

Questions	Response
<b>Mike Icardi - United States Federal Emergency Management Agency</b>	
Question for Mike - how extensive is your enterprise information management system? Does it capture lessons and operations at national and state levels	<p>Our system functions for FEMA requirements only right now. We have two elements to the system, one that is focused on validating findings, and track the actions taken and that is just FEMA information. This is primarily accessed only by internal Continuous Improvement Program staff, or those making updates to actions taken. The other element is a searchable database that everyone in FEMA has access to, we call it our Comprehensive After-Action Report Analysis Tool (CAARAT). CAARAT contains information from our state, local, territorial, and tribal exercise reports that have been submitted to FEMA.</p> <p>Our scope at the national/federal level does not expand beyond FEMA to other organizations. We are working to build capability at the state levels, but Information Technology policies do not currently allow us to create a similar system and capability that is accessible outside of FEMA.</p>
Mike - where to from here with this international community of lesson managers? Where can we collectively take lessons management into the future?	I think the international community has the opportunity to share more of the work that each of us is doing as a resource to reduce work, and learn more. I could see us trying to find a commonly accessible portal to post and share information across governments. As spoken to by Wayne Snell, the community of practitioners is not large, and anywhere we can engage to share information, and challenge each other to be more effective in our individual programs.
Mike Icardi: What was your biggest challenge in persuading leaders of the value of a learning culture and promoting lessons management?	We have an ongoing challenge in not being yet another program that has an ask or requirement that takes their time and resources. This is where we've aimed to be more focused in our support by looking at what they find important when we do our assessments, and not just looking for everything. I also have been purposeful and selective in how we review findings and what we choose to elevate for action. This has helped focus on only asking for their engagement on the biggest disasters and biggest issues.

Mike - you mentioned your team are receiving a lot of requests to support others which is great but how do you manage the workload and expectation management?	This has required a strong program management function. I meet regularly with our Division supervisors to understand workloads and staffing capacity. We're constantly monitoring what flexibility staff have on their projects, and who may be able to work on new requests. When we receive a request, we go through a process of scoping and understanding the problem and potential project, and as we're doing that, working as a management team to understand if we can take it on, or not. We use project management principles as part of that process. If we do not have our own capability, but want to support the effort, we also have a contract that if the requestor has funding, we can issue a call order for a contract team to support them.
Q for Mike - does FEMA CIP capture or monitor or review the implementation of lessons within delivery partners?	Our scope is within FEMA. We are working to build capability with those outside of FEMA to build their own cultures of learning, but we are not capturing or monitoring the implementation of lessons for anyone outside of FEMA. We do not have the authority to operate in that space.
Mike Icardi: What are some practical things you do 'on the ground' to encourage openness & buy-in from operational personnel when doing RT learning/ advising during ops?	We have an overarching principle that we want to ensure we're never impeding operations. If we are on the ground as operations are ongoing, those are the priority, and we are passively monitoring what is going on, and focusing on quick 3-5 minute conversations with key stakeholders to hear why they have done something, or what the effect is, and not focused on 30-45 minute interviews which is one of our primary disaster data collection approaches. We have leaned into being advisory by selectively identifying when we can provide a value-add input. We also try to get even a quick check-in with operational leadership to understand what their priorities and concerns are.
Mike - how does FEMA ensure automation in lessons management does not impact the quality of insights/lessons?	We are not yet using automation in our analysis. As with any systems, we would plan over time to implement it incrementally, test the analysis and outputs with human perspective, and adopt it in a deliberate manner, applying appropriate quality assurance and quality control measures.

<p>Mike Icardi: Have any of your solutions surprised leaders or made them uncomfortable? How did you overcome this, especially if root cause is something your leaders created?</p>	<p>I think this is constantly possible, and it requires us to be considerate of our approach and what we view as success. We tell folks that we're focused on policies and processes, not people, so we are not looking to write findings or observations on a person, but possibly how decisions or approaches have effects on their organization and mission effectiveness. We also want to be considerate in how much data we do or do not have, and how we approach those stakeholders to get their feedback on why something might have happened, and not just assume that because one part of an organization says something is a problem and it is based on this role, without having that role have the opportunity to provide insight and feedback as part of the data collection to have more accurate analysis.</p> <p>These things have to be handled carefully, and figuring out at what level the effects identified need action, and what the most important ones to address are.</p>
<p>Mike- given dropping your people into roles unprepared at times, what development opportunities are offered to prepare staff for uncertainty and complexity?</p>	<p>We have two positions for our field work, and one for our support of the National Response Coordination Center. For our field work, we have developed 3-5 day trainings, that all staff have to go through. For the National Response Coordination Center, we are slowly building out the training and practice environments to prepare staff. We have annual opportunities for staff to self-identify what their own individual development should look like, and then we provide funding for them based on what they are interested in, and the resources available. Our Team holds monthly discussions / informal trainings for staff to gain experience as well. We also aim to implement a mentoring program for staff to have someone who can support and help them learn.</p>
<p>Q for Mike - what do you find works best to move process/documentation into actions/implementation?</p>	<p>The first key is making sure that the office / organization you're asking to take action to be involved in the data collection and validation of the finding and recommendation. That gives them a say in the development process, and also buy-in in crafting it. Second, figure out what is critical and fight for those things, and do not be afraid to not feel like you have to, or can accomplish everything. Third, leverage relationships and trust to communicate the value proposition, and why it is important. The process takes a lot of change management, and will take months and years to implement at times. Fourth, for us, we're reliant on persuasion through analysis, and not top down mandates for action. Our programs and offices can decline to take action, and we see our role as identifying why they are not doing, not forcing them to do it. And if they do not want to do it, we need to learn about why they are not, and whether we could have better captured and presented that information to make it matter to them.</p>

Mike Icardi: When will FEMA look at addressing guidance for lessons management across other agencies and industries (US) including EPA/USCG and the petroleum industry?	There is not a U.S. federal inter-agency policy on the cross government lessons management. None of the departments and agencies have the authority nor resources to serve in that role. At this time, we do not anticipate a formal structure being put in place. We have informal communications and coordination across these offices, but they all contain their own authorities and focuses.
<b>Alistair Dawson - Office of the Inspector-General of Emergency Management</b>	
Alistair - does QLD IGEM start with a review of previous reviews and their lessons before starting a new review? Seems to be a known gap in Australian context.	
Alistair Dawson: IGEMs are notorious for proving recommendations that then require reporting on what has been implemented. Is this the right approach?What is the future for IGEM	
Alistair Dawson: What is the best 'nudge' you've seen implemented in your organisation to respond to emergencies	
Alistair, how do you "get your authorising environment aligned" when governments are elected for 4 years, but most Lessons assessment cycle take much longer.	
Alistair - is concurrency and compounding events creating a new world thinking for IGEM and lessons management ?	
Alistair Dawson: Why are there only two IGEMS in Australia? Shouldn't every state have that transparent oversight?	
Alistair Dawson: Jurisdictions seem reluctant to work together to review and share lessons pre and post major emergencies. How do you think we overcome this resistance to share?	
<b>Wayne Snell - Australian Civil-Military Centre</b>	

Wayne Snell: In an organically driven industry, how do you recruit into it. Do you focus on hiring emergency mgmt practitioners or lessons mgmt/evaluation practitioners?	
Wayne Snell: Thoughts on vocational versus academic qualifications for lessons.??	
Wayne Snell: How do we attract younger professionals into this field as well as targeting less represented groups (LGBTIQ, First Nations, gender diverse etc)?	
Wayne Snell: What kind of guidance (materials) and competency management (defined knowledge, skills and behaviors) would you envision needed for this continuum?	
<b>Dorothea Huber and Mark Semmler - AMSA</b>	
AMSA: How do we as a CoP better sell our wins (policy, behavioural change and financial outcomes) to drive the LODC development and exec buy in?	<p>&gt;The Executive Director of AMSA's Response Division (Mark Morrow) is a Lessons Management Champion and a strong advocate for continuous improvement.</p> <p>&gt;He has played a key role in promoting Lessons Management within AMSA by making it an organisational priority, agreeing to a program budget and process, and requiring evaluations to be undertaken when AMSA manages major incidents involving potential marine casualties, search and rescue or pollution events.</p> <p>&gt;In support of this, AMSA's business policy provides a focus on continuous improvement.</p> <p>&gt;We are currently working on a Communications Strategy that will provide greater visibility to our program on work.</p> <p>&gt;In our presentation We talked about other strategies including reporting to our Executive, The establishment of our Lessons Board, The Lessons Management Framework / Guidelines and procedures, monitoring our performance, Lessons Management training and other communication strategies, including real-time feedback to staff.</p>

<p>AMSA: More an observation than a question regarding similar disciplines to ‘lessons management’, there is very little formal academic training in evaluation.</p>	<p>&gt;From an Emergency Management viewpoint there are limited training opportunities in Lessons Management. However, NEMA offers such courses from time-to-time and a Lessons Management component is part of the emergency management training under AIIMS.</p> <p>&gt;Looking more broadly, Lessons Management is really a subset of evaluation more generally. It provides an assessment of outcomes usually using qualitative assessment techniques. Of course, it has its own nomenclature and associated jargon. The Australia Evaluation Society offers a wealth of resources (literature, seminars etc) and online training. It’s worth looking at Lessons Management more broadly.</p> <p>&gt;On a final note, it is worth researching academic literature on “Lessons Management”. There are some excellent papers on this topic across a range of management and education publications.</p>
<p>AMSA: What level is the AMSA Lessons Board (EL1/2, SES1?) and what is the Board’s role? Approving Lessons Identified for action etc?</p>	<p>&gt;Members of the AMSA Lessons Board are sectional heads from across AMSA and they are at an SES1 or above level. Members include:</p> <ul style="list-style-type: none"> <li>a. Manager, Response Planning (Chair)</li> <li>b. Manager, AMSA Response Centre</li> <li>c. Manager, Operations</li> <li>d. Principal Advisor, Integrated Operations</li> <li>e. Manager, Governance</li> <li>f. General Counsel</li> <li>g. Change Advisor (coming soon)</li> </ul> <p>&gt;The AMSA Lessons Board:</p> <ul style="list-style-type: none"> <li>a. Oversees the routine aspects of the lessons management process in line with the strategic parameters set by the Executive (i.e. the Chair of AMSA and the Divisional Heads)</li> <li>b. Reviews and maintains AMSA’s lessons management approach and supporting doctrine, to ensure its currency with contemporary lessons management approaches</li> <li>c. Reviews the outcomes of lessons management process, decide on responsibilities for follow-up actions to address the lessons identified during those processes and monitor the implementation of these actions</li> <li>d. Reviews and approves the internal release of incident-specific Lessons Reports</li> <li>e. Prepares an annual lessons management plan; and</li> <li>f. Reports to AMSA Executive on the actions of the Lessons Board and any high-level issues that require Executive oversight.</li> </ul>

<p>AMSA - it's one thing to have a framework/guidelines, what are your measures of success of your LM process and do you feel it's improving internally.??</p>	<p>&gt;Great question and something we are still operationalising.</p> <p>&gt;There are some indices we use now:</p> <ul style="list-style-type: none"> <li>a.The number of observations submitted by the staff identifying areas of improvement</li> <li>b.The numbers of people attending post-event debriefs and participating in interviews</li> <li>c.The level of interest in the lessons management process more generally (as measured by visits to the Lessons Management website, requests for information sessions, etc...)</li> <li>d.The use of infographics and metrics on past Lessons Management findings, and</li> <li>e.The application learnings from past Lessons Reports by the staff from the AMSA Response Centre in managing new incidents as they arise.</li> </ul> <p>&gt;We will also be proposing a staff survey in late 2024 that will hopefully provide more details around AMSA's maturity for lessons management.</p>
<p>AMSA: What is your observation form platform? Microsoft forms.?? Or other</p>	<p>&gt;Online observations are received using a Microsoft form with the data collected in a separate Excel Spreadsheet where they are triaged to follow one of three processes – the ARC Continuous Improvement process; the Lessons Management process or they will follow both processes.</p> <p>&gt;Currently, all Lessons Management data are managed using a Master Excel Spreadsheet – this includes feedback received from de-briefs, interviews and online observations. However, as identified by several speakers during the LM Forum, spreadsheets are a clunky and inherently unstable platforms for qualitative evaluations. We are currently exploring alternatives that are better suited to these types of evaluations.</p>
<p>AMSA: In addition to the forms question - what additional systems do you use? Such as Microsoft Lists, Power Apps / Power BI?</p>	<p>&gt;The ARCCI process (described in Q7) is managed using MS Project, Power BI and Excel.</p> <p>&gt;The LM process (also described in Q7) is managed using Excel and a custom built corporate Actions Reporting Tool (the ART ), which uses Power Apps as the basis supported by a Power BI reporting module.</p>

<p>AMSA: You have specific criteria that outlines what falls into 'Continuous Improvement' and what falls into 'Lessons Management'?</p>	<p>&gt;When online observations are received (via Microsoft Forms) they are triaged and follow one of three process paths specified below.</p> <p>&gt;These paths are classified according to the following criteria:</p> <p>1)AMSA Response Centre (ARC) Continuous Improvement (CI) process:</p> <p>a.Observations which raise issues that need to be addressed by the Duty Manager group because they:</p> <p>a.a.Lead to operational efficiencies, and/or</p> <p>a.b.Provide clarity on policies and procedures.</p> <p>b.Actions to address these issues require consideration by the ARC Duty Manager.</p> <p>2)Lessons Management (LM) process:</p> <p>a.Observations which raise issues that need to be addressed by the Lessons Board because they:</p> <p>a.a.Have a broader AMSA impact/relevancy, and/or</p> <p>a.b.Higher risk rating for AMSA if not addressed.</p> <p>b.Action to address these issues require senior management oversight.</p> <p>3)ARC Continuous Improvement and Lessons Management (ARCCI+LM) process:</p> <p>a.Observations which raise issues that fit into both categories above and require actions to be completed independently through the LM or ARC CI processes.</p>
<p>ASMA, can you explain what your interpretation of the difference is between 'evaluation' and 'lessons management' is.</p>	<p>&gt;“Evaluation” is the activity of assessing a process or an outcome based on evidence and defined criteria. A wide suite of assessment methodologies underpin evaluation. Lessons Management is a form of evaluation typically used in Emergency Management. It applies certain types of qualitative evaluation methodology (usually observations derived from interviews, debrief sessions and direct observations) to draw insights from past events / experiences with the aim of introducing better processes that lead to better outcomes in the future. In our view, Lessons Management is a subset of evaluation.</p> <p>&gt;AMSA approaches Lessons Management within an Emergency Management context and sees it as an overarching term that refers to collecting, analysing, disseminating and applying learning experiences from real life events, simulated activities, programs and reviews. These learning experiences include aspects that worked well and should be sustained and those that need to improve. The overarching goal of lessons management is ongoing continuous improvement by AMSA and the people who work for it.</p>
<p><b>Diana Macmullin and Sara Pulford - SA SES</b></p>	
<p>SA SES: What prompted the selection of WebEOC as your platform for lessons management?</p>	<p>WebEOC is already our platform for Incident Management and our users are well versed in its use, so it was an obvious choice for us.</p>



SA SES: Is the lessons module available to other agencies with Webeoc or owned by SA SES only?	Owned by us, but more than happy to share. It may become part of the WebEOC board suite in the future.
SA SES: How is the lesson implemented monitored for sustained change.	The evaluation of sustained change is not managed through the board, but through our usual governance processes i.e. develop key indicators and evaluate over time.
SA SES: Where actions are assigned to teams, are these already identified in the recommendations that go to the board/executive for endorsing, or assigned afterwards?	The responsible team is recommended but the executive make the final decision.
SA SES: How do you manage the concurrent and cascading events- are you able to link unresolved lessons from previous to current events or integrate with current?	Lessons are kept within their relevant event for clarity, but a global view of lessons is also available. Tags can also be used to identify themes.
SA SES: Did you find that you spent so much time navigating the AI technology, that you could have done the analysis quicker manually?	Up until now, the final analysis has been done manually, facilitated by the board, and is very time consuming. We felt that the investment to understand AI would, should its potential be realised, be worth it in the longer term. We are certainly encouraged by the results so far.
SA SES: Do you see AI as being a sense check /validation tool at this stage in the maturity process?	Until we have built certainty and confidence in our use of AI, our approach will be the reverse - use the AI initially and a human to validate, but we still believe this will be a much quicker process than a fully manual approach.
SA SES: How did you go about collecting the original ~3000 observations?	33 face to face and online debriefs, 2 surveys and several small group or one-on-one meetings.
SA SES: How do you plan to integrate Copilot AI with your WebEOC platform?	Great question - we are working with the developer on that - probably using the WebEOC standard integration technology called JX-Connectors.
SA SES: How did you manage data between WebEOC and the AI software? Did you have to export it and then reupload?	For this phase of the project, yes - download to process. But see response re JX-Connectors.
SA SES: Very interesting talk. How well does AI handle root cause analysis? Often observations will state one thing, but the real Lessons is more complex.	You are absolutely correct - we believe you need human experts to complete root cause analysis and evaluate insights. AI clearly is a powerful tool, but it has its limitations and we believe it would be a mistake to try and completely eliminate the human from the process.
SA SES: Can the lesson learnt on webeoc be used at unit and state levels?	Yes -absolutely - this was a key design principle. However, there will be a communications piece to support this.

SA SES: What was the prompt you used to convert observations into an insight?	We used several, and are still working on improving it, but a key learning is that you need to be very precise and specific and break the task up into steps.
<b>Benjamin Hebart - Department of the Premier and Cabinet, South Australia</b>	
Ben Hebart: How did you workflow actions to orgs - did you nominate an identified individual or use generic mailbox.?	This will be a bit dependent on how we set up the licensing. Ideally we would use a generic mailbox, as that way we don't run into people moving on/being on leave etc. However, we will still need a small group of people in each agency who are able to monitor the mailbox and allocate the workflows to the appropriate person/unit/
Ben Hebart: What take up have you had to sharing? Has the labour organisations attempted to withhold information from their members - not sharing with some agencies etc?	From our consultant with the EM agencies in SA, all think the lessons management system is a great idea, however, there is still some degree of trepidation as they are not willing to 'embarrass' their CEs. A major part of this will be to shift the thinking from being 'told off' to seeing this as an opportunity to improve. For the mobilisation, we are yet to see what level of buy-in we might get
Ben Hebart: If you had your time again would you go straight to Microsoft as a first step?	In short, yes. I think the best way to describe this is iterative. It is very back and forth with Microsoft - as we develop our understanding and what the capabilities are and how this will help us achieve our desired outcome.
Ben Hebart: Are you using part of the Microsoft suite to mobilize personnel? (Or just record who is available)	In short - both. In the first instance, we will be using M365 to get people to register and be pre-approved by their line managers to be 'available' for deployment for a large emergency. We will also use the products to integrate the database - i.e. to search for people with the desired skills. It is then proposed the agency seeking additional resources would then make direct contact with the home agency to formally request mobilisation of that/those people. Our thoughts are there will need to be an awareness program with all agencies as to how this will work. Mobilisation of the public sector is in our Public Sector Employee legislation, but it appears that a large number of public sector employees are unaware of the policy and how it works. This is particularly evident in those agencies that are not directly involved in emergency management e.g. Department of Investment.
Ben Hebart: Is there a time frame for this work as funding can be limited and agencies are not flush with funds?	I think funding is always limited - which is driving up down the 365 path. Ideally we will have a system that is of little or no cost to agencies individually - as our thinking is to reduce the barriers to use.
Ben Hebart: did you have to change how you store observations and insights to make it work nicely in PowerApps?	At this stage, in our prototype develop, yes. We are trying to avoid the need to unpivot the data. Will let you know once we have done some real time testing.
Ben Hebart: With security issues will penetration testing be put in place to protect the data?	We will be working closely with our cyber security and IT units in DPC to ensure we have the most appropriate database set up and protections.

Ben Hebart: How is the data in SharePoint and office 365 backed up and compliant with relevant data storage and management legislations	Sharepoint is backed up by DPC. Again, we will be working closely with our cyber security and IT units in DPC to ensure we have the most appropriate database set up and protections. Once thing we will need to carefully manage is document retention and the implications of FOI and how we comply with the relevant legislation. this is all still part of our development phase.
<b>Heather Stuart - NSW SES</b>	
Q for Heather: for high profile / high interest events (like NSW floods) are you communicating lessons learned / improvements with the broader public?	For the 2022 floods the Parliamentary Inquiries are available online for anyone to access. The internal AAR has not been released externally. NSW SES commissioned an AFAC Independent Review into the 2021 NSW Floods. That has been placed on the NSW SES website for the public to access. We are also sharing strategic level lessons that have relevance to other emergency services/functional areas either with the relevant agency or through the NSW State Lessons Process which is overseen by a sub-committee of the State Emergency Management Committee.
Congratulations Heather- where do you store individuals observations and insights ? How do they get onto the database	Our database does not store observations or insights. These are recorded on spreadsheets that are stored in our internal files. We are currently looking at how other agencies are using SharePoint systems to capture observations.
Heather Stuart: Congrats to NSWSES and particularly your team Heather, do the rest of NSW response agencies have access to your system for common lessons to be learned?	The NSW SES database is internal only. If a lesson highlights interactions with another agency we do share that lesson with the relevant agency and attempt to work together to address the recommendation. There is also a NSW State Lessons Process where we share relevant, strategic lessons for analysis. This process is overseen by a sub-committee of the State Emergency Management Committee. An annual analysis workshop draws data from all members of the State Emergency Management Committee and an annual State Lessons Report is produced. Work is currently underway to develop a shared lessons platform for NSW EM sector agencies. The aim is to facilitate sharing of relevant across the EM sector in the state.
For Heather: have you had issues with parts of the organisation dragging their heels on actions assigned to them? If so, how do you manage / support this?	Our LM Framework has 2 governance bodies for lessons. While the Operational Improvement & Lessons Team encourages those with recommendations/actions assigned to them to complete them, it is up to the governance bodies to hold people accountable and to look at strategies to ensure completion. One of the largest challenges to implementation of lessons is resourcing and how lessons are addressed in addition to planned business activities. Our next step is to look at how we can align the lessons cycle with the business planning cycle to try to gain resource allocation.

Heather Stuart: Are potential event preparedness captured in your lessons process too.? Or just actual event deployment and operations	Our focus has been on operations, however we have also developed lessons from exercises. Our methodology and approaches can be applied to all aspects of the PPRR spectrum. Resourcing prevents us doing more than we do at the moment.
Great initiative Heather. Do you sometimes think that your lessons might be useful to others outside the intranet? - Community or other agencies/states?	Most of the lessons identified are internally focussed, however when a lesson highlights work with another agency is required those lessons are also implemented and then shared with the relevant area). We also share the more strategic lessons that apply across agencies/the EM sector through the NSW State Lessons Process. This is overseen by a sub-committee of the State Emergency Management Committee
Well done Heather, well deserved. Do you link to corporate risk and if so, are those risks monitored in the same way?	We utilise a risk matrix for lessons that mirrors that used by our corporate risk team. We have also aligned the processes for monitoring and reporting lessons implementation to that of our internal audit team. When recurring lessons are unable to be addressed (eg due to lack of resources/funding) they have been moved to Risk Registers which are monitored by the corporate risk team and the Audit and Risk Committee
Heather Stuart: Would it be possible to provide the attendees to the forum with the schematics and video demonstrations?	NSW SES is more than happy to share further information, including technical information, with other agencies and organisations. Please contact me at <a href="mailto:heather.stuart@ses.nsw.gov.au">heather.stuart@ses.nsw.gov.au</a> to obtain access to the information. The only proviso is that is not to be shared with commercial organisations.
Absolutely awesome to Heather and the team. Congratulations fro ACTESA.	Thank you!
Congratulations NSWSES for your award, excellent leadership commitment by you Heather. Well done!	Thank you!
<b>Kimberley Wilson - National Emergency Management Agency</b>	
Thanks Kim - love the disruptor position taken and respectful discourse shared today. As LM leads and practitioners, we should challenge the audit lens.	
Kimberley Wilson: Who is responsible for resourcing significant lessons learned where they are structural or systemic	

Kimberley Wilson: The current senate AusGov COVID-19 inquiry is a great example of taking an unhelpful rear view mirror perspective - not best practice approach	
Q for NEMA - how much does political will and influence impact the ability to implement recommendations from reviews?	
Does the NCEC team seek to pull up jurisdictional AARs to the national landscape to seek to harmonize and synergise the challenges and learnings	
Thanks Kim, would you consider real time evaluation supported by a lessons management process more beneficial to deal with the real time and foresight issues?	
Kimberley Wilson: While low-level lessons from the past may not be relevant for future ops, the regular lesson that agencies must adapt and innovate therefore remains valid, yes?	
Kimberley Wilson: Given Australia has different jurisdictions, how ready do you think agencies and jurisdictions are to challenge the status quo and have these discussions?	
Kimberly- does NEMA share exercise findings online	
Kimberley Wilson: Does NEMA seek to own the Australian Government Lessons Framework launched in 2022?	
Kimberley Wilson: what capability is required to conduct real-time evaluation and lessons implementation in this way?	

Kimberley Wilson: Great work challenging the LM status quo Kim, do you see the concept of learning organisation continuing to offer value in the emergency management context.	
Kimberley Wilson: Have you used any other tools to simplify the collection of observations? Is there been any learning on how to improve engagement in submitting observations?	
<b>Charles White - Deep Space Engineering Technology</b>	
Charles White: Given your work environment, you must have faced many challenges, opinions, frustrations and 'no'. What motivated you to keep going?	My motivation came from a deep passion for space exploration and a commitment to advancing human knowledge. The thrill of solving complex problems, the support of a dedicated team, and the vision of contributing to humanity's future in space kept me pushing forward despite the obstacles. And, while I have retired, I do feel the same about the promise of AI if we do it right.
Charles White: How do we best manage data privacy and security for individuals and organisations re use of AI and LLMs?	Managing data privacy and security requires a multi-layered approach: implementing robust encryption methods, establishing clear data governance policies, and ensuring transparency in AI operations. Regular audits and compliance with international data protection regulations are also crucial to maintain trust and security.
Charles White: How much Cabernet will it take for you to speculate on what the "something" is that Altman has seen in the ChatGPT labs?	While a glass of Cabernet can certainly spark some interesting conversations, my speculation would lean towards significant advancements in AI's contextual understanding and problem-solving abilities that could revolutionize various industries.
Charles White: Used AI to answer a question. It gave me a very confident, informative and knowledgeable response. I then asked 'is this truthful'? It then said no.	This highlights the importance of developing AI systems with built-in mechanisms for verifying accuracy and ensuring transparency. It's crucial for AI developers to focus on creating models that can differentiate between facts and assumptions and communicate this clearly to users.
Charles White: If there's time, could you touch on the NASA LLIS system and if it has been effective within the organization?	The NASA Lessons Learned Information System (LLIS) has been instrumental in capturing and disseminating knowledge across projects. It has significantly improved our ability to avoid past mistakes and leverage successful strategies, ultimately enhancing mission success and operational efficiency. Also, we publically share that site with the world, so everyone can learn regardless of corporation, or nationality.

Charles White: How can we use AI to address misinformation and disinformation	AI can play a key role in combating misinformation by identifying and flagging false information, analyzing patterns of disinformation campaigns, and providing users with verified sources. Collaboration with media organizations and educational initiatives to improve digital literacy are also essential.
Charles White: Are their laws / rules around how much can be controlled around the use of AI	There are emerging laws and regulations focused on AI usage, such as the European Union's AI Act and various guidelines from international organizations. These aim to ensure ethical AI development, protect user data, and prevent misuse, but the regulatory landscape is still evolving. But right now, its still the wild wild West.
Charles White: AI we are dealing with is 'trained' on large language models, what do you see as the possible consequences of AI starting to learn on AI generated content?	One potential consequence is the reinforcement of biases and inaccuracies present in AI-generated content, leading to a feedback loop that diminishes the quality and reliability of information. It's crucial to maintain a diverse and high-quality dataset to train AI models and continuously monitor and adjust their learning processes. Remember, inaccuracy is not limited to just AI, as we humans often get it wrong, and document it. There is a new term called synthetic data, which is AI produced, but it can also be very accurate. We need experts to analyze the data, a role I call a Confirmation Engineer, but that would be my next talk.
Hi Charles, given the state of the world and geo politics, what is the basis for your optimism about the future of AI?	Despite geopolitical challenges, I believe in the potential of AI to drive positive change by solving complex problems, enhancing productivity, and improving quality of life. Collaboration across borders and the responsible development and deployment of AI technologies are key to realizing this potential.
Charles White: If ASI becomes smarter than us, how will this impact humans to keep up with it? Does this mean we can explore space in months rather than decades for example?	ASI could drastically accelerate space exploration by optimizing mission planning, solving engineering challenges in real-time, and managing long-duration missions autonomously. However, ensuring human oversight and ethical considerations will be critical in leveraging ASI's capabilities for space exploration.
Charles White: When implementing AI solutions specifically in EM. How do you see this impacting or changing existing processes?	AI can enhance emergency management by providing real-time data analysis, improving resource allocation, and predicting disaster impacts more accurately. However, it's essential to integrate AI with existing systems and ensure that human expertise remains central to decision-making processes.
Charles White: If AI is developing at such an exponential rate, how do we keep up and develop agility	Staying agile requires continuous learning, fostering a culture of innovation, and investing in upskilling the workforce. Organizations should also adopt flexible frameworks that allow for rapid adaptation and integration of new AI technologies as they emerge.
Charles White: How do we ensure that emergency managers don't fall into the trap of relying solely on the AI generated solution & stop considering the dynamics?	Training and continuous education are vital to ensure emergency managers understand AI limitations and maintain a balance between AI-generated insights and human judgment. Encouraging critical thinking and scenario-based training can help reinforce this balance.



Fantastic presentation	Thank you! I appreciate your feedback and am always happy to share insights and engage in these important discussions.
Charles White: If AI brome's 'super' (smarter tha us) how will we know when it's wrong, or not telling us something accurate? And what will prevent any possible corruption?	To ensure we can identify when superintelligent AI is wrong or not providing accurate information, we need to establish rigorous verification and validation processes. AI systems should be designed with explainability and transparency, allowing us to trace the logic behind their decisions. Additionally, implementing robust oversight mechanisms, including ethical guidelines and regular audits, will help prevent corruption. It's crucial to maintain a human-in-the-loop approach, ensuring that AI augments human decision-making rather than replacing it entirely. Building a diverse and interdisciplinary team to oversee AI development and deployment can also safeguard against biases and errors.
<b>Ben Norling - The Yellow Company Pty Ltd</b>	
Q for Ben - do you see evidence that independent reviews can support agencies to access funding and effect policy change?	In my experience, government is responsive to independent findings and recommendations. While departments can vet such advice, I have seen examples where independent reviews by external experts or respected advisors have influenced funding and policy decision making.
Ben Norling: How did your report of Social and economic impacts and their costs post event have in influencing the mitigation and future prevention activities - \$\$ RoI	Impact assessments historically had focussed on the reconstruction of built environment, which is the easiest cost to quantify. Deloitte's SEC Report commissioned demonstrated that direct and indirect social and economic impacts may be significantly higher when quantified in dollar terms. This exercise helps justify government expenditure on social and economic recovery and resilience programs, in addition to built and environment programs.
Ben Norling: Do you see any difference and/or relevance in Intra Action reviews as opposed to near real time monitoring?	Intra actions reviews are another term for what I consider periodic monitoring, which in my presentation I referred to as program or quarterly reviews. Intra-action reviews and periodic monitoring imply a set review process at certain points in time during an event, activity or program. Real time monitoring incorporates an element of live participation or ongoing observation of operations. I have seen a combination of real time observation and periodic reviews work well for longer term activities, such as disaster recovery programs.
Ben Norling: I can see how the monitoring is tracking program delivery but how do you know the lessons are learned?	The monitoring must be sophisticated enough to capture trends. Capturing trends requires continuity of process. For example, if a delivery partner is continually struggling to recover effectively from disaster events, then this is captured through the monitoring process, compared against historical performance (baseline) and actions are taken to improve outcome (e.g. capability uplift, training, intervention). If gradual improvement is not achieved each baseline, this can indicate that lessons are not being learned.



Links mentioned during Ben Norling's presentation:	<p>The national monitoring and evaluation framework is available on the AIDR website:  <a href="https://knowledge.aidr.org.au/resources/national-recovery-monitoring-and-evaluation/">https://knowledge.aidr.org.au/resources/national-recovery-monitoring-and-evaluation/</a>            QRA had commissioned their own state-level evaluation framework by Deloitte, although permission would need to be sought directly from them for access.            Yellow supported QRA to develop 15 evaluation reports, which have been published with links provided on the slide and below:  <a href="https://knowledge.aidr.org.au/me-search/disaster-page-holder/?id=24">https://knowledge.aidr.org.au/me-search/disaster-page-holder/?id=24</a>  <a href="https://knowledge.aidr.org.au/me-search/disaster-page-holder/?id=25">https://knowledge.aidr.org.au/me-search/disaster-page-holder/?id=25</a>  <a href="https://knowledge.aidr.org.au/me-search/disaster-page-holder/?id=26">https://knowledge.aidr.org.au/me-search/disaster-page-holder/?id=26</a></p> <p>The 15 evaluation reports include detail of the approach to evaluation, including key evaluation questions, in Appendix B of each report.</p>
<b>Zoe D'Arcy - Fire to Flourish</b>	
Zoe D'Arcy: How do you measure resilience? Baseline vs after your program?	<p>We currently are doing an assessment of the Fire to Flourish partner communities that will set a benchmark, or baseline. The plan is that further assessments can be done in future years. This will allow us to begin assessing the impact of the program.</p>
Zoe D'Arcy: What indicators or measures do you look at when considering community resilience?	<p>We are using a framework called the CRMC (Climate Resilience Measurement for Communities), which assess a range of indicators that look at general resilience, as well as hazard specific resilience. It's used worldwide by a range of organisations - mostly NGOs. More info can be found here <a href="https://floodresilience.net/resources/item/the-climate-resilience-measurement-for-communities-crmc/">https://floodresilience.net/resources/item/the-climate-resilience-measurement-for-communities-crmc/</a></p>
Zoe D'Arcy: Do you think that the changing demographics of Tenterfield have impacted community resilience and their ability to prepare for, and recover from these events?	<p>This is a really interesting question, for which there are no easy answers! The new people moving in certainly might not have the same knowledge of hazard risks in the Tenterfield landscape, but newcomers we spoke to were aware that they had to learn. They were also keen to contribute the communities' resilience through volunteer roles, through creating business and livelihood opportunities for young people, and more.</p>
Q for Zoe: Bhiamie Williamson recently shared info on the Fire to Flourish program. Can you share how traditional owners have been involved and benefited?	<p>In the Tenterfield area, we are fortunate to have two Indigenous staff members, who have strong connections to traditional owners in the region. For this specific project, we had members of the Moombahlene Local Aboriginal Land Council involved in the Advisory Group. In the broader Fire to Flourish program, there has been considerable effort to build relationships with, and work with the nearby discrete Aboriginal Community, Jubullum, to build their disaster resilience. The community workshops in Jubullum to begin that process just began this week, which is really exciting.</p>

Zoe, how do you guard against only the loudest voices being heard in your series of workshops? Is this an issue?	Always an issue! We are currently designing the granting process for the post-bushfire learning review to be a mix of workshops and also individual assessment of projects. In addition to that, we have to have processes in place to ensure minimal conflict of interests.
Zoe D'Arcy: has the NSW Cross-border commissioner been involved?	That's a really great suggestion - thank you!
Zoe D'Arcy: how do I link up lesson management with 'customer' and community feedback to inform continuous improvement and prioritisation. Any guidance gratefully received.	So, with this question, are you asking how you might consult with community during review processes, and use their feedback to improve agency processes? Great question. I suspect it has to be tackled with a willingness to actually engage and listen, to value the feedback, and to really take demonstrable actions based on the feedback received. This, in turn, could require relationship building on both sides to build trust. I'd be really interested in hearing your thoughts and experiences on this.
Zoe- did telling the community about having funding prior to the study influence and cause bias to their responses	Interesting question, and an issue I'm quite interested in as well. When we began this project, we actually didn't tell participants that we were going to have a grant round with funding attached to it. It wasn't until the final community workshop to gather data that the funding was brought up. And I felt that the attitudes in the room changed to be quite positive about suggesting possible solutions.
Zoe, were you able to use any lessons from the Mallacoota resilience programs?	Mallacoota, and Victoria in general, have provided some great examples of community-led initiatives in the disaster risk reduction and recovery space. As a researcher, and as a resident of NSW, I am always watching these initiatives with an eye to learn. Community-led initiatives from around Australia like this are also encouraged to join the Disasterwise network, which is a sister program to Fire to Flourish.
Zoe D'Arcy: When you take angry responses & aggregate them up, how do you explain that to communities who may not see the link between their input & your interpretation?	Great question. I do think that acknowledging community anger is important, as potential cultural 'mindsets' that need to be addressed to achieve systemic change. Otherwise, I do think that this as an issue that's probably always faced in lessons management - that people are always likely to suggest 'fixes' that don't address the systemic problems that create the issues.
Zoe D'Arcy: How did you ensure best and unbiased community representation in the group of advisors?	We require people who are part of the governance process to declare conflicts of interest, and where those conflicts exist, we try to address those. For example, if a member of the Lions club is on the Advisory Group, and the Lions club has bid for a grant, then that member cannot be part of the decision-making process about that bid.
Zoe D'Arcy: How do interact with the reconstruction authority and service NSW.	I have to admit that we haven't done that, but I think it would be a great idea.

Zoe-how do you go from coming in and hand-holding a community to them being resilient and prepared enough to do this by themselves?	This is a great question - and it's quite challenging because communities aren't really encouraged to self-organise to address these questions (other than becoming volunteer firefighters, or to join the SES - neither of which really look at systemic resilience). And there isn't a strong mechanism to really get community members to the decision-making table when agencies look at community risk.
Zoe: how can what you've learnt be used to inform other communities Australia-wide?	Some of the findings may have relevance for other communities within Australia - I suspect some of the more systemic issues will have a real resonance. But also, it may be that we find that this is a valuable way to work with communities after bushfires. If this is the case, then the methodology is nicely flexible and easily used - so the process is able to be replicated.
Thankyou - beautiful story re: the aerodrome such a fabulous win for the town a a real lesson identified then implemented to be a lesson learned. Outstanding!	Thank you - I was really impressed by the aerodrome effort as well. Just an amazing example of what people can achieve.
<b>Christine Miller - B4Crisis</b>	
Chris Miller: Any reflections of differences between WHO methodologies and Australian exercise and lessons methodologies.??	Answered on the presentation day. Quicker, but disappointingly less emphasis on next steps, implementation or action plans and lessons management

<p>Chris Miller: Two questions - approximately how long did it take to plan such an extensive exercise? And - when will the documentary be available?</p>	<p>Answered on the presentation day</p> <p>Tabletop Simulation Exercise (TTX) Nov 2022 - the idea was discussed and in play from April 2022, but more focused work did not begin until September/October 2022, which included 2 * 4.5 days of workshopping the risks, selecting a scenario, drafting the agenda and lead facilitator's guide; then drafting a SIMEX (Simulation Exercise) Handbook for the Ministry of Health (MoH), Kingdom of eSwatini. Lead Exercise Facilitators and evaluators were provided by the WHO, World Health Organization, African Office.</p> <p>Full scale field or functional simulation exercise (FSX) Nov 2023 - the idea was discussed and in play from April 2022, but more focused work did not begin until May 2023. The scenario was cholera. eSwatini reported an outbreak to WHO in April 2023, then debriefed and wrote a report. In June 2023, the eSwatini MoH hosted a TTX to 'test' the Cholera Operational Preparedness and Response Plan. WHO again provided the exercise facilitation team and evaluators. In October 2023, more preparedness residential workshops to prepare for the FSX were held in country assisted by a World Bank technical adviser. In November 2023, the FSX proceeded for 2 days with the closing ceremony initial briefing and report available the following day. A more detailed report was provided by February 2024. The World Bank and WHO funded a documentary, which is yet to be provided. I will follow that up to see if it is now ready to view.</p>
<p><b>Lee Dagleish and Tim Lewis-Nicholson - Emergency Management Victoria</b></p>	
<p>EMV: Did the community report have intentionally different language used to frame lessons and feedback when compared to the operational report</p>	<p>The lessons included in the Community Report were reviewed for technical language and readability, and slightly altered to ensure plain language was used to make sure the audience (the community) could understand the lessons easily.</p>
<p>EMV: Did you identify commonality in the mainstreaming process from this LGA level exercise that apply to Regional or State response arrangements?</p>	<p>An evaluation report was prepared for each of the 4 exercises in this project, that all include benefits and learnings. An overarching final project report is being prepared that will reflect on benefits and lessons of the project as a whole, many of which apply to exercising emergency management plans at all tiers.</p>
<p>EMV: Is the EMV exercises team in the same division or directorate as the lessons team? How easy or hard is it to ensure you are tightly connected?</p>	<p>The EMV Emergency Management Planning Team (where exercising sits) are in the Strategy and Capability Directorate and the Lessons and Improvement Team are in the Operations Directorate, so different Directorates. Even though we are in different directorates, the teams do feel connected, however it was Tim Lewis-Nicholson's initiative to link the lessons identified into the exercising project.</p>

EMV: You talked about the preparation for the workshop but did you have any learnings from running the sessions? Did you have a structured approach to workshops?	Yes there was a structure approach to the workshop, noting it focussed on a few key themes to allow discussion and not overwhelm the group. Learnings are captured in the exercise report and will in appropriately put into EM Share
<b>Cameron Scott - National Broadband Network</b>	
Cameron Scott: Do you think there is an issue of maturity of companies putting their hands up they did not do something well?	
Cameron Scott: What happened to the course and where can we learn about data collection and evaluation?	
Cameron Scott: How do you balance looking at specific themes for evaluation vs keeping the questions/debrief open to allow opportunity to raise new issues?	
Cameron Scott: A suggestion for the LM Forum - would you consider doing some collaborative work with the Australian Evaluation Society	
Cameron Scott: Do you be selective about which incidents to run this on? Or do you run for all?	
Cameron Scott: Whats is the feedback loop you employ to generate that buy-in and/or allow individuals to see what happens with their observations.	
<b>Mark Cuthbert - Australian Civil-Military Centre</b>	
Mark Cuthbert: Would a statutory protection for lessons management processes enhance the effectiveness?	
Mark Cuthbert: How can we submit follow up questions for the presenters after end of the conference today?	

Mark Cuthbert: Thoughts of influence by policy masters when engaging external consultants to deliver reviews but not accept and negatively influence report findings	
Mark Cuthbert: How can we target collection to identify things we don't already know vs collecting to evaluate what we do already know? Are these separate processes?	