Development of Resilient Australia: enhancing the PPRR approach with anticipation, assessment and registration of risks

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ABSTRACT

This paper will draw on current research to suggest that a more resilient way to Safeguard Australia is best served by enhancing, rather than replacing, the PPRR model. The established model of PPRR does not have to be thrown out, but rather extended to include the anticipation and assessment of threats. This would allow for a working document following the UK model of a National Risk Register to be developed. By building on established best practice and a growing sense of the importance of anticipation and assessment of risks as an integrated element of the disaster cycle then the foundations of National Security Statement (2008), the National Disaster Resilience Framework (2008-09) and the Critical Infrastructure Resilience Strategy (2010), along with the forthcoming National Disaster Resilience Strategy (2010), can offer a more integrated model for emergency management and enhance strategic awareness of risks. However, if this is not coordinated with lessons from international best practice then the risk of embedding vulnerability in the new model will remain, to the detriment of an integrated emergency management model for sustainable national resilience.

Introduction

In recent years there has been a great growth in interest on the meaning and use of 'resilience' in the fields of security and emergency management. No definitive definition of resilience currently operates across all areas of expertise. Internationally discussion may emphasise crisis management (see for example Regester & Larkin, 2008; Boin, 2005), integrated emergency management (see for example Coaffee et al, 2009) or disaster risk reduction (see for example Thomalla et al, 2006) to name but a few. All of these terms are focussed on variations of a similar set of concerns. For the purpose of this discussion, which focuses on specifically on the Australian literature and policy context rather than wider international debate, a broad definition of resilience encompasses all actions that mitigate the cycle of a disastrous event. Resilience is as such a metaphor that is used to draw together policy and practice. It is also a framework which includes every action undertaken to ensure a swift return to an equilibrium that is more stable than that existing prior to perturbation.

This paper will summarise some key messages that can be gleaned from the growth of resilience as an influential policy metaphor in an Australian context; it will then offer a perspective on the current state of play in the approaches to Australian emergency management before concluding with a brief comparison with the treatment of the disaster cycle in UK resilience, highlighting the uses of anticipation and assessment for the creation of a National Risk Register. This discussion will particularly emphasise the framework of the 'disaster cycle' as a complete area of management requiring the treatment of the disastrous event holistically. This is not to say that the event itself is a discreet area that must be understood in its totality, in isolation from the management process, but that (a) the management process itself must acknowledge the potential vulnerabilities of the existing system in a clear and concise way, and (b) the implementation of resilience as more than a metaphor but as a strategic framework for policy and practice must thus draw on the disaster cycle stage by stage as an integrated emergency management process. This paper presents the case that PPRR should be extended to include anticipation and assessment in a more clearly articulated way as part of the disaster cycle, and that a more formal articulation of these elements through a National Risk Register is required to enhance the smooth implementation of emerging strategy for increasing Australian national resilience.

Context of the Australian approach

The Australian approach to emergency management has been undergoing a period of intense scrutiny in recent years. Disaster events are becoming more frequent, particularly with regard to natural disaster events and the threat of terrorist attacks. The first National Security Statement in 2008 by the then Prime Minister Kevin Rudd outlined the broad new principles and priorities of national security, alongside five key objectives for (1) maintaining territorial and border integrity of Australia, (2) promoting political sovereignty at home (3) alongside a stable, peaceful and prosperous international environment in the Asia-Pacific region, (4) preserving social cohesion, resilience and economic strength, and (5) protecting Australians and Australian interests around the world.

By establishing the National Disaster Resilience Framework in 2008 a more integrated relationship between national security agencies and those tasked with emergency management continued to open up across the federated states. In 2009 the Council of Australian Governments (COAG) undertook an agreement for a whole-of-nation resilience-based approach to disaster management, establishing a National Emergency Management Committee (NEMC) with a mandate to offer centralised leadership in the development of new national policy frameworks in security and emergency management, to enhance the *shared understanding* of disaster risk, its context, and responsibility for its management. This comprehensive and nationally integrated approach was to result in the creation of a series of supporting strategic documents, including the National Disaster Resilience Strategy (in December 2010), and a clearer articulation of the structural framework for emergency management at local (district), regional (state) and national (federal) levels, for example through the National Disaster Resilience Program (NDRP) and National Partnerships Agreement (NPA).

Alongside this clarification of the strategy and structural framework the increased professionalization of the security industry in Australia over the last decade through initiatives like the Research Network for a Secure Australia (RNSA), the Australian Council of Security Professionals (ACSP) and associated conferences, such as the annual Safeguarding Australia gathering, are continuing to embed best practice in operational networks of expertise. There is now a general acceptance of the incremental shift in understanding security and emergency that seeks to find applied solutions through integrated approaches to the management of risks in a far more holistic appreciation of the disaster cycle – inclusive of actions taken before, during and after any potential event. However there is also a sense that whilst resilience means enhancing business and citizen ability to make informed and responsible decisions at local levels there also needs to be a collaborative effort by government to meet changing public and private expectations of its statutory obligations. This in and of itself creates new requirements. Of particular concern is the need to balance the implementation of local operational requirements and solutions alongside the collaborative implementation of federal policy or quality standards

across the established, and sometimes entrenched, boundaries between agencies, sectors and levels of operation (Wilkins, 2010). Key for this is the step by step process whereby strategic documents set the broad template for change, strong leadership at each level allows national priorities to feed into, and receive feedback from local and regional levels, a an awareness of the national hazard or threat priorities to complement local and regional threats, hazards or risks.

Developing the Australian approach

There are underpinning the holistic view four key approaches to Emergency Management at the heart of the Australian context. These are:

- The Comprehensive approach
- The All Hazards approach
- The All Agencies approach
- The Prepared Community (EMA, 2010)

The *comprehensive approach* is in and of itself the longest standing of these four in Australian practice and itself is made up of four key areas of operation. These are (1) Preparing for Emergencies, (2) Preventing Emergencies, (3) Responding to Emergencies, (4) Recovering from Emergencies, when combined referred to as PPRR. This model is widely used as the benchmark for practice in emergency management in Australia but has recently received some criticism in the treatment of anticipation and assessment. Anticipation and assessment alongside preparation and prevention are *pre-emergency* event aspects of resilience. Anticipation in this sense can be defined broadly as a complementary process to assessment. Anticipation is horizon scanning to identify potential dangers, registering those in a formal typology and recognition of the changing nature of risks that need to be continually identified and re-assessed. Assessment is also an ongoing process, the specific definition being relevant only insofar as it is applied to a given set of contextual criteria. In this case the broad definition of assessment is linked to *risk* assessment on the one hand and *capability* assessment on the other. The former being a discreet process of risk calculation (as opposed to risk identification) and the latter being the assessment of the capability of all actors to mitigate the potential danger. PPRR is somewhat limited in its understanding and inclusion of the early stages of threat identification of dangers in formal register that draws out of anticipation as horizon scanning (Rogers, 2009). Risk assessment and the anticipation of threats can be seen in PPRR to come as a precursor of mitigation, leaving PPRR as able only to 'categorise available emergency treatments rather than describe a continuum or cycle of events' (Crondstedt, 2010: 11).

The *all-hazards approach* can be seen as one way of moving past this problem, and is also gaining in weight in policy and practitioner circles, as emphasised in the national security statement:

> *'The Government has adopted an 'all-hazards' approach to national security which brings together*

> *the policy, capability and response areas for*
> *natural and man-made disasters.' (Rudd, 2008)*

This approach helps to dispel to some extent that simplistic notion of all-hazards as being prepared for any and all potential events, but in a more meaningful sense suggests that plans across the disaster cycle should recognise the commonalities in situational response mechanisms, and that these commonalities across all emergencies can be translated into operational standards and best-practice used across all-hazards (see for example Alexander, 2005). The Australian approach to all-hazards has widened the Natural Disaster Relief and Recovery Arrangements (NDRRA) to incorporate both terrorist events and natural disasters within the same funding support framework. However it has also been noted that there is a lack of willingness amongst many of the core agencies, at the policy level, to incorporate the public and wider society in this approach which fundamentally undermines the objectives of increasing 'resilience' (Templeman and Bergin, 2008). All-hazards approaches seek to bring together all areas of understanding and expertise in multi-agency collaborative structures, but at the heart of all-hazards is the need for a clear identification and strong assessment of risk, threat and hazard. Once strategy has been developed and structure reviewed the importance of a coherent working document that offers a formal typology, taxonomy or register of the salient threats are cannot be understated. Without clear and consistent understanding and review of registered risk, threats and hazards it is difficult to implement consistent and interoperable standards across federal, regional, local government and public and private partners. This is a key challenge to rolling out the all-hazards approach to national resilience in Australia, which currently lacks a national, regional or local register within the wider treatment of risk and the disaster cycle.

A register of risks would greatly enhance the consistency of information across strategic partnerships which are more and more important to increasingly resilient practices. There have been moves towards more collaboration between State and Territory emergency management organisations and key Federal Government agencies, but also local governments, community based organisations, volunteers, academia and researchers, businesses, and industry bodies. However the extent and form of these engagements is highly varied and strategic planning tends to be the focus of collaborative arrangements between government (AG department), lead emergency agencies (AFP & EMA) and emergency management stakeholders (Clarke & Rowlands, 2009), with strategic partnerships between civil agencies, emergency services, NGO's and private enterprise a focus for state and local networks. A common working document for registration of risks at national level can also provide a template for the regional and local identification of which risks, hazards or threats may be locally specific priorities. This approach may in fact help to build on existing capabilities in local areas and provide common best practice from those on the front line in each community:

'A fundamental shift is required... in moving from a 'need-to-know' national security culture to a 'need-to-share' resilience culture to get the community fully engaged in understanding what our actual state of preparedness is and asking the community to be better prepared.' (Templeman & Bergin, 2009: 6)

As Templeman and Bergin here highlight, these implementation plans must to engage the general public as well as the local emergency planning and relief agencies in those local communities. The role of partnership between agencies is a central one for the development of successfully integrated emergency management arrangements, and is one of differing levels of success. In the Australian context there is a much more fully developed sense of the importance of volunteer organisations at a much earlier point than in the development of resilience in the UK. This is particularly telling through the vital role of the State Emergency Services (SES) in disaster response and recovery, despite tensions between expectations and obligations between government and volunteers (Fahey, 2003) the value of these services remains high (McLennan, 2008) and offers lessons to be learned for many other countries in engaging with the community. These tensions are present around the world, and the role of the public is often not one central to the efficient development of structures and policy for emergency management and operational security as a form of resilience (Coaffee, Murakami-Wood & Rogers, 2009). This is a condition where in many cases public participation and especially public education as a part of the emergency management are often weaker elements of the wider set of activities (Paton & Johnston, 2001). There is a tendency in the development of integrated emergency management as a form of embedded resilience to focus first and foremost on critical infrastructural and operation goals, at the expense of wider community resilience, public education and public participation in these practices. Whilst in the throes of wide-spread structural reform and culture change in professional circles, or the required development and implementation of controlled change through policy and embedding the requirements of new standards for best-practice such conditions are to be expected. However as the structures begin to take on more embedded operational efficiency as they are rolled-out then the operational remit of integrated emergency management requires a consolidated effort to engage with, educate and involve the public. Such endeavours as the Australian Safer Communities Awards are a start to proactive engagement but a wider sense of participation as well as a more passive model of public information will enhance the broader impact of resilience engagement in the longer term.

The overview of national resilience is showing great forward movement with regard to Safeguarding Australia, and the national disaster resilience strategy, scheduled for release in December 2010 is expected to offer a strategic umbrella for many of the ongoing work streams in enhancing national security resilience policy and capability in for building better and more integrated emergency management. An over-arching strategy for enhancing the resilient 'ways of doing' in process and

best-practice of actors and agencies also allows the characteristics and traits of resilience organisations to become more embedded in day to day working, but many challenges remain in finding consistent implementation of this emergent knowledge across all levels of operation.

Strengthening what we have: towards a Risk Register

It is clear that there is an increasing agreement in the field, despite the diversity of definitions, that the best policy metaphor for strategic planning in national security and emergency management is one of resilience. Alongside this there is a much deeper understanding that the PPRR approach has become less useful in the framework of disaster resilience practice than it has been in the past (Gabriel, 2003). Nonetheless it remains the framework with which many are familiar, it remains a central part of the visible policy and it is well established as a standard for a more reactive form of Emergency Management. In reassessing PPRR for alignment with the more disaster resilience-based approach we must be careful not to 'throw the baby out with the bath water' when advocating change. PPRR is overly focussed on reactive considerations, this is now widely accepted. It is also accepted that assessing risk needs to be formally acknowledged as a more significant part of the resilient approach to the disaster cycle. There are a number of areas I would like to bring into this discussion but cannot here for the sake of space and offering a focussed discussion. For example, a deeper examination of how various the existing disaster response strategies in Australia bridge the different levels of community, town, region and state would help to demonstrate how the metaphor of resilience is being practically drawn out in practice.[1] An international focus could also give a different perspective to the Australian context offered here. However the goal of this paper has been to (a) briefly summarise some of the challenges being addressed by the policy metaphor of resilience, (b) highlight that the front end or pre-emergency elements of this process need to be formally acknowledged (c) suggest that a formal register of risks can help in implementing resilience strategy in practice. To this end I advocate proactive inclusion of both the anticipation of hazards and threats alongside comprehensive risk assessments, which can be used to extend the existing strategic framework rather than a wholesale replacement of the PPRR model. Finally a formal typology of risks can be registered and implemented at national, regional and local levels. This not only provides a common frame of reference for all partners but can help to identify threats, capabilities and potential vulnerabilities in the existing system. This is thus an approach that is building proactive anticipation and risk assessment but also strengthening the adaptive capacity that is built into a holistic approach to resilience.

Conclusion: extending the case for AA-PP-RR

A good way to underline this is thorough comparison with a example of the UK Resilience strategy. This offers a good example of how the pre-emergency part of the process can play a role in strengthening resilience overall. is substantially present in the six stages of Integrated Emergency Management (IEM):

> 'Integrated emergency management (IEM) comprises six related activities: **anticipation**, **assessment**, prevention, preparation, response and recovery' (UK Resilience, 2010, emphasis added)

One can certainly argue that where this has been most useful is through the uses of horizon scanning strategy to create a broad typology of potential risks that informed the development of the UK National Risk Register of 2008, reviewed in 2010 (Cabinet Office, 2010), used to focus local expertise, enhance discussion in the local and regional resilience forums and enhance the local risk registers on specific priorities, thus enhancing the implementation of the wider resilience framework across diverse public and private partners. AA-PP-RR widens the resilient and integrated approach to the disaster cycle. Anticipation brings the role of 'horizon scanning' into a central focus as a key part of identifying potential threats and formalising this in a risk register. The creation of a typology of risks at national, regional and local levels improves (a) the identification of vulnerabilities, (b) the targeting of risk assessment resources, (c) enhances the implementation of resilience as more than a metaphor but as a meaningful strategy and a formative framework for best practice.

Once threats on the horizon have been identified and formally registered they can be drawn through the accredited risk assessment procedures and fed further into preparation and prevention through proactive activity along the existing structures of PPRR. What is most promising in many ways is, in the first instance, that the majority of these elements are already in place in the Australian context or are at least implicit in the approaches discussed here, and in the second, the broader strategic level documents that are increasingly steering the direction of development are moving into a more holistic appreciation of the disaster cycle as a integrated system with need of integrated collaborative and adaptive structures at all levels. The problem with the current approach as seen in this review of standing policy is in a lack of clearly articulated pre-emptive and proactive procedure within the long-standing PPRR model. This implies a lack of adaptive capacity in the processes underpinning the Australian strategic framework for mitigating the disaster cycle in a holistic way. If this is the case then resilience remains only a metaphor and doesn't carry the weight of a strategic framework for collaboration and building more resilience capabilities. It should not be taken from this discussion that anticipation and assessment are separate from resilience, as it has been suggested drawing a stark distinction between these does not

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1 This research is currently being conducted at Macquarie university with a focus on New South Wales and the Sydney local emergency districts. Future research collaborations on these themes seek to roll out such research at a state and national level.

further the goal of improving our policy or practice in this area (Hutter, 2010). Anticipation and assessment are a part of the treatment of a disaster cycle as a whole, formal acknowledgement of their importance as a part of the whole can only help to improve the focus of change in this area into the future.

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(Endnote)

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