order of importance, are:

- Defence is to contribute to stability and security in the South Pacific and East Timor. This involves conducting military operations, in coalition with others as required, including in relation to protecting our nationals, providing disaster relief and humanitarian assistance and, on occasion, by way of stabilisation interventions.
- Defence is to contribute to military contingencies in the Asia-Pacific region, including in relation to assisting our Southeast Asian partners to meet external challenges, and to meeting our alliance obligations to the United States as determined by the Australian Government at the time. The strategic transformation of the region will mean that Australia should be prepared to make contributions—including potentially substantial ones—to such military contingencies in support of our strategic interests. Operations at the less demanding end of the scale of possible contributions include humanitarian relief, disaster recovery and the evacuation of our nationals.
- Defence has to be prepared to contribute to military contingencies in the rest of the world, in support of efforts by the international community to uphold global security and a rules-based international order, where Australia's interests align and where the country has the capacity to do so. Examples of such possibilities include providing security for the delivery of humanitarian aid.

Towards the end of the White Paper, the document provides a detailed list of 17 missions that the Australian Government

expects Defence to be able to carry out, potentially at the same time or in carefully managed sequences over concentrated periods of time. One of these is to ‘support emergency response efforts in the event of man-made or natural disasters within Australia, and particularly assist in situations where the scale of a disaster exceeds the capacity of other agencies and jurisdictions’.⁹ Thus while including the emergency response mission within the ADF’s definition of its Principal Task (which is to defeat armed attacks on Australia) implies that it’s of prime importance, the failure to state it prominently may mean that policy makers do not appreciate its importance.

While the Australian Government and ADF strategy, policy and culture is predicated on the belief that Defence disaster assistance will normally be provided as a last resort, this isn’t the expectation of the general public. The community considers that one of the key tasks of Defence is to contribute to disaster-relief operations in Australia. This was a key finding of the 2008 *Community Consultation Report* developed as part of the White Paper process.¹⁰

The community is aware of the military’s high-quality response to overseas disasters, such as the 2004 Indian Ocean tsunami, and expects similar, if not greater, efforts at home. The presence of the military in disaster response is welcomed by the public: it shows the Australian Government is prepared to provide the necessary resources to aid the community. For the Australian Government, the ADF is one of the few resources it can use to demonstrate that it’s contributing to domestic disaster response. A Defence presence provides a calming effect in the affected community. This was very evident during the Victorian bushfires in 2009 and Cyclone Larry in 2006.

The Victorian Bushfires Royal Commission

The Victorian Bushfires Royal Commission’s *Interim Report* last year made two recommendations that are relevant for Defence. First, that the Commonwealth should facilitate discussions between relevant Commonwealth agencies (including EMA, Defence, Defence Imagery Geospatial Organisation and Geoscience Australia) and state and territory fire services to identify ways in which Commonwealth resources might be applied more rapidly and effectively during extremely dangerous bushfires, including investigating the potential for these resources to be used for detecting, tracking and suppressing bushfires.

The Royal Commission also recommended that the Commonwealth, through EMA, provide briefings at least once a year to state and territory agencies regarding arrangements available (including through Defence) to support the jurisdictions during disasters and emergencies, particularly bushfires. State and territory representatives should advise relevant ministers and the chief officers of emergency services (including fire services) of the outcomes of these briefings.¹¹

The Australian Government has agreed to both of these recommendations. Federal agencies, including Defence, will continue to engage with the jurisdictions to improve the information and support that it gives. Specifically for Defence, information on its capability will be part of the annual pre-season briefings to the jurisdictions.

The Australian Government has noted that the resources of the Defence intelligence collection agencies (such as the Defence Imagery Geospatial Organisation) are available to the extent permitted by the legislative framework of the *Intelligence*

Services Act 2001. This allows Defence intelligence capabilities to be redirected from core functions to assist in response to, and in support of, Commonwealth/state emergency response efforts in the event of natural disasters.¹²

Three recommendations to strengthen the Defence role in disaster assistance

A number of benefits and risks arise for Defence as a result of it providing disaster assistance.

The most important benefit for Defence is that it enhances the organisation's reputation. Defence receives considerable support from the Australian community for its disaster assistance role. There's also increased military workforce satisfaction: ADF members place a high value on their contribution to disaster assistance. The experience gained is useful for the increasing number of offshore Defence missions in disaster relief.

By providing this support, however, Defence can't undertake other activities. It has finite resources. The flow-on effects can include delays in training, additional maintenance needs and, in extreme cases, the reduction of operational activities. The resulting reduction in Defence's preparedness may constrain the options available to the Australian Government to deploy the ADF to assist in other emergencies.¹³ And there's a risk that Defence's reputation might suffer if it fails to meet community and political expectations.

The following three recommendations are designed to strengthen Defence's role in disaster assistance and to manage these risks.

1. The Australian Government should clarify that domestic disaster assistance is a Priority Task of the ADF.

The Defence White Paper identified that Defence's Principal Task is to deter and defeat armed attacks, and within that task is a requirement that it contribute to disaster management domestically. It identifies three additional tasks in descending order of priority: contributing to the security and stability in our near region; contributing to military contingencies in the Asia-Pacific region; and contributing to military contingencies in the rest of the world.

In the future, Defence is likely to be used more frequently to assist in domestic disaster tasks and for a wider range of activities. There will be larger and more frequent extreme weather events due to climate change;¹⁴ increased vulnerability of the growing populations in coastal development and in bushfire-prone areas; continual reduction per capita in the number of volunteers and emergency services personnel; and growing community and political expectations that military resources will be used to support whole-of-government efforts.

The Australian Government directed Defence to increase its domestic counter-terrorism role following the 2001 terrorist attacks in the United States.¹⁵ It should now consider a similar approach for the range of domestic and international disaster response and relief, humanitarian assistance, and reconstruction missions that are comprehended in the Principal Tasks of the ADF outlined in the White Paper. This will also involve liaising with other agencies responsible for coordinating responses to domestic disasters to ensure that Defence guidance is considered in all relevant agencies' directives, capability development and budget processes.

The guidance should state that Defence needs to have the operational preparedness, mobility, equipment, personnel and coordination ability to provide effective assistance to civil authorities in support of whole-of-government missions. This capability should be developed in such a way that it causes minimal disruption to Defence's total capabilities and complements the work of emergency services, and state and local governments. It should be provided only until more substantial civil capabilities arrive. Ideally it should maximise the psychological benefits that the appearance of military forces have in affected communities and provide training opportunities for ADF units.

There is a possibility that as the quality of the Defence disaster assistance improves, the pressure on jurisdictions to continually improve their responses will be reduced. To prevent a dependency mentality developing, Defence should implement a demand-management strategy. Civil authorities need to have a realistic understanding of the contribution that Defence can make, including the inability to pre-position high-readiness forces and equipment for long periods in case a natural disaster occurs. Civil authorities need to understand that high-readiness units aren't evenly distributed around Australia; some places will receive a faster and larger ADF response than others.

In pre-season briefings ADF Liaison Officers should emphasise that requests be made only if there are no civil alternatives. If there's excessive use of ADF assets, the jurisdictions may need to pay for the services. Defence will need to explain to political leaders the flow-on impacts for other parts of the Defence organisation and encourage civil authorities to improve their disaster prevention, preparation, response and recovery activities. Defence should consider

undertaking training for civil authorities in military–civil coordination.

Given that disaster assistance is part of Defence's Principal Task, it follows logically that it should also be a force structure determinant. The ADF's force structure is made up from the combination of its personnel, equipment, facilities and military doctrine. Being better able to respond to disasters will not require the ADF to bring major new and disaster-specific capabilities into existence; rather it will give greater emphasis to dual-use capabilities and might require some additional elements being maintained to provide better coverage. Many of the capabilities that would be required to respond to domestic disasters will be of utility to the ADF in undertaking other Principal Tasks and missions identified in the White Paper. Thus including domestic disaster response as a force structure determinant could produce more capability depth for the ADF across the contingency spectrum.

2. Defence should undertake a fundamental review of its domestic disaster assistance role to ensure it maximises its contribution to disaster management.

Defence domestic disaster response arrangements continually evolve in response to lessons learned from missions. Current and recent enhancements include:

- reviewing Defence's policy on Defence assistance to the civil community
- restructuring JOSS, which would include enabling ADF Liaison Officers to be placed in jurisdictions' Emergency Coordination Centres
- enhancing Defence's situation awareness of natural disasters by having a Bureau of Meteorology Liaison Officer sited at HQJOC

- collaborating with EMA to identify ways in which Defence can streamline and enhance the timeliness of its support
- enhancing coordination with Geoscience Australia as the lead Australian Government agency for domestic geospatial and imagery support.

The incremental evolution of the Defence role in disaster management is no longer appropriate due to the likely increase in demand and expectations and the risks that go with them. A more rigorous and structured approach is required. This should start with a strategic appreciation based on the Australian Government's guidance, the adequacy of current defence policy, and the future domestic disaster environment. That environment consists of the range of natural disasters and man-made threats, the response capabilities and arrangements of civil counter-disaster organisations and changing community vulnerabilities.

As part of evaluating the environment, it's necessary to re-examine a key assumption that underpins the Defence approach to domestic assistance: that Defence will be called upon infrequently due to the availability of other disaster response resources in the jurisdictions (i.e. paid and volunteer emergency services, state and local government employees and the private sector). Historically, these other resources were substantial, at least relative to demand and expectations. For a variety of reasons they are less so today.

While the capabilities and numbers of paid emergency service personnel continue to increase, much of this growth is required to meet existing baseline demand. This means that transfers of ambulance, fire and police personnel to a disaster will reduce services in other areas. Volunteer State Emergency Services numbers have remained static, so per capita the ratio has decreased. They can't

sustain high tempo operations for long or very frequent deployments.

The other major source of response manpower was local government employees, with their own civil engineering equipment. However, due to outsourcing, most local councils now have only a small day-labour force. And most heavy machinery operation is now provided by the private sector. Similarly, the day-labour forces of state governments have also diminished, particularly in public works, construction and hospital services. Local government is increasingly incapable of providing significant quantities of manpower quickly. While it's true that the private sector has significant capabilities, these are normally already fully engaged on existing projects and can't always be deployed quickly to disaster zones.¹⁶ Given these changes, Defence will be called upon more frequently.

Another assumption underpinning Defence's policy approach to disaster assistance is the belief that assistance can be effectively provided by simply adapting existing capabilities without it being supported by relevant doctrine, operational arrangements and planning. This isn't the case for stabilisation or reconstruction tasks. And it's not true for disaster assistance.

Improving disaster assistance will require a rigorous examination of the key inputs to capability and optimising them as a system. Developing the required capabilities will be different from Defence's normal capability development process, which is best characterised as a negotiation between the Australian Government and Defence. It will be more akin to developing Defence's domestic counter-terrorism capabilities that involve negotiations with all jurisdictions and civil security agencies. Developing the correct Defence domestic disaster assistance capabilities will require negotiations with all tiers of government coordinated by the Commonwealth.

A potential area for improvement is the use of Reserves. Certain units could be tasked with specific civil defence functions. For example, a unit could be designated as a support group for countering large bushfires in Victoria and South Australia. This unit could be trained to support civil authorities and have a high state of readiness during the bushfire season, although under the current Reserve arrangements this is problematic. Another group could be designed to support the civil authorities Australia-wide in their transition from the response to recovery phase. Better utilisation of the Reserves for domestic disasters would assist in building community resilience. National resilience is now a key objective of all Australian governments.¹⁷

A key issue for the Australian Government will be the degree to which Defence includes domestic disaster requirements in its capability development processes. In some instances, it will come at virtually no additional cost, while in others it may have significant costs. The additional costs will mostly be related to personnel costs, notably additional training, exercising and planning.

The main questions that should be addressed in the review are listed in Box 3.

3. Defence and civil counter-disaster organisations, under the coordination of the Attorney-General's Department, should work together to facilitate the transfer of capability development, research and development and other skills to strengthen the jurisdictions' next-generation disaster management systems.

Defence is used for disaster assistance because of its mobility, preparedness, manpower and equipment. However, it has other abilities that can make a significant contribution to the long-term improvement

in Australian disaster management. This would involve providing soft skills to help the jurisdictions plan and implement the next generation of disaster management systems.

Next-generation systems are those that are more integrated and efficient in delivering an all-hazards, all-agency and prepared community approach. Likely features of these will be the integration of the resources of the three levels of government, business, non-government organisations and volunteers, the provision of real-time situation awareness, including remote sensors and integrated disaster information.

Defence has a unique and substantial ability through its processes and personnel to identify future capability requirements and then plan to achieve them. While Defence's approach can't be directly transplanted into the jurisdictions, its approach to developing future operating concepts, creating seamless joint operation structures, evaluating operational and technology options, and crafting technology roadmaps would be extremely valuable in helping to create the future disaster management systems required by the jurisdictions.

Specific areas where Defence has high-quality soft skills are:

- **Planning.** Planning activities range from developing planning frameworks to operational planning.
- **Multi-organisation coordination.** Coordination of different services, civil contractors and other groups to achieve missions is a skill used by Defence in joint operations and is required by civil counter-disaster organisations.
- **Capability development.** Capability development is a proven way to link requirements to inputs and outputs. Capability development as a discipline is increasingly being used by emergency

Box 3: Key questions for Defence to strengthen its approach to disaster assistance

Organisation

- Should there be units dedicated to domestic disaster relief, or is the use of Joint Task Forces the optimal structural response?
- Are lessons learned fed into changes in doctrine, operations, training etc.?
- Is the belief that the Reserve Response Forces can provide significant resources to civilian disaster assistance reasonable, given the problems of rapidly deploying non-continuous personnel?
- Can the forces configured for international operations in support of stabilisation and reconstruction; e.g. civil–military co-operation (CIMIC) squadrons and construction units be utilised for domestic disaster assistance?
- Can the deployment of planning and logistics staff be accelerated in anticipation of a disaster?
- Are Defence briefings on its operational arrangements, and the availability and capability of resources, adequate?
- Is Defence's contribution to interagency planning appropriate?
- Is the approach of providing military-produced geospatial intelligence to civil agencies efficient and effective?
- Is the transition of control for ADF Liaison Officers posted in each jurisdiction's Emergency Coordination Centre from Joint Operations Support Staff to HQJOC efficient and effective as the Defence response escalates?

- Is the posting cycle of ADF Liaison Officers undermining the development of sound relationships between Defence and civil counter-disaster organisations?

Personnel

- Can the civilian skills of reservists be better utilised for disaster assistance tasks?
- Is it true that a significant percentage of reservists are also emergency service personnel, meaning that there is a lack of resilience in those Reserve units that might be utilised in a disaster, as it will be missing many ADF members?
- Is the level of disaster training appropriate for ADF Liaison Officers at the jurisdictions' main and local Emergency Coordination Centres?
- Is the quality of ADF personnel assigned to JOSS adequate?
- Is the pre-deployment training of JTF Liaison Staff appropriate?
- Can Defence capitalise on the recognition benefit of disaster assistance activities for recruitment?
- Are there particular civil competencies that a small number of ADF members should obtain, such as aerial water bombing?

Collective training

- Is there sufficient alignment between civil and military competencies to enable ADF members to be utilised as needed?
- Can there be greater use of civil training facilities to achieve more realistic civil training requirements?

Box 3: Key questions for Defence to strengthen its approach to disaster assistance (continued)

- Should Defence assistance procedures be taught and exercised more widely by ADF members?
- Is there an appropriate level of Defence participation in civil agency disaster exercises?
- Is sufficient weight given to recovery operations in ADF training?
- Can the experience gained in disaster assistance be better utilised by ADF groups; e.g. CIMIC squadrons and construction units, in their other roles, such as reconstruction?
- material appropriate; e.g. water purification equipment?
- Do Defence's equipment and output meet contemporary Australian health and safety standards; e.g. quality of water from purification equipment?
- Are capabilities appropriately packaged for deployability, such as fly-away surgical teams?
- Are the packages of commonly required goods aligned with international deployment requirements or other agencies; e.g. AusAID, to aid efficiency?

Equipment and platforms

- Should disaster assistance requirements be included into the requirements phase of the capability systems life cycle; e.g. Landing Helicopter Dock amphibious ships?
- Should military requirements be a factor in domestic infrastructure decisions, such as a port's freight and passenger line terminals that are required for moving equipment and troop loading respectively?
- Does military aviation need physical changes to enhance its heavy lift, aerial firefighting and mass casualty handling?

Logistics

- Are the stock holdings, provisioning lead times, serviceability and configuration status of

Command and management guidance

- Are there current and relevant regulations, instructions, publications, doctrine and tactical level procedures on Defence disaster assistance?
- Does the guidance given provide an appropriate balance between anticipating and reacting to demand, between response and recovery requirements, and between a 'normal' and a 'catastrophic' disaster?
- Do operational procedures reflect disaster management best practice, such as not deploying locally resident ADF personnel to search for bodies?
- Can perceived and actual limitations on Defence domestic disaster assistance imposed by the Australian Constitution be addressed?

services, such as the Queensland Fire and Rescue Service, but is far less common at a whole-of-government level.

- **Doctrine development.** Doctrine is the formal expression of knowledge

that covers the nature of the threat and the methods to mitigate and manage it. Doctrine provides the basis for determining equipment capabilities, organisational structure

and relationships, leadership, tactics and training. Currently only a few emergency services have doctrine.

- **Technology roadmaps.** A technology roadmap is a plan that matches goals with specific technology solutions to achieve them. Significant improvements in disaster management can be achieved through technology. However, it is also challenging due to issues such as interoperability and integration.
- **Situation awareness systems.** Situation awareness is having knowledge of the factors of importance, understanding their meaning and predicting their development in the near term.
- **Science and technology research.** Evidence-based evaluation is essential to making informed decisions, and science and technology research can provide this.

An example of the contribution that Defence has made in the past is in fire mapping. Following the ACT and NSW bushfires in 2001–02, the Defence Imagery and Geospatial Organisation initiated work on the development of a system for detecting and monitoring bushfires by using earth-observing satellite technology and web-based mapping. Known as *Sentinel* and now managed by Geoscience Australia, it provides a national bushfire monitoring system that allows emergency service managers across Australia to identify fire locations posing a potential risk to communities and property.

The Defence Science and Technology Organisation has assisted civil security agencies in research and technological needs, including systems evaluation, operations research and lessons learned. The Joint Warfare Doctrine and Training Centre (JWDTC) can provide expertise in doctrine development, simulation support,

and evaluation. The Capability Development Group can provide expertise in developing capability requirements and operational concepts, managing interoperability, and producing test and evaluation programs.

Civil disaster professionals know the problems with their existing disaster management systems: inadequate situation awareness, poor communication interoperability, insufficient focus on prevention, lack of inter-jurisdictional qualification portability and poor transition from response to recovery operations. However, they don't have the time, skills and resources to develop the next-generation systems that meet the requirements of the numerous stakeholders and leverage technology. Defence can use its skills and knowledge to help the jurisdictions do this through skills transfer and capacity building. This presupposes that there's a demand from the jurisdictions, which isn't always present. Thus the jurisdictions should be encouraged to engage with Defence on these issues.

Engagement would be through the National Security Capability Development Division of the Attorney-General's Department. This Division coordinates and manages Australia's counter-terrorism arrangements and contributes to Australia's emergency management capability in conjunction with the Australian Government, state and territory agencies, and other groups. Using this mechanism is important as it supports the whole-of-nation national security budget being developed to balance investment between threats across the security spectrum. Developing a national approach would assist in breaking down cultural barriers between emergency services and other stakeholders, which is one of the key impediments to the development of whole-of-jurisdiction disaster management systems.

Additional resources should be provided to both this Division in the Attorney-General's Department and Defence to enable them to undertake this work. In some cases private sector organisations familiar with Defence may be able to cost-efficiently deliver Defence's contribution. Funding should be provided to the jurisdictions under the mutual obligations framework of the Council of Australia Governments (COAG) National Partnerships.¹⁸

Concluding remarks

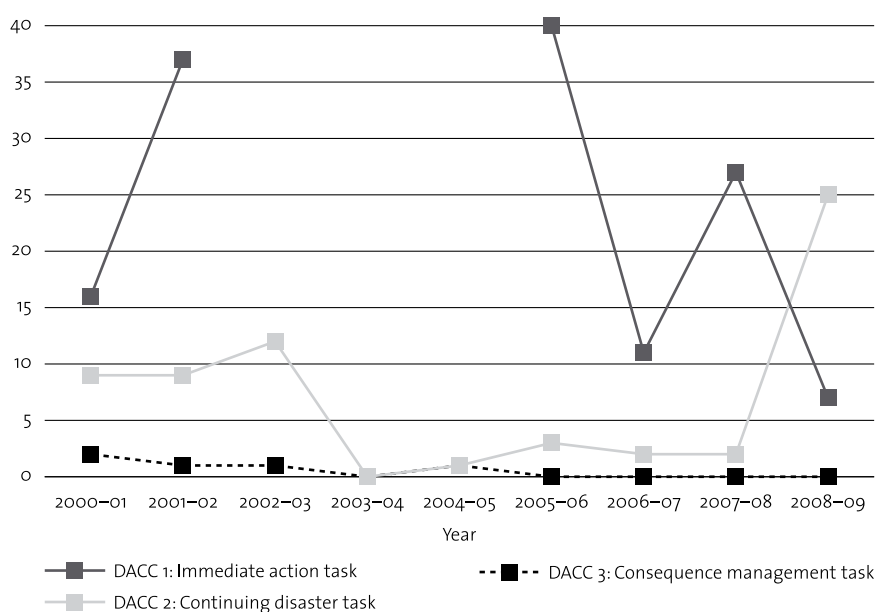
From the late 1960s to 2001, Australia's national emergency management organisation was within Defence. In November 2001, responsibility for EMA was transferred to the Attorney-General's Department. It's now time for Defence to again become a major player in domestic disaster management. The changes advocated in this paper won't result in a significant change to force structure.

However, they will involve modifying existing organisations, policies and procedures, logistics and training. These changes recognise that while the ADF can adapt to unfamiliar tasks, its performance outcomes are far better when it has mission-specific capabilities and operational procedures.

Impacts on force structure arising from these recommendations include adjusting training and education to better prepare ADF personnel to work with the counter-disaster community, and providing more force package options that can be rapidly deployed as part of a civil disaster response.

The Australian people expect Defence's contribution to domestic disasters to be part of the core business of Defence. If these recommendations are implemented and additional funding is provided, enhancing Defence's role in domestic disaster assistance will assist in protecting Australia and won't undermine the ADF's war-fighting role.

Figure 1: Number of times disaster assistance has been provided by Defence 2000–09



Note: Defence were unable to provide data for DACC 1 tasks for 2002–03 to 2004–05.

Source: Department of Defence.

Endnotes

- 1 This paper does not address domestic security assistance to the jurisdictions as defined under the Defence Force Aid to the Civil Authorities (DFACA) arrangements.
- 2 Extract from Department of Defence, Operation VIC FIRE ASSIST webpage, <http://www.defence.gov.au/opEx/global/opvicfire/index.htm>, accessed 10 December 2009.
- 3 Capability is defined as the combination of equipment, personnel, logistics support, training, resources etc., which provide an ability to achieve an operational aim.
- 4 The RRF is based on a rifle company structure with internal logistics and transport assets. It is manned by Army Reserve personnel who have completed as a minimum their Reserve Recruit Training Course and an RRF employment course. The role of RRF is to provide force elements at high readiness in support of Defence Aid to the Civil Community and Defence Force Assistance to Civil Authority operations. Their primary tasks consist of support cordon and search operations, support to search operations (low-risk search), vital asset protection and control of personnel and vehicles.
- 5 Over the next few years, it will be important to observe whether these forces are actually deployed or whether ad hoc groupings continue to be deployed. If the former occurs, it may be appropriate to expand the RRF.
- 6 Attorney-General's Department, 2008, *Australian Government Disaster Response Plan COMDISPLAN*, p. 19.
- 7 These ADF Liaison Officers complete a five-day induction course that includes presentations by EMA and the jurisdictions' emergency and disaster management agencies.
- 8 Department of Defence, 2009, *Defending Australia in the Asia Pacific Century: Force 2030* (White Paper), p. 13.
- 9 Department of Defence, 2009, *Defending Australia in the Asia Pacific Century: Force 2030* (White Paper), p. 89.
- 10 Department of Defence, 2009, *Looking Over The Horizon: Australians Consider Defence*, p. 11.

It appears that the community's expectation that Defence should make contributing to domestic disasters a key task is a new development. This wasn't a finding in the first community consultation report that was produced as part of the 2000 Defence White Paper process; see *Australian Perspectives on Defence: The Report of the Community Consultation Team*. Canberra, Department of Defence 2000.
- 11 Victorian Bushfires Royal Commission, 2009, *Interim Report*, <http://www.royalcommission.vic.gov.au/getdoc/a19c8100-3ae9-43bc-896f-57cbe35ca680/Executive-summary>.
- 12 Australian Government, 2009, *Commonwealth Response to the Victorian Bushfire Royal Commission's Interim Report*, pp. 10–11.
- 13 Preparedness is a measure of how ready and how sustainable the organisation is to undertake operations.
- 14 See Athol Yates and Anthony Bergin, *Hardening Australia: Climate change and national disaster resilience*, ASPI Special Report No. 24, August 2009. http://www.aspi.org.au/publications/publication_details.aspx?ContentID=221&pubtype=10.

- 15 See Andrew Smith and Anthony Bergin, *Australian domestic security: The role of Defence*, ASPI Strategic Insights 31, November 2006. http://www.aspi.org.au/publications/publication_details.aspx?ContentID=104.
- 16 See *All in a day's work: Business and Australian disaster management*, ASPI Task Force Special Report, December 2008. http://www.aspi.org.au/publications/publication_details.aspx?ContentID=194.
- 17 See the national disaster resilience statement from the December 2009 COAG meeting. http://www.coag.gov.au/coag_meeting_outcomes/2009-12-07/index.cfm?CFID=381108&CFTOKEN=23571290#NDA.
- 18 See *Hardening Australia: Climate change and national disaster resilience*, note 14 for an explanation of National Partnership Agreements. http://www.aspi.org.au/publications/publication_details.aspx?ContentID=221&pubtype=10.

Acronyms and abbreviations

ADF	Australian Defence Force
ADFLO	Australian Defence Force Liaison Officer
CIMIC	civil–military co-operation
COAG	Council of Australia Governments
COMDISPLAN	Commonwealth Disaster Response Plan
CSH	community support hubs
DACC	Defence Assistance to the Civil Community

DFACA	Defence Force Aid to the Civil Authorities
DSG	Defence Support Group
EMA	Emergency Management Australia
HQJOC	Headquarters Joint Operations Command
RRF	Reserve Response Forces
JOSS	Joint Operations Support Staff
JTF	Joint Taskforce
JWDTC	Joint Warfare Doctrine and Training Centre
VBRRRA	Victorian Bushfire Reconstruction and Recovery Authority

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Mr Athol Yates is Executive Director, Australian Security Research Centre. He is the author of *Climate Change Adaptation and Emergency Services Handbook* (2009) and *Handbook of Climate Change Adaptation for the Built Environment*, forthcoming this year from British publisher Wiley-Blackwell. He is the principal project consultant for Engineers Australia's Infrastructure Report Cards that audits the state of Australia's economic infrastructure to be published mid-year.

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