



Australian Government

Attorney-General's Department

National Security Knowledge and Lessons Management Workshop Report

Held at the

Australian Emergency Management Institute

11 - 13 June 2013



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Executive Summary

The National Security Knowledge and Lessons Management workshop was a three-day workshop to identify lessons and themes emerging from operations during 2011 – 2013 and the opportunities for enhanced knowledge and lessons management across the sector. The workshop was divided into two parts; firstly, lessons identified from experiences in an operational context and, secondly, opportunities to enhance the management of knowledge and lessons.

Lessons management processes were used to capture observations then analyse and theme the observations to produce insights. The key insights are summarised below. The detail of the observations and themes used to develop the insights can be found in the appendices to this report.

Insights

1. Disaster events can exceed the imagination of controllers
2. Interagency and interpersonal relationships are essential for effective coordination
3. National arrangements facilitate interstate deployment of resources
4. The importance of multi-agency/multi-jurisdictional situational awareness
5. The need to manage social media
6. Variations exist between Incident management systems
7. The importance of managing community engagement and expectations
8. Intelligence support may assist emergency management
9. Personnel Management issues remain a challenge

The way forward

The outcomes from the workshop will be used by the Attorney-General's Department to consider needs and possible approaches to national knowledge and lessons.

Background

One of the priority outcomes of the National Strategy for Disaster Resilience is that lessons learned from local, national, and international sources are accessible and available for use by governments, organisations and communities. The Strategy highlights that sharing knowledge, including lessons learned from previous events, is important in promoting innovation and best practice. However, simply debriefing and identifying lessons is not enough. Adapting our systems and approaches requires constant evaluation of capabilities, and the implementation and sharing of findings across the community.

The Attorney-General's Department conducted the first National Security Knowledge and Lessons Management Workshop at the Australian Emergency Management Institute in November 2011 in response to the series of unprecedented disasters that had occurred both in Australia and internationally, in the preceding two years. This Workshop highlighted the importance of learning from experience and sharing the lessons identified.

Evaluation and lessons management are key areas of focus for building resilient communities. In October 2012 the ANZEMC agreed that the Emergency Management sector's ability to manage and share knowledge from past experiences is important to better adapt and respond to current and future events. While we all recognise the importance of evaluating and capturing lessons from both exercises and operational activities, the challenge remains to ensure we are able to effectively identify and share lessons/insights which have broader significance and could lead to policy changes to enhance prevention, preparedness, response and recovery mechanisms.

Since the 2011 Workshop, the Attorney-General's Department has been leading a project to develop a consistent national approach to the management of lessons. There are two key aspects of this work. The first is developing the capability and processes to manage lessons and the second is actually identifying lessons, making sense of them and using them to inform decision making and change.

In relation to capability development the Attorney-General's Department has been working on the following:

- Exercise evaluation course (funded through ANZCTC)
- Lessons Management Handbook (Developed by the National Security Knowledge and Lessons Management Workgroup and partly funded through the National Emergency Management Projects)

- Evaluation of Operations Course (partly funded through NEMP and to be delivered by AEMI in March 2014)
- Developing Lessons Management training with the assistance of the Australian Defence Force

In relation to identifying lessons the Attorney-General's Department has been instrumental in supporting the formation of the:

- National Security Knowledge and Lessons Management Workshops at AEMI in November 2011 and June 2013
- The National Security Knowledge and Lessons Management Workgroup (the Workgroup) conducting two coding workshops with the assistance of the Centre for Army Lessons to develop and trial processes to collate and analyse lessons and produce insights.

Introduction

The 2013 National Security Knowledge and Lessons Management workshop was a three-day workshop to consider and share how organisations deal with knowledge and lessons management and to develop a clearer understanding of the barriers to and opportunities for knowledge management across the emergency management sector.

The workshop included presentations identifying lessons that had come out of diverse emergency operations across Australia in 2011-2013. This included operational experiences from the Queensland floods, the Victorian tornado, and South Australian fires. The workshop program can be found at **Appendix A** of this report.

Aim

The workshop aimed to collate lessons identified from recent operations and inform the development of a national approach to the management of national security knowledge and lessons across all hazards.

Objectives

The objectives for the workshop were to:

- Identify and confirm national themes
- Identify lessons from operations since November 2011
- Establish an ongoing mechanism to share lessons and identify themes on an annual basis
- Maintain and enhance a national lessons management network
- Promote the outputs of a recent NEMP, the draft Lessons Management Handbook and the accredited Evaluation of Operations training course
- Explore other tools and techniques to enhance lessons management
- Identify requirements and options to develop a consistent approach to lessons analysis to inform strategic decision making and priority setting at all levels of government.

Participants

Presenters and participants were drawn from a broad spectrum of emergency management agencies across Australia.

A list of organisations represented at the workshop can be found at **Appendix B**.

Location

The workshop was held at the Australian Emergency Management Institute (AEMI) at Mt Macedon, Victoria. For over fifty years the institute has had a significant role in building the capacity and professionalism of the emergency management sector in Australia. The Institute continues to focus on improving knowledge and development in the emergency management sector. It supports broader national security capability development efforts to build community resilience to disaster.

Workshop structure

The workshop was divided into two parts. Part One of the workshop (11 – 12 June 2013) looked at agencies sharing the lessons identified from recent operations. There was a focus on case studies and experiences of recent emergencies and the lessons identified from response, coordination, investigation and recovery activities at the national, jurisdictional, agency and community level. It was an opportunity to share knowledge and compare information from experiences in an operational context.

Part Two of the workshop (the 13 June 2013) looked at how we might manage knowledge and lessons more effectively in future. Part Two involved participant's first working in groups to identify lessons that had been prevalent in recent operations. The outcomes of this discussion form the basis of identifying national recurring themes. Participants also considered what the next steps are in each sector for lessons and knowledge management.

Part One - Lessons Identified and Insights

The key objectives for Part One of the workshop were to:

- Identify lessons from operations since 2011 and
- Identify and confirm recurring national themes/trends
- Analyse and theme lessons identified to produce insights.

During Workgroup activity 1 participants reviewed the lessons identified and combined them into themes. A summary of the lessons identified from individual presentations can be found at **Appendix C**. The table at **Appendix D** summarises the themes identified. Insights were developed for each of the key themes and these are listed below.

1.1 Disaster events can exceed the imagination of controllers

The consequences of underestimating the potential of evolving emergency situations can be catastrophic. Forward planning can be limited by the expertise and collective experience of the planners. The ability to utilise imagination to look beyond what has happened during past events and plan for catastrophic events beyond those seen or experienced is essential. Things that have never happened before happen all the time. Human factors research identifies that individuals under stress may revert to behaviours and responses learned from previous situations and underestimate the severity of the emerging hazard. There is a need to enhance realistic worst case scenario planning and perception.

1.2 Relationships are essential for effective coordination

Interagency and interpersonal relationships are fundamental to facilitate cooperation, collaboration and effective information flow during an event. Interagency relationships and cooperation can be built and strengthened through deploying liaison officers between agencies and conducting joint training and exercises. Additionally, sharing information about organisational culture and hierarchies may aid in breaking down barriers between agencies.

1.3 National arrangements facilitate interstate deployment of resources

Consistent national arrangements can facilitate the request for and deployment of, interstate resources. Once deployed, clarity on responsibilities, authorities and powers can enhance the effective operation of resources deployed to another jurisdiction and help avoid potential personnel and legal issues.

National arrangements for Australian Defence Force (ADF) assistance are in place but the following observations were made;

- ADF response could benefit from revised request processes and conditions based triggers linked to major disaster event characteristics that enable preparations to begin pre-request.

There can be an overlap in ADF assistance between the response and recovery phases. During this “relief” phase clearly defined entry and exit triggers and conditions for the ADF can assist with a smooth transition back to civilian authorities and the private sector.

1.4 Importance of multi-agency situational awareness

A common operating picture within and across agencies and jurisdictions is essential to support effective emergency management. Information management and information sharing remain challenging. Expectations for up to date information from senior officials, the media and the public continue to increase and present challenges, including time to validate and analyse information.

1.5 Need to manage social media

Social media was identified as an issue by numerous speakers. The views of individuals and agencies on the importance and management of social media differed. Whilst there was no agreement on the use of social media or its place in emergency management there is clearly a need for agencies to have a position on how it will be managed. Views on the use, appropriateness, effectiveness and risk of social media differed in the following three key areas;

- providing information and warnings to the public
- receiving requests for assistance from the public
- intelligence gathering and data mining.

1.6 Are the public heeding public information?

The importance of accurate and timely public information is well understood by emergency management agencies and this has been reinforced by lessons identified from disasters over the last decade. Significant effort has been invested to improve the information provided to the public before, during and after events. Indications are that emergency service agencies believe major improvements have been achieved in this area. Emergency management agencies need to continue to enhance their understanding of the type of information communities want and the preferred media for receiving it.

1.7 Variations between Incident management systems

Consistent, or at least fully interoperable, incident management systems, technology and training contribute to effective multi agency/multi jurisdiction response and shared situational awareness. Variations of incident management systems and training, incompatible technology and differing interpretations between agencies, sometimes between regions of an agency or even between shifts and individual controllers, continue to be observed.

Another specific issue identified was the accountability of incident managers and the need to capture a formal record of decision making.

1.8 Managing community engagement and expectations

The need to find a balance between the provision of assistance to the community and empowering the community to build their resilience remains. Community engagement and expectation management are key to success. Building and maintaining trust will come from communicating, educating and keeping the community engaged before, during and after a crisis.

1.9 Intelligence support to emergency management

It has been identified that historically there has been no dedicated intelligence collection and analysis function within the Incident Management Team (IMT) structure. Imbedding an intelligence capability within the IMT would enable information from various sources including social media, media and situational reports to be analysed to inform the planning process. Some of these problems may be rectified by the inclusion of a dedicated intelligence function in the new version of the Australasian Inter-Service Incident Management System (AIIMS). Such a function already exists within the Incident Command and Control System (ICCS).

1.10 Personnel management

Managing personnel issues and complying with workplace health and safety policies and legislation during emergencies remains a challenge. Fatigue management was identified by a number of presenters as a major challenge particularly in managing volunteers that may have worked a full day in their normal job before deploying to an emergency.

Recurring national themes

During Workgroup Activity Two, participants considered the lessons and insights presented to identify recurring issues. These were compared against the recurring issues identified from the 2011 Workshop to produce a summary of the national recurring themes. A map of the National

Themes can be found at **Appendix E**. The major addition relates to People and includes Human Factors, Culture and Relationships.

It was highlighted that a number of the themes identified are likely to continue to occur as many are “wicked problems”¹ and are unlikely to be solved. For example issues such as multi-agency communication, coordination and interoperability in times of crisis will remain challenging and during a catastrophe will never be perfect, particularly in hindsight. Given this, the appropriate focus for the sector is to mitigate the associated risks attached to the recurring issues rather than seeking to solve them.

One of the key challenges will be to change the perception that all issues identified from operations and exercises are lessons and can be learned. Whilst there are some lessons that can be identified and learned these are mostly at the tactical and operational level. The wicked problems that we face at the strategic, multi-jurisdictional and multi-agency level are never likely to be “learned” but can be managed more effectively.

The National Themes map at **Appendix E** is an initial attempt to identify the “wicked problems”. It also aims to provide a consistent, high level schema for use by lessons managers when theming observations/lessons to support multi-agency analysis.

¹ A wicked problem is one for which each attempt to create a solution changes the understanding of the problem. Wicked problems cannot be solved in a traditional linear fashion, because the problem definition evolves as new possible solutions are considered and/or implemented. The term was originally coined by Horst Rittel. H. W. J. Rittel and M. M. Webber, ‘Dilemmas in a General Theory of Planning’, *Policy Sciences*, Vol. 4, No. 2, June 1973,

Part Two – Managing Lessons and Knowledge

The key objectives for Part Two of the workshop were to;

- Maintain and enhance the national lessons management capability and network
- Explore other tools and techniques to enhance national lessons management
- Identify requirements and options to develop consistent approaches to lessons management and analysis to inform strategic decision making and priority setting at all levels of government
- Identify ongoing mechanisms to share lessons and identify themes on an annual basis.

Presentations focused on progress in lessons management capability since the 2011 workshop. This included sharing strategies, processes, methodologies and tools developed, to build lessons management capabilities. Several participants reported on lessons processes used for operations, exercises, training and evaluations. Others discussed how their agencies had developed and utilised knowledge management approaches, systems logic maps, performance monitoring and assessment frameworks, and capability self-assessment tools, to collect, analyse and manage knowledge and lessons.

2.1 Knowledge and lessons management themes

The workshop highlighted a number of significant themes in relation to lessons and knowledge management. Participants developed suggestions for the way forward.

2.1.1 Lessons capability

Lessons capability emerged as a predominate theme throughout workshop presentations. Legal, organisational and bureaucratic barriers were identified as a common impediment to developing a lessons capability.

Barriers to implementing a lessons capability at an organisational level include:

- Organisational culture and corporate will
- Resistance to change
- Silo thinking
- Lack of trust
- Blame culture.

It was identified that these barriers hampered lessons being shared. As a result of these barriers it was often difficult to achieve buy-in at senior levels and acquire the resources required to implement necessary changes.

The participants' presentations further identified that information sharing and collaborative learning were hindered by:

- Incompatible operational systems
- Incompatible information technology
- Differences in knowledge management systems
- Organisational and legal barriers.

This results in agencies having a limited ability to exchange knowledge and lessons.

The participants suggested the following to overcome these barriers and ensure adequate prioritisation, funding and resourcing are provided to build lessons capability and drive change through all levels of an organisation.

- Get agency buy-in at the highest levels
- Identify champions who are committed to improving lessons capability within their organisations
- Encourage cross-agency and multi-jurisdictional training and exercising
- Undertaking real-time analysis during operations and integrating lessons into the immediate, short and medium learning loops
- Ongoing performance monitoring, regular evaluations of programs and operations, research and education, to support continuous learning and capability development
- Compatible systems to facilitate the collection, analysis and sharing of information and lessons across the sector in order to support operational decision making and priority setting at state and national levels.

2.1.2 Learning culture

Presentations highlighted the need for a culture of learning to be embedded within organisations and to be supported at the highest level. Similarly, there are barriers inhibiting the development of lessons capability. These were identified as the leadership style of the sector, a lack of corporate will to support and implement change, a reluctance to share information and lessons due to agency sensitivities and a blame culture.

If organisations are to become true learning organisations there needs to be a conscious shift away from a culture of blame. There was general consensus that this can only be achieved by gaining the commitment and support of senior leadership at state and national levels in order to drive change from the highest levels. Integral to achieving this cultural shift is the need to focus on learning from the past rather than focusing on accountability. Champions are also required across all levels of state and national organisations in order to support and proactively seek change.

2.1.3 Knowledge management

Effective management and mobilisation of knowledge are essential to share lessons and support learning. A key challenge identified in this area is the capture and retention of operational knowledge. Presentations covered a range of strategies, processes, methodologies and tools employed by agencies to manage and share knowledge and lessons.

2.2 Next steps

The participants worked in syndicate groups to consider the “next steps” for lessons management capability development and the actions required at the agency, jurisdictional, and national levels, as well as research and educational needs. A summary of these findings is at **Appendix F**.

Conclusion

The outcomes from the workshop will be used by the Attorney-General’s Department to consider needs and possible approaches to national knowledge and lessons management.

Participants agreed that the management of knowledge and lessons across all-hazards and across the prevention, preparedness, response and recovery spectrum was both desirable and a priority. Further, participants identified that the development of enhanced and consistent approaches to the evaluation of, and learning from, operations was a high priority as the next disaster season approaches. It was agreed that it was important to maintain the momentum developed by the workshop.

The themes and trends identified at the workshop will assist in the identification of capability gaps and priorities and assist to inform the future allocation of resources.

Given the significant jurisdictional commitment to this workshop, participants supported an annual lessons and knowledge management workshop being held to ensure that the outcomes and key focus areas identified from this workshop are progressed.

Appendices

Appendix A – Workshop program

TIME	TOPIC	PRESENTER
TUESDAY, JUNE 11 2013		
1020	Welcome and Introduction	Carolyn Thompson Director, Education, Research and Training – AEMI
Session One		
1030	KEYNOTE ADDRESS: The National Environment/Lessons from the national perspective	Mark Crossweller – Director General, Emergency Management Australia
1130	Telstra – Warrnambool exchange	David Piltz - Telstra
Session Two		
1330	SA Fires	Mark Thomason – SA Country Fire Service
1400	Queensland floods	Mark Ryan – Emergency Management Queensland
1430	NSW Fires	Chief Superintendent Steve Yorke – NSW Rural Fire Service
Session Three		
1530	NSW Floods	Mark Morrow – NSW SES
1600	Victoria tornado	Leanne Simpson – Victoria SES
WEDNESDAY, June 12 2013		
Session Four		
0830	Victoria Fires	Tony Murphy – Victoria Office of the Fire Services Commissioner
0915	Victoria floods	Bob Flett – Victoria Office of the Emergency Services Commissioner
Session Five		
1030	Defence assistance	Mark Anderson - ADF
1100	Activity 1. Identifying emerging themes	Heather Crawley - AEMI
Session Six		
1330	Lessons Management – Where we are	Catherine Jones – Attorney General's Department
1400	Evaluation of recovery	Dr Lisa Gibbs – Melbourne University
1445	Operational Analysis	Jason Cromarty – DSTO
Session Seven		
1530	Activity 2. Review of national themes and an international comparison	Mark Cuthbert - AGD
THURSDAY, June 13 2013		
Session Eight		
0830	Emergency Management Performance Standards	Anna Georgalis – Victoria Office of the Emergency Services Commissioner
0900	Lessons management education	Geoff Cooper – Centre for Army Lessons
0930	Unwritten – Capturing knowledge beyond reports	Katrina Beard – AEMI
Session Nine		
1030	Queensland update	Mark Ryan – Emergency Management Queensland
1100	Dept of Transport Exercise Evaluation	Rachael McIntosh – Vic Dept of Transport
1130	Real time evaluation of operations	Paul Margetts - Vicpol
1200	NSW SES update	Heather Stuart – New South Wales SES
1215	Knowledge Hub update	John Haydock - AEMI
Session Ten		
1330	Activity 3. Next steps	Mark Cuthbert/Cameron Scott - AGD
1515	Proposed handbook/accredited training	Mark Cuthbert/Cameron Scott
1545	Future Directions and Close	Mark Cuthbert/Cameron Scott

Appendix B – List of participants

Mark Anderson	Department of Defence – Headquarters Joint Operations Command	Deputy Director Lessons
Amanda Biffin	Attorney-General's Department – National Security Capability Division	Graduate
Anthony Callan	Department of Agriculture, Fisheries & Forestry	Director Biosecurity
Geoffrey Cooper	Department of Defence – Centre for Army Lessons	Senior Analyst
Jason Cromarty	Department of Defence - DSTO	Analyst
Mark Crosweller	Attorney-General's Department – Emergency Management Australia	Director General
Mark Cuthbert	Attorney-General's Department - National Security Capability Division	Assistant Director
Craig Davies	Fire & Rescue New South Wales	Manager - Operations
Martin Embery	Country Fire Authority	Manager - Planning
Robert Flett	Office of the Emergency Services Commissioner	Manager
Jennifer Finlay	New South Wales State Emergency Service	Research Analyst
William Gale	Catholicare	Manager
Anna Georgalis	Office of the Emergency Services Commissioner	Deputy Commissioner
Lisa Gibbs	University of Melbourne	Associate Director
Andrea Heath	State Emergency Service Tasmania	Assistant Director
Julia Hovenden	Attorney-General's Department – National Security Resilience Policy	Policy Advisor
Michael Howard	Attorney-General's Department - National Security Capability Division	Director
Christine Jeacle	Attorney-General's Department – Emergency Management Australia	Director
Catherine Jones	Attorney-General's Department - National Security Capability Division	Assistant Secretary
Monique Kardos	Department of Defence - DSTO	Senior Scientist
Roger Lye	Attorney-General's Department – Emergency Management Australia	Assistant Director
Paul Margetts	Victoria Police	Inspector
Ryan McCahon	Australian Customs and Border Protection Service	Policy Advisor
Rachael McIntosh	Department of Transport Victoria	Principle Advisor
Glen Mole	Fire & Rescue New South Wales	Data Officer
Mark Morrow	New South Wales State Emergency Service	Assistant Commissioner
Tony Murphy	Victoria Fire Service Commissioner	Fire Services Liaison Officer
Grant Nicholson	Telstra Corporation Limited	Director
David Piltz	Telstra Corporation Limited	Director
Dee Sayer	Attorney-General's Department - National Security Capability Division	Capability Development Officer
Mark Ryan	Emergency Management Queensland	Program Manager
Cameron Scott	Attorney-General's Department - National Security Capability Division	Assistant Director
Mark Searcy	South Australia Metropolitan Fire Service	District Officer
Leanne Simpson	Victoria State Emergency Services	Manager Operations
Diana Smith	Department of Prime Minister and Cabinet	Advisor
Robert Stevenson	South Australia State Emergency Service	Planning Officer
Heather Stuart	New South Wales State Emergency Service	Manager
Carole Tan	SelectRight	Scribe
Mark Thomason	South Australia Country Fire Service	Operational Officer
Steven Yorke	New South Wales Rural Fire Service	Group Manager
Rodney Young	Telstra Corporation Limited	Emergency Response Manager

Appendix C – Lessons identified

Lessons identified from presentations at the 2013 National Security Knowledge and Lessons Management Workshop:

Mark Thomason South Australian Country Fire Services – Insights from 2011:

- Personnel for level 2 and 3 incident management teams must be accredited
- Incident Management Team (IMT) structure should meet the needs of the incident
- Logistics functions need to be clearly clarified between IMT, Region and State
- Doctrine needs to meet end user requirements
- Forward planning needs to be part of incident management
- Fatigue management needs to be considered as part of every incident
- Mapping products must be of an appropriate scale and contain relevant information
- Role of Regional staff should not conflict with other roles within IMT
- Contingency Plans must be circulated and regularly exercised.

Mark Ryan Emergency Management Queensland – Lessons Identified January 2012 – June 2013:

- Improve State wide daily teleconference length
- Improve ad-hoc resupply arrangements
- Improve operational management
- Improve linking State and regional exercises to test the ‘organisation’
- Improve aviation structure and roles and responsibilities
- Improve common information technology platform
- Challenges included ambiguous legislation, culture, human factors and capacity.

Leanne Simpson Victoria State Emergency Service – Tornado Outbreak March 2013:

- There is a need for a better ability to forewarn communities – speed and unpredictability of weather systems
- TORNADOS are not an independent warning rather they are embedded in a severe thunderstorm warning, if identified
- There were challenges in sharing information between Bureau of Meteorology(BoM) NSW and Vic
- Understanding the initial extent of damage was challenged as the public would call in once to log multiple jobs
- Inability to render repairs on a number of homes as owners were not in attendance
- Different control agencies across the border

- Difficulties in access to NSW liaison staff
- Issues with solar panels and asbestos
- Crews were unfamiliar with communication alternatives when the Telstra Tower in Bundalong failed.

Tony Murphy Fire Services Commissioner Victoria – Lessons Learnt

- Interstate arrangements need to be standardised
- FDR system needs further research and be finalised
- Warnings need to be more customised and useful to locals/community
- Mass evacuation continues to be the greatest concern for incident controllers
- Local level planning importance of community ownership
- Traffic management points causing the isolation of communities.

Mark Morrow New South Wales State Emergency Service – Operational Lessons Learned 2011 – 2013:

Lessons learned in relation to:

- Community engagement & early warnings
- Pre-deployment of resources to impacted areas
- Improved internal communication processes
- Raised NSW SES media profile
- Liaison officers (LO's) in regional IMTs
- Developing Public Information capability
- Use of social media
- Having pre-prepared & standardised products and processes
- Keeping government informed
- Operational decision making
- Joint agency operations & resource sharing
- Actioning After Action Review (AAR) items.

Improvements required in:

- Information versus response
- Use of emergency alert
- Standardisation of and training for IMT roles
- Information recording and access
- Fatigue management

- Operations vs. Business as usual
- Tornado Response
- Sustaining long-term responses
- Operational management systems.

Mark Crossweller Director General Emergency Management Australia

Canberra fires of 2003 highlighted:

- The lack of understanding of what phenomena this fire could produce and impact it could have on the community
- The divisions between State/Territory Jurisdictions and between emergency services about how to deal with the emerging problem
- The potential limitations of the effectiveness of our conventional capabilities
- Insufficient situational awareness of the unfolding event
- Insufficient appreciation of and capability to issue public messages and warnings
- A propensity towards anger and blame.

Victorian Bushfires of 2009 highlighted:

- Insufficient respect for the true potential of the nature of the hazard
- Insufficient unity between emergency services
- The imitations of the effectiveness of our conventional capabilities
- Insufficient situational awareness of the unfolding event
- Insufficient ability to adequately warn the public and issue safety messages in a timely and accurate manner
- Limitations in being able to properly read the warning signs, apply our collective imaginations and act accordingly (old thinking and old behaviours to a new problem)
- Our propensity to move straight to a blame environment

2010 – 2011 Queensland floods highlighted:

- Increasing respect for the true potential of the nature of the hazard
- Increasing unity between emergency services, administrative and executive levels of governments and media
- An increasing understanding of the extreme limitation of the effectiveness of our conventional capabilities
- Insufficient but improving situational awareness of the unfolding event

- Improving ability to adequately warn the public and issue safety messages in a timely and accurate manner
- Our propensity to move straight to a blame environment.

Mark Anderson Australian Defence Force (ADF), Headquarters Joint Operations Command – Lessons Analysis

Lessons identified from recent operations:

- There are increased community and government expectations of a Defence role in future domestic crises
- Managing expectations and gaining situational awareness is critical so that ADF assets are focused on the highest priority
- Situational awareness, in the case of a need for response escalation, is reduced in some cases due to the absence of formal notification process for Defence Aid to Civil Community (DACC)
- ADF response planning could benefit from conditions-based triggers linked to major disaster event characteristics in order to meet community expectations
- The relief period is not adequately defined in DACC Policy
- The definitions of emergency and administrative appear to be interpreted differently at Commonwealth and State level
- ADF DACC response times are adversely affected by a convoluted request process.
- The use of reservists could be more effective if the available legislated employment protection for reservists is applied during DACC operations
- The Notice to Move for reservists can be reduced with early situational awareness and identification of the capability requirement.

Steve Yorke, New South Wales Rural Fire Service, Chief Superintendent

Lessons Learnt 2012 – 2013 Fire Season:

Challenges

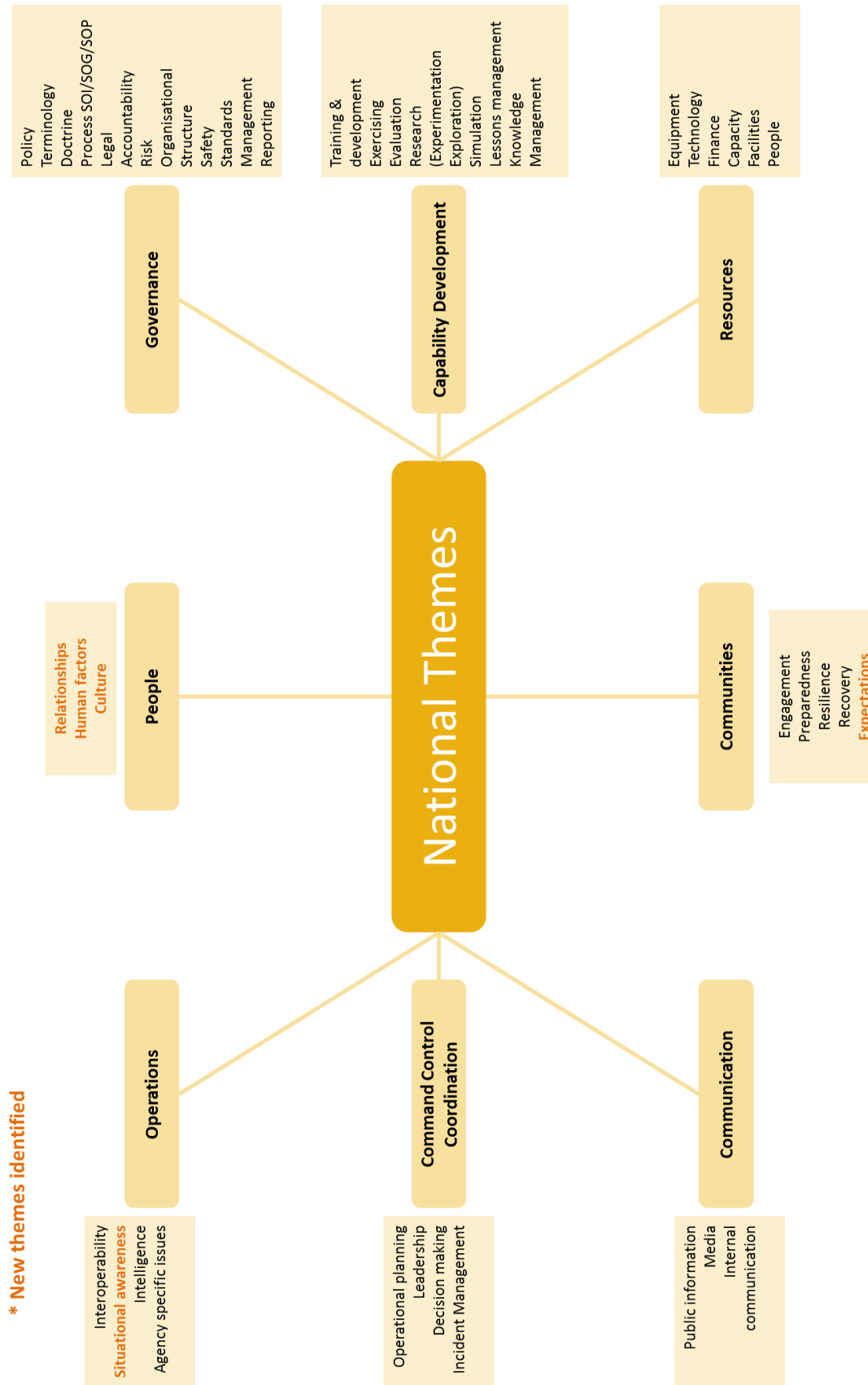
- Matching website capacity and resilience with community demand
- Bush Fire Information Line
- Social media
- Demand on operational systems
- Importance of rapid response and containment
- Mobile applications and information.

Appendix D – Themes

Public Information
Listening
Messaging (language, terminology, flexibility, community focus)
Early communication to community to suit needs
Use of social media (SMS, Facebook, Twitter)
Relationships
Contacts
Formal and informal
The right relationships to build and sustain
Collaborative learning
Interoperability
Multi-agency situational awareness
Joint situational awareness
Common operating system
Common operating picture
Better utilisation/access to social media and integration of public/government geospatial sources
Information sharing on national level at all levels of government (states, territories, commonwealth) and across agencies, jurisdictions, sectors, industries
Community expectations and engagement
Community focus
Expectation and engagement management
Build trust
Communicate
Educate
Inform
Realistic
Empower the community (resilience)
End user – focus on their requirements
Improvements to incident management systems
Incident management training and structures
Incident management team roles
Different incident management systems – are they really the same?
Recording decision making – understanding intent
Safety issues for emergency services (e.g. solar panels, asbestos) – training needed to identify, SOPs -relevance and consistency of training
Intelligence
Intelligence capability
Emergency intelligence
Emergency management intelligence – locating local intelligence

National Incident System
Events that exceed controllers imagination
Underestimating the hazard
Catastrophic planning - worst case scenarios
Scalability to go beyond the expected or bounds of known experience
Use lessons to prepare for the unknown
Use imagination, forethought, collective wisdom and intelligence
Better pre-positioning of surge capabilities required (defence, c/wealth, other S&Ts) –should be better able to read/understand when local/state capabilities will stretch/break based on past experience
Develop triggers to pre-position
Personnel management
Volunteers – integration into response
Fatigue management – clash with ES culture
Workplace Health & Safety
Mental health, PTSD and other health issues
Welfare issues
National arrangements
Resource sharing
National doctrine
Interstate deployment arrangements
Role definition/allocation
Inter-agency and inter-jurisdictional processes
ADF assistance
Aging technology/infrastructure
Resource deployment – impact on relief and recovery
Lessons Capability
Organisational barriers to implementing lessons identified
Operational capability to implement lessons (e.g. priorities, budgets)
Bureaucratic and legal barriers – systems and processes - further resolution & legislative change needed
Lessons management capability
Learning Culture
Build a learning culture
Barriers - organisational culture, corporate will, blame game
Humility
Cultural change - willingness to share with community
Knowledge management
Retention and capture of corporate knowledge
Corporate knowledge loss

Appendix E – National Themes



Appendix F – Next steps

Next Steps
Agency Level
<ul style="list-style-type: none"> • Develop a lessons management capability within each agency. • Establish buy-in at senior agency levels in order to; <ul style="list-style-type: none"> ○ acquire required funding and resources, ○ embed a learning culture across all levels of the organisation, and ○ drive change. • Identify champions at higher state and national levels who can encourage agencies to implement change. • Develop a lessons management network, and hold workshops and forums, to facilitate collaborative learning and share knowledge and lessons management tools. • Complete the Lessons Management Handbook, disseminate this, and provide additional support through training. • Develop common tools enabling data collection and storage at the agency level which can also be shared across agencies.
State Level
<ul style="list-style-type: none"> • Establish high-level support from state level Emergency Management Committees (SEMC) to enable and drive change and embed a learning culture into the everyday practice of state organisations. • Develop a community of practice and build networks to facilitate information sharing and ideas between agencies. • Show leadership and champion knowledge and lessons management at the state level. Use champions to share experiences with others within and across jurisdictions. • Use existing emergency management arrangements to create a subset of the SEMC as a working group that can act as a knowledge transfer sub-committee and inform the SEMC and state agencies regarding information and ideas incorporating lessons and knowledge management, learning and development, exercise evaluation, emergency planning assessment and operational evaluation. • Establish a common approach to data collection, analysis and codification to facilitate information and lessons sharing, and exercise management, across multiple agencies at the State level. • Build relationships with the community by allowing them to observe or be involved in exercises and debriefs.
National Level
<ul style="list-style-type: none"> • Gain Australian New Zealand Emergency Management Committee (ANZEMC) support in order to establish a nationally consistent approach to lessons and collaboration within and across Australian government agencies as well as hazard domains/sectors (e.g. Fire, Police, Biosecurity, Health, SES, Counter Terrorism and Border Protection).

Next Steps

Agency Level

- Achieve buy-in within appropriate leadership and high-level governance structures to drive an agenda for change and embed learning culture within organisations at state and national levels.
- Develop national priorities that are useful at State and sectoral levels in order to create efficiencies.
- Establish national standards, guidelines, templates and standard codification to enable greater cross-jurisdictional consistency in communication, terminology, training and evaluation, and support improvements in incident management systems and interoperability across the sector.
- Develop a national training package which is linked to what already exists but is tailored to emergency management and includes a tool kit (such as good practice guide, templates, and standard codification).
- Develop strategies for the development of relationships, connections and networks across agencies and the sector in order to strengthen cooperation, collaboration and knowledge and lessons sharing at the national level.
- Develop compatible systems and tools for sharing knowledge and lessons (such as knowledge management systems, SharePoint) across the sector at a national level.
- Publication of a national handbook on lessons management

Research and Education Needs

- Develop plans for further action based on recommendations made at the 2013 NSKLM workshop.
- Identify priority research areas that agencies can work on collaboratively.
- Identify gaps in national capability and develop training and evaluation courses which address these gaps.
- Harmonise the various emergency management handbooks available such as the Exercise Management Handbook and Lessons Management Handbook (which is about to be published) to integrate information these provide.
- Develop a portable training package (ideally a national training package) that individual practitioners are able to deliver using common methodologies.
- Continue to develop a collaborative environment enabling agencies across the sector to engage collectively in training exercises and share lessons in order to enhance lessons capability.
- Develop documentation around evaluations of joint training exercises which can be shared across agencies.
- Continue to develop the Knowledge Hub to include codification and harmonisation of knowledge and lessons tagging.
- If problems are encountered in developing hubs and platforms for sharing due to financial constraints, utilise free platforms such as Google+ which provides users with calendar integration, and space for private groups, working groups and video-conferencing.