KNOWLEDGE, INNOVATION AND RESEARCH UTILISATION NETWORK (KIRUN)

AUSTRALIAN FIRE AND EMERGENCY SERVICES AUTHORITIES COUNCIL

Lessons Analysis Workshop Outcomes
16th August 2018

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ENQUIRIES

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INTRODUCTION

Conducted on 16 August 2018 in Melbourne, Victoria the Lessons Analysis Workshop was a one-day workshop with two objectives:

1. identify recurring insights and/or lessons across sectors and jurisdictions; and
2. identify potential/emerging insights and/or lessons

Nineteen agencies from six jurisdictions participated as well as two agencies from New Zealand. Lessons Management processes were used to analyse observations then produce insights. These insights are summarised below.

BACKGROUND

This workshop was based on a proof of concept that was trialled in 2017. The outcomes of this workshop used observations and insights from 2012-2018.

Overview

The workshop used the OIL Model (Observations-Insights-Lessons), further information provided in the methodology section, to theme and analyse observations to develop insights.

Facilitators

The workshop was facilitated by:

- Adair Forbes Shepherd, EMV
- Geoff Cooper, Centre for Army Lessons
- Heather Stuart, NSWSES
- Jay Williams Virgona CFA VIC
- Lisa Jackson, EMV
- Mark Cuthbert, Home Affairs
- Mark Thomason SACFS
- Russell Underwood, Centre for Army Lessons
- Tania Scott DELWP VIC

Participants

See **Attachment A** for a list of participants.

Location

The workshop was held at the Australasian Fire and Emergency Services Authorities Council office on Albert Street in Melbourne East.

Workshop structure

The workshop was divided into three parts.

The first part involved syndicates coding data contributed by multiple agencies from multiple jurisdictions to identify themes specific to a focus area. Data from previous lessons workshops was also available for comparison. The focus areas were:

- Intelligence/information management
- Recovery
- Interoperability
- Incident Management
- Public Information and Warnings
- Emerging themes
- Lessons and Learnings

The second part involved syndicates drafting, presenting and validating the insights to reflect the themes identified in the relevant focus area.

The third and final part involved participants debriefing the process and discussing the next steps for lessons management.

Lessons methodology

The lessons methodology used for this exercise draws on the OIL (Observations-Insights-Lessons) Model as documented in the Australian Emergency Management Handbook – Lessons Management which has been developed from the OIL Model used by the Australian Centre for Army Lessons.

The elements of the OIL Model are:

- Observation: A record of a noteworthy fact or occurrence as seen during an activity or operation; it is the evidence or data collected – that is, what is seen or discovered (observed). Observations can be positive or negative.

- Insight: A deduction drawn from the evidence collected (observations), which needs to be further considered. Insights provide guidance for future analysis and potential action. Insights can be positive or negative, and can contribute to reinforcing positive behaviour or changing practices. Insights may be developed when a single observation poses a high risk to the organisation or when a number of similarly themed observations have been collected.

- Lesson identified: A viable course of action based on the analysis of one or more insights or observations that can either sustain a positive action or address an area for improvement.

Observations were analysed to identify common themes and sub-themes. This report identifies insights only and the insights are summarised below. This report does not progress through the OIL process to identify lessons or attempt to make recommendations for remedial action.

DATA

970 observations were contributed this year by nine agencies from five jurisdictions. Over 1500 observations from previous years was available for comparison.

INSIGHTS

The insights identified from the analysis are listed below and they are displayed in accordance with the relevant focus area. The number of observations supporting each insight are in brackets and whether they are areas that are working and should be sustained or areas form improvement.

1. **Focus area 1: Intelligence and information management**

    1.1. *Information Systems lack interoperability (31) Improve*
    Agencies and jurisdictions are increasingly using information systems and technology to support the management of emergencies. Information systems are routinely used to exchange intelligence, geo-spatial Information, resourcing and public information within and between, agencies and jurisdictions. Each agency and jurisdiction generally has multiple information systems that support their ability to manage incidents.

    There were many observations sighting problems with the interoperability, reliability and capability of these systems. This adversely affected the quality and timeliness of information being shared between agencies, incident management centres and the public. The lack of compatibility and connectivity between these disparate systems was also observed to impact the effectiveness of multi-agency responses, recovery efforts and the decision making of incident management teams.

2. **Focus area 2: Recovery**

    2.1. *Collaboration aids recovery planning (15) Sustain*
    When planning was based on solid connectivity, local intelligence and cooperation between agencies and organisations, communities were better informed and supported. Delays in recovery and transition efforts occurred as a result of poor communication between agencies and organisations particularly when there were multiple locations, centres, and municipalities involved in an event.

    2.2. *Recovery requires dedicated capability and resourcing (10) Sustain*
    When appropriate and dedicated recovery capability and capacity were in place at all levels of operations the flow of information, efficient use and allocation of resources to assist impacted communities improved.

3. **Focus area 3: Interoperability**

    3.1. *Systems enable relationships, relationships improve systems (9) Sustain*
    When pre-existing relationships were in place there was increased trust and respect between stakeholders. Experience across numerous incidents showed an improvement in effectiveness when there was a clear understanding of the roles and responsibilities of agencies and personnel involved in an event. This was more challenging when authorities and or responsibilities were unclear or when personnel were unfamiliar with other organisations people, systems or processes.

    3.2. *Understanding capability enhances tasking (10) Sustain*
    Where an understanding of the real-time/on-site capabilities and limitations of each response agency within an incident was known, it enabled the incident management team to achieve the goals required to resolve the incident in a more efficient and timely manner. This understanding enhances tasking.

3.3. Voice communication between agencies remains challenging (8) Improve
A lack of commonality in the voice communication systems between agencies resulted in decreased situational awareness, reduced incident-site safety and difficulties maintaining clear operational objectives. At some incidents, agencies were limited to resorting to face-to-face communication to make things work.

4. Focus area 4: Incident Management Teams

4.1. Which level operations centre should specialist personnel be deployed to (8) Improve
The capacity to provide appropriately trained personnel, subject matter experts and local knowledge in a timely fashion to an incident control centre is critical to achieve incident objectives. The provision of specialist personnel resources to centres was at times in conflict with the provision of specialists to higher level operation centres. At times it was unclear if specialist personnel should be deployed to incident, region or state operation centres. This resulted in inconsistent provision of specialist advice.

4.2. Capacity, training and authority of Liaison Officers (17) Improve
The use of Liaison Officers is recognised as working well in some agencies. This has resulted in more effective coordination and use of support agencies. Observations indicate that problems are continuing to occur in relation to:
   a) the capacity of agencies to provide liaison officers to Incident Management Teams
   b) the selection by agencies of appropriately trained liaison officers who have relevant authority is often challenging for some agencies.
There is opportunity to further explore this insight to determine causes and identify agencies where better practice is occurring.

5. Focus area 5: Public Information and Warnings

5.1. Early engagement and meetings with the community were effective (8) Sustain
Community meetings that were initiated early, were received positively. Feedback revealed the community felt listened to, and that meetings were timely and informative. In fact, some meetings were held well before there was any impact, allowing the community to have the time to make decisions and respond appropriately.

5.2. Tailored communication with the community meetings was effective (8) Sustain
In a number of events, community engagement was acknowledged as a priority and observations show that a high degree of effort was applied to ensuring connectivity. This was achieved through utilising a variety of communication methods tailored and appropriate for the community. Where local knowledge and information was not incorporated this lead to confusion and inconsistency at the local level.

5.3. Procedures for warnings not always adhered to (4) Improve
Observations collected showed that a lack of clarity and understanding about, and adherence by incident personnel to procedures communicating warning messages led to confusion of the public.

5.4. Roles and responsibilities of media officers not always clear (4) Improve
There were observations indicating that personnel undertaking media roles did not have clear and understood roles and responsibilities, or clear processes for maintaining situational awareness.

5.5. Public messaging not always clear (8) Improve
Observations show that where communities received consistent, simple and useful information which was tailored to the changing situations and their needs, messaging was understood. However, observations indicate that on occasions where messaging was vague, unclear, inconsistent and incorrect, confusion in the community resulted.

5.6. Public information roles require resourcing (5) Sustain
Observations suggest that where public information roles are well resourced and supported both within management teams and on the ground, the provision of public information, warnings and alerts are improved.

5.7. Sharing and integration of information across agencies enables consistent public messaging (8) sustain
Observations showed that where information was integrated and shared across agencies, consistent public messaging was delivered and understood by the public. Where this did not occur, competing agency needs led to conflicting messaging, interagency tension and confusion for the public.

6. Focus area 6: Emerging themes

6.1. Duplication and disconnect of impact and damage assessment systems and processes (31) Improve
There were numerous challenges surrounding collection, sharing and storage of information for relief and recovery functions. Multiple agencies engaged with affected community members to collect the same or similar information multiple times. The collection of information was not coordinated and sharing of relevant information between agencies was ineffective partly due to incompatible systems and varying perceptions on privacy. Impact and damage assessment information was incomplete, not centrally stored, shared or integrated. This resulted in frustration from and additional unnecessary contact with traumatized community members as well as delays and poorly informed planning for recovery. Recovery planning was enhanced when impact and damage assessment was coordinated, integrated, timely and well communicated.

An opportunity for further investigation on this issue across jurisdictions would be worthwhile to establish the extent.

6.2. Challenges with situational awareness and warnings when emergencies occur at night (23) improve
A number of insights and lessons collected from New South Wales and Victoria identify that alerting and warning people to emergencies that occur at night is particularly challenging. Response, intelligence gathering, situational awareness and communication were all adversely impacted when events occurred at night. Alerting people to the danger and providing accurate warnings when emergencies start at night was identified as a significant challenge. While people who were awake were receiving alerts, many people had gone to bed and some slept through the warnings. In a number of cases warnings were disseminated too late for residents.

An opportunity for further investigation on this issue across jurisdictions would be worthwhile to establish the extent.

6.3. Challenges realising the full potential of new technologies (10) Improve
New technologies and systems continue to become available to Incident Management Teams (IMT), for example Unmanned Aerial Systems (UAS). New technologies increase the information available during operations. However observations indicated, they were not always used to their full potential capability due to limited training in the use of and interpretation of data from these capabilities.

An opportunity for further investigation on this issue across jurisdictions would be worthwhile to establish the extent.

7. Focus area 7: Insights on Lessons and Learning

7.1. More to do to develop and support a learning culture (19) improve
To ensure the success of lessons management and continuous improvement, a need was identified for leadership to demonstrate and promote a culture of learning. This is reinforced by numerous observations and insights from previous workshops indicating the need to champion the lessons management process.

Reports from previous years indicate that the existence of a blame culture inhibited learning from experience. This year there was an indication that there appears to be a move away from a blame culture which is facilitating learning from experience.

7.2. Lessons practitioners require skills and tools (5) improve
Observations from 2017/18 season provided positive feedback on the skills and experience of current lessons practitioners promoting continuous improvement within their organisations. This has reinforced the need identified in November 2011 for careful selection of lessons practitioners to ensure that outcomes are robust and credible. Observations point to the need for adequate support from leadership to ensure lessons practitioners have the required attributes, tools and systems to conduct lessons management.

7.3. Increasing support for lessons capability (27) sustain
Observations show that there has been an increased interest through leadership support for the lessons management capability. Strong leadership support has contributed to overcoming some of the barriers identified to the successful implementation of lessons management in previous reports. As identified in 2014, there is the potential for lessons management to lose momentum in the current budgetary environment and for this progress to be lost. This highlights the need to maintain the focus and momentum of lessons management at all levels of government with continued strong leadership support and resourcing for the growth of this capability.

7.4. Governance, frameworks and policies are required for lessons management (10) improve
Observations indicate that clear lessons governance that is relevant to the organisation needs to be established, documented, and communicated. This needs to be fully supported by leadership to enable a learning culture and ensure the success of a lessons management capability. These observations indicate that multi-agency interoperability and effective sharing of information needs to be considered during the development of any lessons management framework or policy.

7.5. *Workable lessons processes are essential (10) improve*
Observations indicate that establishing and adopting a workable lessons management process is essential for ensuring organisations can learn from experience. The outcomes from the lessons process need to be shared across the sector to enhance interoperability and learning.

7.6. *Communications and engagement strategies are required (8) improve*
Observations indicate the need for a communication and engagement strategy to support the lessons management capability, with a focus on the positive promotion of the concepts and ideas of the lessons management process and practice.

7.7. *Lessons management training is still lacking (19) improve*
The need to train and up skill lessons practitioners and further develop the National lessons management capability is essential to success. This includes critical thinking and analytical techniques such as root cause analysis. This has been a recurring theme in lessons workshops since 2014.

7.8. *Common terminology and practices are required (4) improve*
Observations have indicated that there is a need for common terminology and practices for the collection of data and development of insights and lessons.

7.9. *Previous lessons can be better used to inform planning (7) improve*
Observations indicate the importance of embedding lessons management into agency planning processes and adopting it as common practice. Lessons from previous events need to be reviewed and considered in pre-planning and preparation. Some observations indicate that has not always been occurring effectively.

7.10. *Exercising could be better informed by lessons (7) improve*
Approaches to exercise planning and needs analysis vary between agencies and jurisdictions. Exercises are a valuable tool to develop, explore or test elements of capability. The lessons process is now maturing to the point where lessons identified or information gaps could be used to inform needs analysis and exercise planning more effectively.

The way forward

It was agreed that the outcomes from the workshop will be provided to the Australia-New Zealand Emergency Management Committee and the AFAC Council for noting. These insights could also inform lessons management processes in jurisdictions for further analysis against jurisdictional specific context and insights to support future lesson identification.

Participants noted that significant progress has been made in developing lessons management approaches and capability with a number of agencies and jurisdictions reporting advancements but there are still challenges in getting data to support strategic national lessons analysis. This is expected to improve in coming years as jurisdictions develop state level approaches to the analysis of lessons.

ATTACHMENT A   PARTICIPANTS

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