

2017–18 Annual Assurance Summary

The Year in Review

Inspector-General for
Emergency Management



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Preface

The Inspector-General for Emergency Management's (IGEM) Annual Assurance Summary collates and provides a high-level summary of assurance activities conducted by different organisations and independent bodies across Victoria's emergency management sector (the sector).

In 2017–18, assurance activities were conducted at all levels of the emergency management system – organisational, system and independent – as described under the *Monitoring and Assurance Framework for Emergency Management*. This is a testament to the sector's commitment to learning and continuous improvement.

IGEM is currently undergoing a consultative process to refresh the *Monitoring and Assurance Framework for Emergency Management*, to ensure it is contemporary and relevant for the sector and reflects the enhancements to sector-wide assurance over the past three years.

At the system level, IGEM has continued to monitor and report to government on the implementation progress of recommendations from significant reviews and inquiries, such as the *Review of response into the thunderstorm asthma event of 21–22 November 2016* and the Hazelwood Mine Fire Inquiry, to ensure that valuable lessons are identified and embedded back into the emergency management system.

In 2019, IGEM will conduct a review into selected programs and arrangements put in place as part of 10 years of emergency management reform. Victoria embarked on this reform journey following the 2009 Victorian Bushfires and the worst floods in the state's history. Since the reforms commenced, the Victorian community has suffered a number of other significant emergencies including the Hazelwood coal mine fire in 2014, and the tragic thunderstorm asthma event of 2016. The review will consider the effectiveness of the reforms in enhancing how Victoria prepares for, responds to, and recovers from emergencies.

The *2017–18 Annual Assurance Summary* reflects another year of progress by the sector in implementing the reform agenda. This includes the introduction of legislative amendments to Parliament for new integrated emergency management planning arrangements, the reporting against performance standards for responder agencies for capability and response, and further work to reform Victoria's relief and recovery arrangements.

Assurance and continuous improvement are intrinsically linked and neither is possible without collaboration. I would like to take this opportunity to thank our emergency management partners for their support and acknowledge the sustained efforts demonstrated by the sector, and all its staff and volunteers, in working towards the shared vision of *safer and more resilient communities*.

Tony Pearce

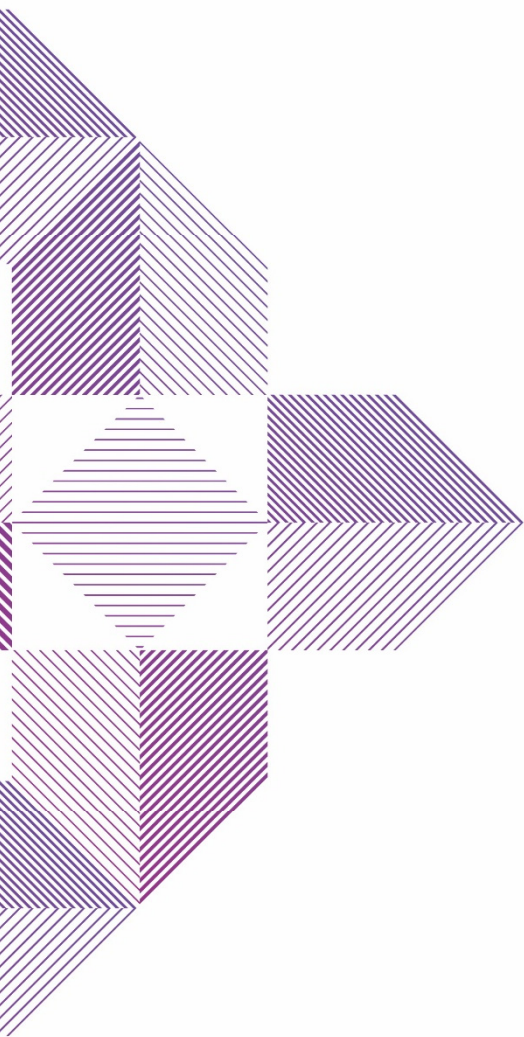
Inspector-General for Emergency Management

Contents

Preface	iii
Acronyms	v
Executive summary	1
1 Introduction	3
1.1 IGEM's role	3
1.2 Objective and scope	4
1.3 Approach.....	4
1.4 Reader's guide.....	4
2 Emergency management in Victoria	6
2.1 Governance	6
2.2 Operating context.....	9
3 Risk and resilience	10
3.1 Performance and risk overview.....	10
3.2 Progress against reform agenda.....	14
3.3 Future directions	16
4 Capability and response	18
4.1 Performance and risk overview.....	18
4.2 Progress against reform agenda.....	24
4.3 Future directions	25
5 Relief and recovery	27
5.1 Performance and risk overview.....	27
5.2 Progress against reform agenda.....	30
5.3 Future directions	31
6 Concluding remarks	32
7 References.....	33

Acronyms

CERA	Community Emergency Risk Assessment
CFA	Country Fire Authority
DELWP	Department of Environment, Land, Water and Planning
DHHS	Department of Health and Human Services
EMC	Emergency Management Commissioner
EMV	Emergency Management Victoria
EPA	Environment Protection Authority Victoria
ESTA	Emergency Services Telecommunications Authority
FRSC	State Crisis and Resilience Council Flood Recovery Subcommittee
ICT	Information and communications technology
IGEM	Inspector-General for Emergency Management
MFB	Metropolitan Fire and Emergency Services Board
NERAG	National Emergency Risk Assessment Guidelines
SAP	Victorian Emergency Management Strategic Action Plan
SCRC	State Crisis and Resilience Council
SESC	State Emergencies and Security Command of Victoria Police
SRT	State Review Team
VAGO	Victorian Auditor-General's Office
VICSES	Victoria State Emergency Service



Executive summary

Victoria's emergency management sector (the sector) and independent bodies conduct a range of assurance activities – such as inquiries, reviews and monitoring – to support the continuous improvement of emergency management in Victoria.

Assurance activities provide evidence to government and the community of the sector's ability to plan for, respond to and recover from emergencies. They may also highlight areas where improvements can be made.

The Annual Assurance Summary draws together and provides examples of significant assurance activities relating to all phases of emergency management – preparedness, response and relief and recovery.

Many of the system level assurance activities highlighted in this Annual Assurance Summary are undertaken by the Inspector-General for Emergency Management (IGEM), Emergency Management Victoria (EMV) and independent bodies.

Organisational-level assurance activities undertaken by emergency management sector organisations – such as debriefs, after action reviews and monitoring – make a vital contribution to broader system level assurance.

The year in assurance

Victorian communities were impacted by a wide range of emergency events in 2017–18, including the SKM Coolaroo Recycling Plant Fire in July 2017, the statewide flood and storm event in December 2017, the Flinders Street incident in December 2017, and the South West Complex Fires/Cobden-Camperdown Peat Fires in March–April 2018.

These events, as well as other less traditional emergencies such as the marine pollution event at Warrnambool and the devastating influenza season of 2017, tested the resilience of the Victorian community and stretched the capability and capacity of the sector.

Assurance activities such as reviews and debriefs allow the sector and the Victorian community to learn from these experiences and provide the platform for better preparedness for, response to and recovery from similar events in the future.

In 2017–18, IGEM continued to provide assurance in relation to bushfire fuel management through its investigation and reporting of planned burn breaches, and monitoring the implementation progress of ongoing recommendations from IGEM's 2015 *Review of performance targets for bushfire fuel management on public land*⁽¹⁾ and the 2015 *Independent Investigation of the Lancefield-Cobaw Fire*⁽¹⁾. In July 2018, the final outstanding action from the Victorian Bushfires Royal Commission – 49(i) *Develop guidelines for retrofitting Class 9 buildings* – was completed. This concludes the monitoring and reporting of all Victorian bushfires Royal Commission recommendations and the 315 associated actions.

The sector has continued to embrace a culture of continuous improvement, notably through EMV and sector partners capturing and sharing lessons from responses to emergency events in case studies published in the *Emergency Management Operational Review 2016–17*⁽²⁾. The review included theme updates highlighting the broad range of emergency management operational activity that occurred during 2016–17.

In March 2018, a multi-agency real time monitoring and evaluation team was deployed in response to the relief and recovery activities for the South West Complex Fires. The purpose of real time monitoring and evaluation is to add value to and support real time learning and improvement of emergency management activities. While deployed the team made a number of observations and gained insights that will be used to inform the development of the next Emergency Management Operational Review.

In 2017–18, IGEM undertook a major review to assess the effectiveness and impact of Victoria's current emergency management governance arrangements which came into effect in July 2014, following commencement of the *Emergency Management Act 2013*⁽³⁾.

2017–18 reform agenda highlights

Reform of Victoria's emergency management system continues to progress. In 2017–18, the sector made progress in a number of reform areas including:

- updating the *Victorian Emergency Management Strategic Action Plan*⁽⁴⁾ for the next three-year period (July 2017 to June 2020) to reflect the growth and progress across each of the statewide strategic priorities
- continuing collaboration between government and industry to improve the resilience of Victoria's critical infrastructure, as detailed in the *All Sectors Resilience Report 2017*⁽⁵⁾ for critical infrastructure resilience, which informs government on key emergency risks faced by, and interdependencies between, Victoria's critical infrastructure
- releasing the second annual *Critical Infrastructure Resilience – Implementation Progress Report 2017*⁽⁶⁾, which outlines the progress of the Victorian Government and industry partners in implementing Victoria's critical infrastructure resilience arrangements
- introducing the Emergency Management Legislation Amendment Bill 2018⁽⁷⁾ to Parliament, which sets up the framework for integrated emergency management planning in Victoria
- increasing understanding of the sector's core capabilities to effectively prepare for, respond to and recover from major emergencies, which is outlined in the *Victorian Preparedness Framework Update #1*⁽⁸⁾
- holding a number of workshops to progress the development of a Resilient Recovery Strategy to meet the intent of the *Victorian Emergency Management Reform White Paper*⁽⁹⁾.

IGEM notes the significant time and resources invested by emergency management sector organisations across Victoria to progress the reform program.

Conclusion

Assurance activities and implementation of improvement actions identified through those activities are critical to achieving the sector's vision of *safer and more resilient communities*.

IGEM commends the sector for continuing to embrace a culture of continuous improvement and maintaining the momentum to progress the reform agenda.

IGEM recognises that the sector, and all its people, have committed significant time and resources, in embarking on this reform journey and improving emergency management in Victoria.

In the next Annual Assurance Summary, IGEM will continue to report on performance, risks, and progress against the reform agenda.

1 Introduction

Victoria's emergency management sector (the sector) includes all agencies, bodies, departments and other persons who have a responsibility, function or other role in emergency management.¹

Over the years, numerous emergency management assurance reports have been produced by the sector or independent entities. The findings of these reports are often related or interdependent. However, before 2016, a consolidated view of sector assurance activities had not been produced.

The Inspector-General for Emergency Management (IGEM) now produces an Annual Assurance Summary to provide a high-level synopsis of sector assurance activities. This is the third Annual Assurance Summary.

The Annual Assurance Summary provides a sample of assurance activities that are undertaken throughout the sector, including agencies' assurance programs, sector-wide assurance activities and IGEM's monitoring and assurance activities.

IGEM acknowledges that it is not possible to capture each and every sector assurance activity in a concise summary report. The assurance activities highlighted are those which have broad applicability to the overarching emergency management arrangements in Victoria.

1.1 IGEM's role

IGEM is a legislated appointment established under the *Emergency Management Act 2013*⁽³⁾ (the Act) to:

- provide assurance to government and the community about emergency management arrangements in Victoria
- foster continuous improvement of emergency management in Victoria.

IGEM's assurance activities are guided by the *Monitoring and Assurance Framework for Emergency Management*⁽¹⁰⁾ (the Framework) which provides the foundation for a coordinated and collaborative approach to sector-wide assurance.

IGEM is currently undergoing a consultative process to refresh the Framework to ensure it is contemporary and relevant for the sector and reflects the enhancements to sector-wide assurance over the past three years. This includes better positioning IGEM to continue to meet its legislative objectives.

In March 2018, IGEM and the Inspector-General Emergency Management Queensland (IGEM Queensland) co-hosted an inaugural national assurance collaborative in Canberra.

The national assurance collaborative brought together similar organisations, from across Australian states and territories and New Zealand, to explore approaches to assurance in the emergency management sector. Specifically, the collaborative explored:

- concepts and models of assurance and parallels across jurisdictions
- enablers such as legislation, functions, roles, structures, workforce capability and stakeholder relationships
- learnings and lessons since IGEM and IGEM Queensland commenced operation, and from other jurisdictions
- opportunities for future collaboration, partnerships and influence.

IGEM delivered two presentations and discussed its approach to assurance of Victoria's emergency management arrangements, the Framework and its review, investigation and ongoing monitoring of the thunderstorm asthma event of November 2016.

¹ This definition is adopted from section 3 of the *Emergency Management Act 2013* (Vic)

IGEM intends to continue its involvement in national assurance dialogue to share knowledge and information across jurisdictions and leverage this to improve its own assurance practices.

1.2 Objective and scope

The objective and scope of the Annual Assurance Summary is to provide a high-level overview of sector assurance activities undertaken in 2017–18 and serve as a record of progress. The primary audience is the Minister for Emergency Services (the minister).

The Framework defines assurance as an expression or statement designed to increase the confidence of government and the community in the ability of the sector to plan for, respond to and recover from emergencies.

The sector and independent bodies, such as the Victorian Auditor-General's Office (VAGO), undertake assurance activities to measure and assess capability, capacity and performance.

Assurance activities typically include, but are not limited to, debriefs, audits, monitoring, reviews and evaluations.

1.3 Approach

To compile the Annual Assurance Summary, IGEM sourced publicly available reports on assurance activities conducted at the organisational, system and independent levels. These reports provide information on sector performance and risks, and describe progress against the reform agenda. IGEM also considered assurance activity outputs voluntarily provided by emergency management sector organisations.

IGEM also considers publicly available plans, strategies, guidelines and frameworks developed by the sector as these documents signal future directions of reform and the related assurance activities.

IGEM sources publicly available information to minimise burden on the sector.

IGEM prepares the Annual Assurance Summary in accordance with assurance principles outlined in the Framework. In particular, it adds value by providing a succinct, high-level overview of sector assurance activities and does not impose any additional burden on the sector.

The Annual Assurance Summary does not make any findings or recommendations.

1.4 Reader's guide

Following this introduction, the first part of the Annual Assurance Summary titled 'Emergency management in Victoria' describes the overarching governance and recent operating context for the sector in Victoria.

The next three parts provide the high-level overview of assurance activities undertaken by the sector during 2017–18. The parts correlate to the governance structure of the State Crisis and Resilience Council (SCRC) Sub-Committees, namely:

- Risk and Resilience
- Capability and Response
- Relief and Recovery.

Assurance activities are allocated as accurately as possible to one of these three themes even though some of them focus on matters which span more than one.

Under each theme, assurance activities are further categorised as follows:

- Performance and risk overview – outlines assurance activities which consider sector performance against relevant standards or which consider risks within the emergency management system.
- Progress against the reform agenda – outlines assurance activities which demonstrate progress made on reforms set out in *Victorian Emergency Management Reform White Paper*⁽⁹⁾ (the White Paper).
- Future directions—outlines assurance activities which are still taking shape as well as policies, strategies or plans which signal the future directions of reform progress and the related assurance activities.

The Annual Assurance Summary ends with ‘Concluding remarks’ which reinforce the importance of assurance activities in achieving the sector’s shared vision of safer and more resilient communities, while also recognising the time and resources that the sector and independent bodies devote to providing assurance.

2 Emergency management in Victoria

Victoria has a long history of emergencies, each with different characteristics, challenges and consequences. Over the past decade this has included animal health incidents, fires, floods, hazardous materials incidents, heatwaves, public health emergencies, locust plague, road/rail incidents, severe storms and tornadoes.

Emergency events like these can result in devastating losses and considerable social, economic and environmental impacts. This history demonstrates that emergencies may emerge at unpredictable times and can be triggered, magnified or mitigated by natural and human factors.

The shared vision for emergency management in Victoria is *safer and more resilient communities* with the shared, legislated objective of *a sustainable and efficient emergency management system that reduces the likelihood, effect and consequences of emergencies*.

The sector recognises that this shared vision and goal can only be achieved through all agencies, departments, industry, business, levels of government and community working together as one.

2.1 Governance

Strong governance is required to coordinate policies and strategies across the sector. Figure 1 depicts the overarching emergency management governance structure in Victoria.

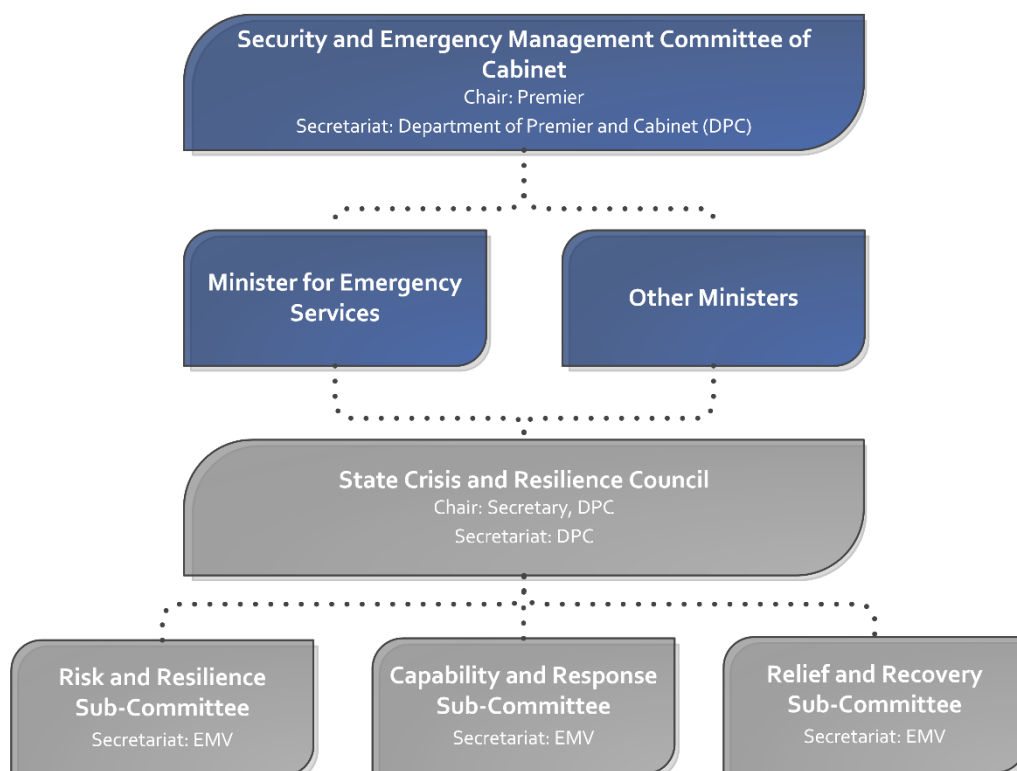
Following commencement of the Act on 1 July 2014, the SCRC was established to drive a more integrated approach to governance. The SCRC's role is to achieve integration by developing and coordinating policy and strategy and overseeing its implementation across the spectrum of emergency management functions. The SCRC membership comprises the:

- Secretaries of each government department
- Chief Commissioner of Police
- Chief Executive of Emergency Management Victoria (EMV)
- Emergency Management Commissioner (EMC)
- IGEM (as an observer)
- Chief Executive Officer of the Municipal Association of Victoria (as the representative of local government).

The SCRC is supported by three Sub-Committees: Risk and Resilience; Capability and Response; and Relief and Recovery. The SCRC and its Sub-Committees meet no less often than quarterly. They ensure integration and cohesion across the sector and enable the government to progress the reform agenda.

The SCRC Sub-Committees' membership is made up from a broad range of organisations with a role in emergency management.

Figure 1: Overarching emergency management governance structure in Victoria



SCRC key priorities

Every year the SCRC develops a list of key priorities, the delivery of which will realise its role as the peak crisis and emergency management advisory body to the Victorian Government. The priorities support the delivery of the reform agenda. The key priorities for 2017–18 were:

- strengthening resilience and risk mitigation to protect communities
- implementing a whole-of-government integrated approach to emergency management that meets future needs, including overseeing the implementation of the Emergency Management Sector Outcomes Framework
- implementing a next generation relief and recovery system for Victoria, including a focus on community led recovery and integration of emergency management activities before, during and after an emergency
- strengthening counter-terrorism, security, social cohesion and countering violent extremism
- testing changes to the natural disaster funding arrangements and advocating to the Commonwealth Government for an outcome that benefits Victoria
- providing ongoing oversight of the implementation of inquiry/audit recommendations and other findings, including from the Hazelwood Mine Fire Inquiries and the Victorian Government's response to the *Review of response into the thunderstorm asthma event of 21–22 November 2016*⁽¹¹⁾
- building diversity and inclusion in the sector, including the implementation of the *Emergency Management Diversity and Inclusion Framework*⁽¹²⁾.

IGEM's review of Victoria's emergency management governance arrangements

In 2017–18, IGEM conducted a review to assess the effectiveness and impact of Victoria's current emergency management governance arrangements which came into effect on 1 July 2014, following commencement of the Act.

IGEM has provided the review to government and it is currently being considered by the minister.

Victorian Emergency Management Strategic Action Plan

The Act requires that the SCRC develops a Strategic Action Plan (SAP) with a three-year outlook, and that IGEM monitor and report to the minister on the implementation progress of the SAP by emergency management sector organisations.

In July 2015, the first three-year SAP⁽⁴⁾ was released. It outlined statewide strategic priorities, with corresponding actions, to support the sector in achieving its vision of *safer and more resilient communities*. It is the overarching plan that guides an all communities, all emergencies approach to emergency management in Victoria. As a rolling plan, it is reviewed annually to realise the opportunities and meet the challenges that continue to arise for the emergency management sector.

In December 2017, IGEM published its second *Annual Progress Report - Victorian Emergency Management Strategic Action Plan Update 2016–19*⁽¹³⁾, covering the period 1 July 2016 to 30 June 2017. The report detailed progress against the SAP's⁽⁴⁾ 31 actions.

The report found that four actions were complete, 19 actions were underway and the remaining eight actions were due to commence in 2017–18. IGEM acknowledged that the four completed actions introduced new capability, approaches and resources across critical infrastructure, emergency management education, service delivery standards and information sharing.

Emergency Management Outcomes Framework

Since 2015, EMV has coordinated work with emergency management sector organisations to develop an approach for outcome measurement. The approach was initially organised around the four themes of the SAP⁽⁴⁾. In 2017, the approach was reorganised to align with the whole-of-Victorian Government architecture for outcomes measurement.

The theory behind outcomes measurement is that it provides government with an evidence based approach to assess the impact that services and systems have on an individual, community and statewide basis. The *Victorian Public Health and Wellbeing Outcomes Framework*⁽¹⁴⁾ developed by the Department of Health and Human Services (DHHS) is a published example of a framework developed using the whole-of-Victorian Government architecture.

In October 2017, EMV presented the reorganised Emergency Management Outcomes Framework as a draft proposal to the SCRC Sub-Committees. Working down from the vision of *safer and more resilient communities*, the draft framework describes domains, outcomes and outcome indicators.

EMV continues to coordinate development of the outcome measures – the metric or the method for quantifying change in the outcome – with reference to data already being collected in the sector.

IGEM is particularly interested in the development of the outcome measures given that, under the Act, IGEM has a function to develop and maintain a monitoring and assurance framework which includes outcome measures against which the capacity, capability and performance of the emergency management sector is to be assessed.

To avoid creating unnecessary burden and parallel processes, IGEM anticipates that it will leverage appropriate system-level outcome measures from among the outcome measures developed by EMV in consultation with the sector.

2.2 Operating context

The Victorian community was affected by a range of emergency events throughout 2017–18. Some of the events of note were the:

- SKM Coolaroo Recycling Plant Fire (July 2017)
- marine pollution event in Warrnambool (November 2017)
- statewide flood and storm event (December 2017)
- Flinders Street incident (December 2017)
- 2017 influenza season²
- South West Complex Fires/Cobden-Camperdown Peat Fires (March–April 2018).

During the 2017–18 summer season there were four extreme fire danger days and 31 severe fire danger days. Agencies responded to over 3800 bush and grass fires that resulted in 35,000 hectares burnt. DHHS issued 46 Heat Health Alerts and the Victoria State Emergency Service (VICSES) responded to over 12,000 requests for assistance as a result of wind/storm events.

A challenge for Victoria is climate change which brings more frequent and intense weather events, creating the potential of emergencies impacting communities more often. The challenge for the sector, and for the Victorian community, is working through how they can be more resilient to these events.³

The Victorian Government is currently undertaking work to identify emerging risks in the context of how acute shocks, such as bushfires, pandemics and acts of extreme violence, interact with chronic stresses, such as overpopulation and unemployment. This work seeks to better understand these emerging risks and how to leverage emerging opportunities, such as technology, to best place the sector to face these challenges in the future.



Image: Emergency Management Victoria

² The number of laboratory confirmed notifications of influenza in Victoria for 2017 was 48,121, compared to 12,924 for 2016 and 17,265 for 2015

³ <https://www.emv.vic.gov.au/news/a-message-from-the-commissioner-about-the-last-12-months>

3 Risk and resilience

The International Organization for Standardization defines risk as ‘the effect of uncertainty on objectives’.⁴ This definition of risk is clearer once put in context. In the context of emergencies, VICSES describes risk as ‘the outcome of interactions between a specific hazard (for example bushfires) and assets or functions that are of value to the human system’.⁵

The sector adopts a common definition of resilience as the ‘capacity of individuals, communities, institutions, businesses and systems to survive, adapt and thrive no matter what kind of chronic stresses and acute shocks they experience’.⁶

This part of the Annual Assurance Summary provides a high-level overview of assurance activities undertaken in 2017–18 which consider the sector’s management of emergency risks or the sector’s work to build resilience to chronic stresses and acute shocks.

IGEM notes that some assurance activities included in this part of the Annual Assurance Summary focus on matters which span more than risk and resilience. For example, while the subject matter also spans capability and response and relief and recovery, the implementation monitoring of recommendations and related actions flowing from the 2009 Victorian Bushfires Royal Commission is included in this part on the basis that the final ongoing action is resilience focused.

3.1 Performance and risk overview

Victorian Bushfires Royal Commission

The *2009 Victorian Bushfires Royal Commission Final Report*⁽¹⁵⁾ made 67 recommendations to improve the state’s preparation for, response to, and recovery from bushfires. Since then, the sector has undergone major reform, particularly through its commitment to an all agencies, all communities approach.

Between 2010 and 2014, the Bushfires Royal Commission Implementation Monitor was responsible for monitoring and reporting on the implementation of recommendations and associated actions. In 2015, IGEM assumed responsibility for monitoring the implementation of all remaining recommendations and related actions and tabled two annual reports in Parliament on the progress of these recommendations.

In its second and final annual report, IGEM concluded that it would not provide a further progress report to Parliament as only two actions remained ongoing. Instead, IGEM continued to monitor and report on progress directly to the minister.

In January 2018, IGEM briefed the minister that Action 49(h) *Amend Building Regulations 2016 to adopt performance requirements* was complete.

In July 2018, IGEM briefed the minister that Action 49(i) *Develop guidelines for retrofitting Class 9 buildings* was complete.

The completion of Action 49(i) concludes the monitoring and reporting of all Victorian Bushfires Royal Commission recommendations and the 315 associated actions.

⁴ International Organization for Standardization. *ISO 31000:2009 Risk management – Principles and guidelines*. Geneva: International Organization for Standardization; 2009.

⁵ Victoria State Emergency Service. *Community Emergency Risk Assessment, Informing Emergency Management Planning, Participant Workbook Version 2.0*. Online publication: Victoria State Emergency Service; 2014.

⁶ Emergency Management Victoria. *Community Resilience Framework for Emergency Management*. Melbourne: Emergency Management Victoria; 2017.

Bushfire fuel management

IGEM's 2015 *Review of performance targets for bushfire fuel management on public land*⁽¹⁶⁾ and the 2015 *Independent Investigation of the Lancefield-Cobaw Fire*⁽¹⁾ made recommendations to the Department of Environment, Land, Water and Planning (DELWP) relating to the State's bushfire fuel management program. The recommendations supported the transition to a risk reduction target for fuel management and encouraged government to broaden its approach to consider different forms of land tenure and alternative means of managing the risk of bushfires.

In January 2018, IGEM released its second, and final, *Annual Report - Implementation of recommendations on bushfire fuel management - October 2017*⁽¹⁷⁾ covering IGEM's recommendations to DELWP through both the review and the investigation. IGEM reported all recommendations from the review as complete or having transitioned to business as usual, and reported one recommendation from the investigation as complete and two ongoing.

Much of the activity to address the recommendations from the review and the investigation has been embedded within the program associated with the Victorian Government policy *Safer Together: A new approach to reducing the risk of bushfire in Victoria*⁽¹⁸⁾.

IGEM also oversees the reporting and investigation of any breaches of control lines by a planned burn. Therefore, IGEM will continue to monitor the ongoing recommendations and report on their progress as part of its annual summary of investigations into breaches of planned burn control lines.



Image: Christopher Petty

Planned burn investigations

The 2015 Lancefield-Cobaw Fire originated from a planned burn that breached control lines. As a result, the Victorian Government requested IGEM to manage the investigation of any further breaches of DELWP planned burns control lines, including the preparation of public reporting.

IGEM's second *Summary of investigation into DELWP breaches of planned burn control lines 2016–17*⁽¹⁹⁾ report was released in January 2018. In this report, IGEM made findings about systemic opportunities for improvement derived from its analysis of DELWP's breaches of control lines during 2016–17 and made recommendations aimed at reducing the potential of future breaches of planned burn control lines.

In its report, IGEM recognised that DELWP is committed to identifying and eliminating systems errors that may result in breaches of planned burn control lines. DELWP is also committed to incorporating identified learnings from investigations into sustainable enhancements to its own processes and procedures.

IGEM also highlighted in its report the cooperative approach to establish an accountable process for managing the investigation of planned burns that breach control lines. In turn this process has contributed to the continuous improvement of DELWP's risk assessment process for planning its bushfire fuel management on public land, and has assisted in enhancements to DELWP's internal assurance processes.

VICSES Community Resilience Strategy – year one outcomes

The *VICSES Community Resilience Strategy 2016–19*⁽²⁰⁾, released in July 2016, aims to provide guidance to VICSES staff and volunteers on how they can work together to build safer and more resilient communities by building capacity, increasing collaboration and fostering connections. It outlines a three-year road map for design, development, delivery and evaluation of future programs to build community resilience.

In February 2018, VICSES released its *VICSES Community Resilience Strategy Year One Outcomes Report*⁽²¹⁾. This report outlines the key highlights, activities and outcomes that have been achieved under the strategy during 2016–17.

A major focus during 2016–17 was the development of a draft Indicators and Evaluation Framework to measure the strategy outcomes, which are:

- individuals, households and businesses believe that preparing for future emergency events is important
- program and service delivery with others is collaborative, integrated and community-centred
- better connected communities that are able to adapt to future emergency events.

VICSES engaged with operational partners, external stakeholders and academia, and conducted interviews and workshops with volunteers and staff in developing the draft framework.

VICSES intends to finalise this work and its full suite of measures during 2018–19.

Community emergency risk assessment

VICSES has a role in facilitating the Community Emergency Risk Assessment (CERA) process. The CERA process was developed by VICSES in 2011, and reviewed and updated in late 2013, to provide Municipal Emergency Management Planning Committees with a multi-hazard framework for considering and improving the safety and resilience of their community before, during and after emergency events.

The CERA approach aims to understand the likely impacts of a range of emergency hazards on community assets, values and functions. It provides an opportunity for multiple community impacts and consequences to be considered and enables collaborative risk treatment plans and emergency preparedness measures to be described.

The outputs of CERA are then used to inform emergency management planning, develop risk action plans and ensure that communities are aware of, and better informed about, hazards and the associated emergency risks that may affect them.

In June 2017, VICSES released its *CERA Findings Report 2016–17*⁽²²⁾ which describes:

- the purpose and background of the CERA process
- how the CERA process works
- other complementary Victorian risk programs
- CERA results.

The report found that the top three most common hazards identified across Victoria were heatwave, bushfire and storm.

2018 Heatwave awareness campaign evaluation

In March 2018, DHHS commissioned an evaluation into the effectiveness of its 2018 heatwave awareness campaign, which comprised of a series of online and social media advertising and a radio live alert. This evaluation used previous research as a benchmark.

The evaluation involved an online survey of 1000 Victorians aged 18 years and older, and specifically sought to understand:

- perceptions around problem heat
- people's understanding of extreme heat and associated risks
- actions people take both in preparation for and during heatwave conditions
- attitudes and behaviour to children being left in cars
- where people source information regarding impending weather and for keeping healthy during extreme heat
- impact of the advertising.

The evaluation found that the campaign had been effective in reaching target audiences (those most vulnerable and those who attend to those seen to be vulnerable) and that radio and social media supported by online advertising remained an appropriate and cost effective channel similar to previous years.

The evaluation also made recommendations around continuing to target media and messaging to the more vulnerable audiences and their caretakers and exploring other channels (radio) to reach older Victorians.

Cyber security

The *Victorian Government Information Technology Strategy 2016–20*⁽²³⁾ released in May 2016 highlighted that the security of information and infrastructure is essential to the functioning of government and called for the development of a cyber security strategy. As a result, the Victorian Government *Cyber Security Strategy*⁽²⁴⁾ (the Cyber Security Strategy) was released by government in August 2017.

The Cyber Security Strategy applies to the whole of the Victorian public service and seeks to deliver confidence in the Victorian Government's information and communications technology (ICT) infrastructure and systems, and supports new government digital service delivery initiatives.

The Cyber Security Strategy outlines 23 actions that the Victorian Government is taking to improve cyber resilience, governance and approach both within government and with Victoria's major infrastructure and service providers. It relies on collaboration across governments, across service providers, with the university sector and with Victoria's ICT sector.

The 23 actions set out in the strategy are organised under five priorities of the government to uplift its cyber security capacity:

- engagement – whole-of-Victorian Government collaboration
- planning – the use of shared and common services over the three-year planning cycle
- partnering – leveraging relationships, internal capability and industry expertise
- service maturity – mitigating identified capability gaps
- capability – developing the right balance between in-house cyber security skills and appropriate use of managed security services.



Image: Shutterstock / Rawpixel.com

3.2 Progress against reform agenda

Critical infrastructure resilience

The need for an all hazards model for critical infrastructure resilience was identified in the White Paper⁽⁹⁾. On 1 July 2015, the Victorian Government introduced new emergency risk management arrangements for critical infrastructure resilience (the arrangements). The arrangements included Part 7A of the Act, the *Critical Infrastructure Resilience Strategy*⁽²⁵⁾, the Ministerial Guidelines for Critical Infrastructure Resilience, and the *Emergency Management (Critical Infrastructure Resilience) Regulations 2015*⁽²⁶⁾.

Under the arrangements, IGEM has a role in monitoring, reviewing and assessing critical infrastructure resilience at a system level. Since mid-2015, IGEM has monitored implementation of the arrangements, assessed incremental improvements and identified improvement opportunities.

In its *Critical Infrastructure Resilience – Implementation Progress Report 2017*⁽⁶⁾, IGEM found that overall government organisations are working collaboratively with their respective critical infrastructure sectors in implementing activities in line with the intent of the arrangements. The report outlined many examples of good practice among industry and government, including information sharing and cross-sector exercising, as well as improvement opportunities for further consideration.

As per the arrangements, EMV publicly released its second annual *All Sectors Resilience Report 2017*⁽⁵⁾ in December 2017. This report drew upon the collaborative work undertaken by portfolio departments and industry throughout 2016–17 to improve the resilience of Victoria's critical infrastructure and manage emergency risks to it. This report described Victoria's critical infrastructure resilience arrangements, outlined key emergency risks and dependencies faced by Victoria's critical infrastructure sectors, and provided an overview of Victoria's eight critical infrastructure sectors.

In relation to the energy sector nationally, in October 2016, the Council of Australian Governments Energy Council ministers agreed to an independent review of the national electricity market to take stock of its current security and reliability and to provide advice to governments on a coordinated national reform blueprint.

The review was conducted by an Expert Panel led by Dr Alan Finkel AO, Australia's Chief Scientist. The final report, *Independent Review into the Future Security of the National Electricity Market - Blueprint for the Future*⁽²⁷⁾ was released in June 2017. The report outlines a plan to maintain security and reliability in the national electricity market in light of the significant transition underway, including due to rapid technological change.

More specific to the Victorian energy sector, on 19 January 2017 the Minister for Energy, Environment and Climate Change announced an independent review of Victoria's electricity and gas network safety framework, to be chaired by Dr Paul Grimes.

An interim report⁽²⁸⁾ was released in October 2017 for public comment, prior to the preparation of the final report. The interim report⁽²⁸⁾ presented findings and 43 draft recommendations focused on strengthening the capabilities and regulatory approach of the regulator, Energy Safe Victoria, underpinned by consolidated and improved legislation.

Also in the past year, VAGO tabled its *ICT Disaster Recovery Planning*⁽²⁹⁾ audit in Parliament. The report examined the ICT systems critical for the operations of government agencies and their effectiveness in remaining available and continuing to operate reliably in the event of a disruption (refer to section 5.1 for more information).

Emergency management planning

In accordance with the strategic priorities outlined in the White Paper⁽⁹⁾, EMV is leading the reforms to Victoria's emergency management planning arrangements.

The Emergency Management Legislation Amendment Bill 2018⁽⁷⁾ (the Bill) was introduced to Parliament in February 2018. It passed the Legislative Assembly and was introduced to the Legislative Council in March 2018.

The amendments in the Bill set up the framework to reform emergency management planning in Victoria. The reform seeks to establish an integrated, coordinated and comprehensive approach to emergency management planning at the state, regional and municipal levels that brings together planning for before, during and after emergencies.

To support the implementation of the planning arrangements, EMV, in partnership with the sector, is developing new emergency management planning guidelines for the state, regional and municipal levels. The guidelines will describe how to implement the new arrangements from plan development to assurance.

Under the new arrangements, IGEM is expected to have an assurance role to monitor, review and assess emergency management planning at a system level.



Image: Emergency Management Victoria

3.3 Future directions

State emergency risk assessment review 2017

Since 2006, a number of state-level emergency risk assessment projects have been undertaken in Victoria to determine the state's priority emergency risks. The results of the risk assessments are used to guide strategic decision-making for the management of these priority emergency risks.

The results of the state-level emergency risk assessments undertaken in 2012–13 were publicly released in February 2014, published in *Emergency Risks in Victoria – Report of the 2012–13 State Emergency Risk Assessment*⁽³⁰⁾.

EMV, in collaboration with the sector, is currently undertaking the state emergency risk assessment review to confirm the appropriateness of the state's priority emergency risks, the controls in place and their effectiveness and, if required, revise the risk characterisation in line with the updated *National Emergency Risk Assessment Guidelines 2014*⁽³¹⁾ (NERAG).

EMV is undertaking the project in three stages:

- engaging key stakeholders
- assessing emergency risks (using NERAG)
- final reporting of Emergency Risks in Victoria.

Between August and October 2017, expert stakeholder workshops were convened to review 17 different emergency risks based on high and credible worst case risk scenarios in line with NERAG. The next and last step is to develop the final public report.

High-risk communities

Under its *Annual Forward Plan of Reviews 2017*⁽³²⁾, IGEM conducted a review to assess the effectiveness of how the emergency management sector identifies, plans for and mitigates the consequences of emergencies for high-risk communities.

The review examined the processes and tools the emergency management sector uses for identifying high-risk communities, the vulnerabilities in those communities and how the sector addresses these issues in their planning and response processes. The review draws on the known risks identified within the *Emergency Risks in Victoria – Report of the 2012–13 State Emergency Risk Assessment*⁽³⁰⁾ and other risk identification processes to select a range of case studies to identify if, and how emergency risks are being addressed for those most at risk.

IGEM worked closely with subject matter experts and research entities and engaged with relevant emergency management sector organisations at the state, regional and local levels, and consulted with communities to inform the review.



Image: Country Fire Authority

4 Capability and response

The sector defines capability as its collective ability to reduce the likelihood and consequences of an emergency before, during and after it occurs.⁷

For the purposes of the *Emergency Management Manual Victoria (EMMV)*, *Part 3 State Emergency Response Plan*⁽³³⁾, emergency response is described as the action taken immediately before, during and in the first period after an emergency to reduce the effect and consequences of emergencies on people, their livelihoods and wellbeing, property and the environment, and to meet basic human needs.

This part of the Annual Assurance Summary provides a high-level overview of assurance activities undertaken in 2017–18 which consider the sector's capability to reduce the likelihood and consequences of an emergency or the sector's response to an emergency.

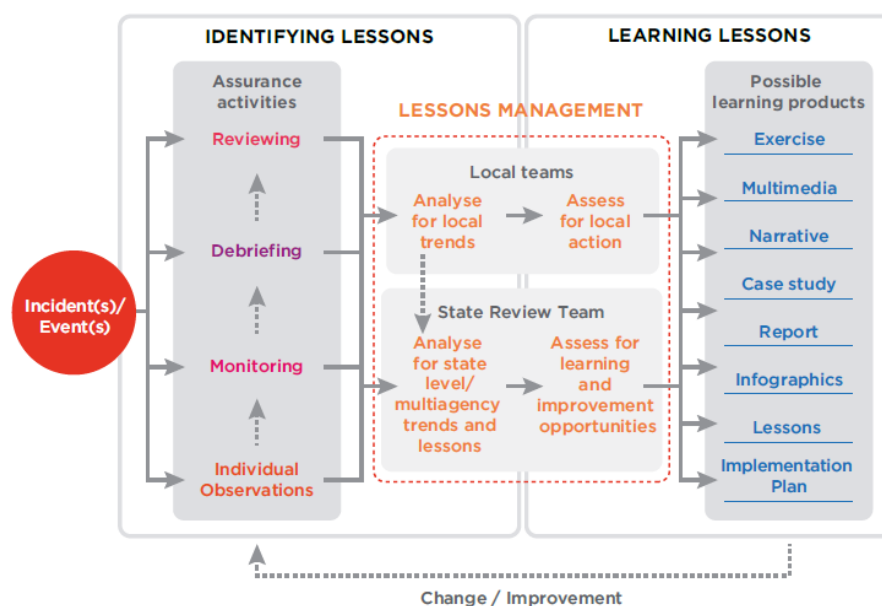
4.1 Performance and risk overview

Lessons management

EMV released the *Emergency Management Operational Review 2016–17*⁽²⁾ (the Operational Review) in October 2017. The Operational Review is part of an ongoing cycle of learning and improvement, and aims to highlight good practice, changes and improvements that have occurred across the Victorian emergency management sector during 2016–17.

The Operational Review is developed with support from the State Review Team (SRT), which comprises representatives from more than 16 sector organisations. The SRT provides guidance and advice on assurance activities and the identification of state-level and multi-agency lessons. As part of this role, the SRT promotes learning within the sector through a lessons management role in line with the sector's *EM-LEARN Framework*⁽³⁴⁾. As shown in Figure 2, lessons management involves the identification and learning of lessons captured through assurance activities occurring before, during and after emergencies – including debriefing, monitoring and reviews.

Figure 2: Lessons management in the sector



⁷ Emergency Management Victoria. *Victorian Preparedness Framework 2017*. Online publication: Emergency Management Victoria; 2017.

The Operational Review provides an overview of the operating context, presents 13 case studies about specific operations or exercises from which lessons are identified and then presents lessons on cross-cutting themes. The case studies span the spectrum of preparation, response and recovery and include non-traditional emergencies such as the Springvale bank fire incident and the Essendon Fields aircraft crash.

EM-Share⁽³⁵⁾ is an online platform that is intended to support lessons sharing and learning, including the development of the Operational Review. It was designed to enable communities, businesses, and industry to submit their observations, stories and experiences, so that these can be analysed by agencies and the relevant lessons shared for the purposes of continuous improvement.

Real time monitoring and evaluation

Real time monitoring and evaluation is an assurance activity used to monitor operational performance, systems and processes and to evaluate the effectiveness of emergency management activities. It can add value to the management of emergencies by providing real time feedback to personnel and confidence and assurance to the EMC on the overall management of emergencies.

EMV developed its Real Time Monitoring and Evaluation Program: 2017–2020 Strategy in July 2017. The vision of this strategy is to develop and maintain a single program of qualified and supported evaluators that can be deployed to perform real time monitoring and evaluation before, during and after major emergencies.

The strategy seeks to combine several existing monitoring and evaluation processes within the sector into a single program for more efficient and effective real time monitoring and evaluation that focuses on multi-agency processes, coordinated data collection and improved transparency.

Under the strategy, the real time monitoring and evaluation process will be applied primarily during the readiness, response, relief and early recovery phases of major emergencies. It will not be applied to emergency management planning, preparedness, prevention, exercising, long-term recovery and non-operational activities, except under exceptional circumstances as determined by the EMC in consultation with SRT.

The strategy does not prevent agencies, departments and local governments from undertaking assurance activities relevant to their areas of emergency management responsibility.

Victoria Police – State Emergencies and Security Command

The State Emergencies and Security Command (SESC) of Victoria Police works closely with EMV and emergency management sector organisations to achieve positive outcomes for Victoria in terms of safety and community resilience.

Prior to the start of each summer season the SESC provides:

- a state-level pre-summer season briefing before summer each year to Superintendents across Victoria. The focus of the 2017–18 briefing was on the importance of the Incident Emergency Response Coordinator role, and the associated legislative responsibilities
- a pre-season update for the minister and the Chief Commissioner of Police
- an opt-in pre-season webinar update for officers across the state.

SESC also performs an annual assurance process to check the level of emergency response readiness and to provide assurance to the Deputy Commissioner Regional Operations through the State Emergency Response Coordination Division.

In October each year, starting at the local area, each Municipal Emergency Response Coordinator (a Victorian Police officer) checks whether key emergency response plans, information sources and forums are in place, reviewed and understood. The Municipal Emergency Response Coordinator's report is the first in a series of reports which are validated, consolidated and built upon through the hierarchy of the State Emergency Response Coordination Division to the SESC, culminating in a Statement of Assurance to the Deputy Commissioner Regional Operations.

After the summer season, SESC facilitates a post-season debriefing for Superintendents and also prepares a booklet of case studies on a selection of incidents to share learnings.⁸ Each case study provides an overview of the incident and highlights what worked well and what could be improved upon.

Under the EMMV⁽³⁶⁾, Victoria Police is responsible for the effective coordination of emergency response within regions and/or municipal areas. An element of Victoria Police's emergency response coordination role is to ensure that the control agency for an emergency completes an operational debrief for the emergency response.



Image: Shutterstock / Leonard Zhukovsky

CFA training college at Fiskville

In May 2016, the Environment, Natural Resources and Regional Development Committee of Parliament (the Committee) tabled its *Inquiry into the CFA Training College at Fiskville Final Report*⁽³⁷⁾ in Parliament. The Committee made 125 findings and 31 recommendations.

On 24 November 2016, the Victorian Government tabled *Victorian Government's Response to the Environment, Natural Resources and Regional Development Committee's Inquiry into the CFA Training College at Fiskville*⁽³⁸⁾ supporting in full, in-principle or in part each of the recommendations. The Victorian Government also developed its commitments in response to the 31 recommendations.

⁸ Case studies: Summer season 2016–2017: Lessons from the past – readiness for the future

The minister requested IGEM to report on the implementation progress of the government commitments and to develop an assurance framework, including a monitoring regime that considers the safety of the operations of Victoria's Emergency Management Training Centres.

IGEM developed the assurance framework in consultation with relevant agencies and departments with a lead role in implementing the government commitments. The assurance framework describes IGEM's approach to:

- monitoring the implementation of the government's commitments in response to the recommendations
- providing oversight of the safety of the operations of Victoria's Emergency Management Training Centres in close consultation with WorkSafe Victoria and in accordance with IGEM's legislative functions.

WorkSafe is the Occupational Health and Safety (OHS) regulator for Victoria and IGEM does not have powers to oversee or ensure agencies comply with the OHS legislation and regulations. Therefore, IGEM's role involves providing oversight of WorkSafe's OHS compliance monitoring program, which covers eight training centres across the state.

IGEM expects to report to government on the implementation of the government's commitments in July 2018.



Image: Country Fire Authority / Blair Dellemijn

Fire services' response times

Since 30 October 2017, Victoria's fire services – Country Fire Authority (CFA) and the Metropolitan Fire and Emergency Services Board (MFB) – have published quarterly reports^(39, 40) of their response time data to provide greater transparency.

The Victorian Government has requested IGEM to implement an independent assurance process, which will ensure the ongoing integrity of fire services' response time data, including analysis of the data and measures to inform the development of future response strategies.

Previous audits and reviews including the Victorian Auditor-General's Office's report on *Emergency Service Response Times*⁽⁴¹⁾ made important findings and recommendations regarding response time data reporting systems and processes, IGEM has considered these as a basis to guide its assurance activities in this area. IGEM expects to deliver its first fire services' response time data assurance report to government in August 2018.

Emergency call-taking and dispatch

Under the *Emergency Services Telecommunications Act 2004*⁽⁴²⁾, IGEM determines the non-financial performance standards for the Emergency Services Telecommunications Authority's (ESTA's) delivery of services. IGEM establishes these standards in consultation with relevant emergency services organisations. The Act requires IGEM to monitor and investigate ESTA's performance and report any related issues to the minister.

IGEM prepares half-yearly and annual performance summaries of ESTA. The reports detail ESTA's performance against the standards and matters relevant to investigations and implementation monitoring. From July 2017 to May 2018 inclusive, IGEM conducted 33 screenings⁹ and completed two investigations.

This included an investigation into ESTA's management of eight separate cases involving the November 2016 thunderstorm asthma event. This investigation was provided to the Coroner as evidence for the ongoing coronial process relating to the 2016 thunderstorm asthma event.

Statewide flood and storm event public information and warnings

The statewide flood and storm event in December 2017 provided VICSES and the sector with an opportunity to gain insights into how the Victorian community responded to public messaging disseminated before, during and after the event through mass media, social media, targeted warnings and the use of Emergency Alert (text messages to mobile phones).

The high confidence and extreme nature of forecast rainfall led to an unprecedented level of public information and warnings including:

- the use of Emergency Alert to distribute 7.4 million text messages to prepare Victorians
- a tactical advertising campaign of online and live reads advising of the rain event on radio
- extensive social media messaging with over 1000 individual posts across VICSES, VicEmergency and other emergency webpages reaching in excess of 1.6 million users
- substantial coverage on traditional media with numerous news conferences and other reporting.

VICSES commissioned social research into the community's views on the public information and warnings associated with the event. The social research involved surveying over 3800 Victorians approximately two to three weeks after the event. The research found:

- two-thirds of surveyed Victorians were aware of the event before it started, enabling them to prepare if necessary
- television and radio were most important for alerting people, but 20 per cent of surveyed Victorians turned to the internet and social media for more information
- evidence of the demand for information that is local, timely and contains practical tips on what to do and where to go
- the vast majority of Victorians welcomed the Emergency Alert text messages they received and thought it was important.

VICSES has shared the findings of the research with the sector and will coordinate the development of an action plan with sector organisations.

Thunderstorm asthma and rapid-onset emergencies

In December 2016, the Victorian Government requested that IGEM review the emergency response to the thunderstorm asthma event. The *Review of response to the thunderstorm asthma event of 21–22 November 2016, Final Report*⁽¹¹⁾ (the review) was published in April 2017.

⁹ Prior to commencing an investigation, IGEM conducts a screening to examine the issues of the matter and, depending on the level of risk, may proceed with a formal investigation.

The review made 16 recommendations to improve preparedness and response arrangements for future rapid-onset emergencies and the performance of health and emergency management systems and processes in Victoria. All recommendations were accepted in-principle by the Victorian Government.

In May 2017, the minister requested IGEM to monitor the implementation of recommendations from the review.

IGEM has worked closely with the lead agencies DHHS and EMV to monitor the progress of these recommendations and will continue to do so throughout 2018. IGEM will also continue to monitor the longer-term effectiveness of improvements made in response to the review.

IGEM provided its report on the implementation progress of the 16 recommendations to government in May 2018.



Image: Shutterstock / sw_photo

Improving Victoria's air quality

In Victoria, EPA is the agency primarily responsible for monitoring, regulating and reporting on the state's air quality and conducts emergency monitoring as part of the Victorian emergency management system to respond to major pollution events, for example the SKM Coolaroo Recycling Plant fire in July 2017.

An *Independent Inquiry into the Environment Protection Authority Victoria* (EPA)⁽⁴³⁾ in 2016 recommended that EPA assess the adequacy of its air monitoring networks, and consider options to improve data sharing and accessibility, and community communications. The Victorian Government accepted all the recommendations relating to air quality monitoring.

In March 2018, VAGO tabled in Parliament its *Improving Victoria's Air Quality*⁽⁴⁴⁾ audit report that examined whether Victoria's air quality meets national standards for pollutant components such as ozone and particulate matter.

VAGO made five recommendations for EPA in its report, and one further recommendation for EPA and DELWP.

The report made key findings referring to recommendations from the 2016 inquiry report, on EPA's ambient air quality monitoring, the effectiveness of EPA's campaign and emergency monitoring stations, and reporting on air quality. The report also covered the importance of ensuring accountabilities are understood and coordination is achieved across all government agencies that undertake functions that impact air quality, including DELWP.

4.2 Progress against reform agenda

Building sector preparedness

In May 2017, the *Victorian Preparedness Framework*⁽⁴⁵⁾ (the Preparedness Framework) was released to provide a method to understand sector capability requirements and the critical tasks required to deliver core capabilities.

The Preparedness Framework was developed as a planning tool to assist the sector to understand the capabilities required for all stages of a major emergency.

In May 2018, EMV released the *Victorian Preparedness Framework Update #1*⁽⁴⁶⁾, to provide an update on how the Preparedness Framework is being put into action across the sector through a series of case studies.

The Preparedness Framework is designed to be a flexible and agile construct that will be continually reviewed as it evolves and adapts, in line with changing risks, government policies and sector reform.

Emergency management performance standards

The Act requires that the EMC develop and maintain operational standards for the performance of emergency management functions by responder agencies in line with action set out in the White Paper.

The SAP⁽⁴⁾ calls for the development of performance standards to guide effective and efficient governance and to enable the sector to measure its performance so that there will be a clear understanding of the roles and responsibilities for emergency management in Victoria.

In December 2015, the EMC released the first tranche of standards for the capability and response functions of responder agencies. In December 2016, the EMC released the second version of the *Victorian Emergency Management Performance Standards*⁽⁴⁶⁾ (the Standards), which included standards for risk and resilience and relief and recovery functions for responder agencies.

Responder agencies¹⁰ reported against the capability and response standards for the period 1 July 2016 to 31 December 2016.

The capability and response standards are organised into three functions, each with six minimum requirements:

- capability development (six minimum requirements with 15 indicators)
- readiness and response (six minimum requirements with 18 indicators)
- public information (six minimum requirements with 16 indicators).

Responder agencies are only required to report against minimum requirements that relate to the emergency management functions that they undertake.

For the next reporting period, responder agencies are required to report against the full suite of standards that includes risk and resilience and relief and recovery functions.

¹⁰ The relevant responder agencies reporting for the period 1 July 2016 to 31 December 2016 were CFA, DELWP, EMV, MFB and VICSES.

IGEM is interested in the potential for the reporting against the Standards to inform and provide evidence for broader assurance activities. For example, IGEM's legislated role in evaluating statewide training and exercising arrangements (refer to section 4.3 for more information).

Contingent on the appropriateness and quality of the information, IGEM would seek to leverage the reporting against the Standards as an input to the selection and timing of assurance activities, as well as a source of evidence to avoid creating unnecessary burden and parallel information gathering processes.

VICSES capability and capacity

In March 2018, VICSES launched its *Strategic Plan 2018-2022*⁽²⁰⁾ which also links to actions 18 and 19 in the White Paper.

The development of the strategy started in February 2017 with the release of a Discussion Paper to VICSES' members and key partner agencies. This was followed by 13 information and feedback sessions with around 300 of its members – volunteers and staff – across the state. Feedback from these sessions, together with feedback collected via email and from a member review panel, has informed the development of the strategy and forms the basis of the strategic themes.

The strategy adopts a holistic approach to operational service delivery that focuses on volunteers and staff members and the provision of knowledge, skills and resources to enable VICSES to deliver its services safely and effectively.

The strategy outlines five strategic themes which VICSES will develop action plans for. These are:

- local solutions for local problems
- interoperable service delivery
- member career focus
- creating a capability mindset
- supporting flexible structures.

4.3 Future directions

Emergency management volunteers

The Value of Volunteers, Volunteering and Volunteerism (3Vs) project seeks to identify the different types of value provided by emergency management volunteers, including supporting measures and data, to support effective policies, practices and decision-making.

This project was delivered in collaboration with volunteers, industry experts and agencies. A Volunteer Consultative Forum endorsed Reference Group has guided the project design, methodology, engagement, stakeholder management and links to the sector.

In August 2017, EMV released the project's interim report⁽⁴⁷⁾ which provides an overview of the findings and recommendations from a literature review, research analysis and qualitative interviews. The interim report⁽⁴⁷⁾ also details potential approaches and methods to develop a more robust view of the value of volunteers, volunteering and volunteerism.

Exercising

The conduct and management of exercises is a key element in developing, enhancing and maintaining capability within the sector. Exercises are an essential component of preparedness by improving capability and contributing to organisational learning and continuous improvement.

EMV developed an Exercise Framework and Exercise Program 2018–2021 which outlines, at a high-level, the concept and types of exercises for single and multi-agency capability development activities. The framework highlights that exercise evaluation is an integral component of any exercise, and that an evaluation coordinator should be involved from the concept development phase of an exercise.

To support the implementation of the framework, EMV has developed an exercise portal to provide a single point of reference for organisations involved in the development and conduct of exercises. The portal seeks to enhance consistency in the design, planning, conduct and evaluation of multi-agency exercises through a statewide exercise calendar and a library of reference materials.

Under the Act, IGEM has a role in evaluating statewide training and exercising arrangements. IGEM plans to adopt a progressive approach to assurance of statewide training and exercising arrangements that reflects the importance, complexity and longer-term nature of this work. IGEM will not unnecessarily create any new reporting requirements and will seek to leverage outputs created under the arrangements to inform its assurance activities.



Image: Emergency Management Victoria

5 Relief and recovery

The *State Emergency Relief and Recovery Plan*⁽⁴⁸⁾ defines relief as ‘the provision of assistance to meet the essential needs of individuals, families and communities during and in the immediate aftermath of an emergency’. It defines recovery as ‘the assisting of persons and communities affected by emergencies to achieve a proper and effective level of functioning’ and explains that recovery is generally a longer-term process. It clarifies that both relief and recovery begin when an emergency occurs and that many response, relief and recovery activities are undertaken concurrently.

This part of the Annual Assurance Summary provides a high-level overview of assurance activities undertaken in 2017–18 which consider the arrangements for and the sector’s performance in relief and recovery.

Some assurance activities included in this part of the Annual Assurance Summary focus on matters that span across more than relief and recovery alone. For example, even though the subject matter spans risk and resilience and capability and response, the implementation monitoring of recommendations, affirmations and actions from the Hazelwood Mine Fire Inquiry is reported in this part on the basis that they have a strong community recovery focus.

5.1 Performance and risk overview

Hazelwood Mine Fire Inquiry

IGEM assumed sole responsibility in mid-2016 for monitoring the implementation of the recommendations and affirmations of the *Hazelwood Mine Fire Inquiry Report*⁽⁴⁹⁾ in response to the Hazelwood mine fire in 2014.

The *Hazelwood Mine Fire Inquiry: Victorian Government Implementation Plan*⁽⁵⁰⁾ released in June 2016 set out 246 actions to fulfil the government’s commitment to implement the recommendations and affirmations of the 2014 and 2015–16 Inquiry reports.

In December 2017, IGEM published its second *Hazelwood Mine Fire Inquiry - Annual Report 2017*⁽⁵¹⁾ on the progress of implementation of recommendations and affirmations from the Inquiry reports. IGEM found that 187 of the 246 actions set out in the implementation plan were completed, with key areas of progress across state and local government, community and industry.

IGEM reported overall, that significant progress has been achieved to improve emergency planning and coordination, health outcomes and mine rehabilitation in the Latrobe Valley following the Hazelwood mine fire. IGEM noted that the implementation of many actions required extensive and ongoing community consultation or collaboration with stakeholders across government and industry.

IGEM will continue monitoring the implementation of ongoing recommendations and affirmations and report to Parliament on progress annually until 2019.

SKM Coolaroo Recycling Plant fire review

In August 2017, IGEM commenced a review of the fire that broke out at the SKM Coolaroo Recycling Plant in July 2017.

With the fire involving high hazard materials and occurring in a densely populated area, there were similarities surrounding this fire and the 2014 Hazelwood mine fire.

IGEM's *Review of SKM Coolaroo Recycling Plant Fire*⁽⁵²⁾ was released on 14 December 2017. The review found that significant lessons had been learned from the Hazelwood mine fire, and that improvements arising from the Hazelwood Mine Fire Inquiry had been applied during the Coolaroo fire. This included rapid deployment of air quality monitoring to inform health advice for local community, as well as making information available on the EPA website.

South West Complex Fires/Cobden–Camperdown Peat Fires

The South West Complex Fires of March 2018 burnt through around 15,000 hectares with 26 houses and 63 sheds lost, as well as machinery, thousands of livestock, pasture and silage.

The ensuing Cobden–Camperdown Peat Fires of March–April 2018 also contributed to poor air quality in the surrounding areas due to smoke from burning peat.¹¹ Smoke from burning peat can reduce air quality and may contain fine particles, water vapour, and gases including carbon monoxide, carbon dioxide and nitrogen oxides. It may also contain sulphur compounds which are odorous.

A number of people were relocated from zones around the peat fires and relief centres were established for people seeking respite. Air monitoring and community health monitoring stations were also established.

A real time monitoring and evaluation team was deployed in March 2018 in response to the relief and recovery activities for the South West Complex Fires. The purpose of real time monitoring and evaluation is to add value to and support real time learning and improvement of emergency management activities.

The team focused on three themes:

- transition and integration of response and recovery
- capability and resource management
- recovery governance.

Overall, the team identified 13 insights¹² across the three themes. The observations and insights collected for this event were uploaded to EM-Share⁽³⁵⁾, which in turn will inform the development of the Emergency Management Operational Review 2017–18.

Flood recovery

Beginning in September 2016, Victoria was impacted by a protracted flood event which affected 51 of Victoria's 79 local government areas and caused over \$150 million worth of damage. During this period, there were more than 150 flood warnings and advice messages issued across the state, and several severe storm events which impacted metropolitan and regional locations.

The State Crisis and Resilience Council Flood Recovery Subcommittee (FRSC) was established on 19 September 2016. It brought together senior representatives across nine government departments and agencies to ensure effective coordination of recovery activities, timely government decision-making and to prioritise recovery investment.

The need for more robust and systematic monitoring and evaluation activities was a key recommendation of VAGO's *Flood Relief and Recovery*⁽⁵³⁾ audit report tabled in Parliament in June 2013. Recognising this, FRSC placed significant importance on capturing key learnings from the 2016 floods to support improved recovery initiatives and arrangements for future events.

¹¹ Peat is created gradually in wetlands through the build-up of partially decayed vegetation and once it has been ignited, it is very difficult to extinguish.

¹² Insights occur when there are multiple observations and pieces of evidence which have a similar root cause. As a general rule, real time monitoring and evaluation teams seek to have a minimum of three observations or pieces of evidence for each insight.

Therefore, as part of developing the closure report that was provided to government in June 2017, FRSC also conducted an evaluation involving an online survey of FRSC members, key regional recovery representatives and affected local governments. The evaluation examined key work areas such as reporting, communications and coordination of services.

ICT disaster recovery

VAGO tabled its *ICT Disaster Recovery Planning*⁽²⁹⁾ audit report in Parliament on 29 November 2017.

In this audit, VAGO examined the ICT disaster recovery processes of Victoria Police and four departments that provide essential government services – Department of Economic Development, Jobs, Transport and Resources, DELWP, DHHS and the Department of Justice and Regulation – to assess whether their ICT disaster recovery processes are likely to be effective in the event of a disruption.

Overall, the report concluded that the audited organisations did not have sufficient assurance that they can recover and restore all of their critical systems in the event of a disruption or disaster.

The audited organisations accepted all 15 recommendations made by VAGO, and have developed action plans to address the recommendations.

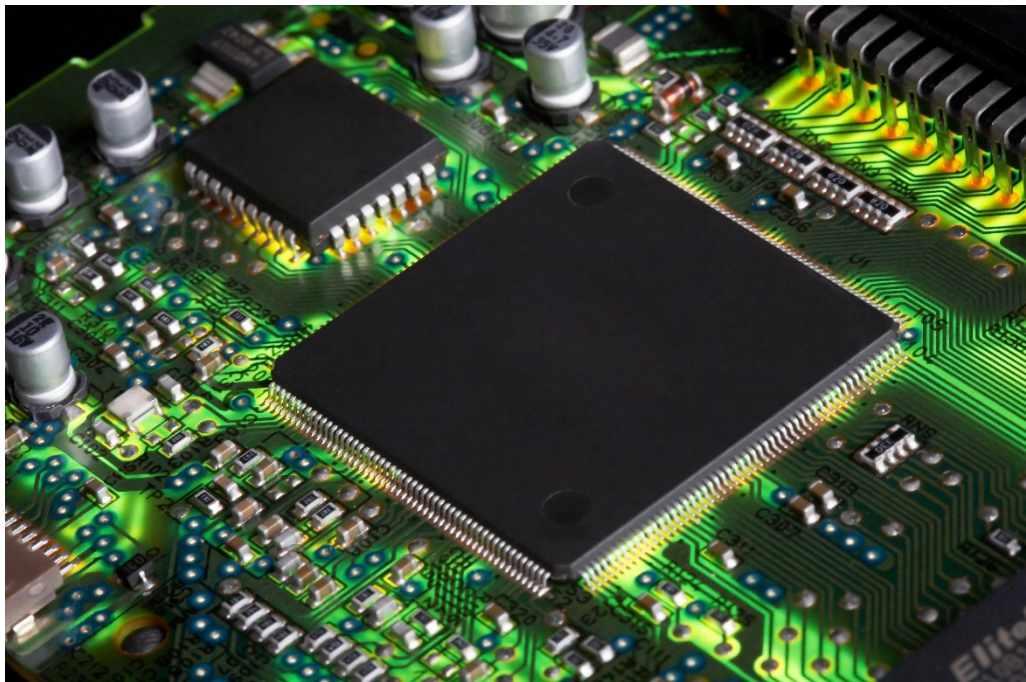


Image: Shutterstock / Volodymyr Krasnyuk

5.2 Progress against reform agenda

Reforming relief and recovery

The White Paper⁽⁹⁾ recommended a range of improvements to relief and recovery arrangements to enable communities to participate in their own recovery.

In February 2017, EMV released the *Resilient Recovery Discussion Paper*⁽⁵⁴⁾ (the Discussion Paper), which aimed to generate discussion on challenges and opportunities within relief and recovery in Victoria and enable collaboration on the development of a future strategy. The paper introduced a proposed model of resilient recovery that seeks to connect community systems and networks to support and plan for community outcomes of wellbeing, viability, sustainability and liveability.

EMV sought feedback from the sector, businesses and the community on the Discussion Paper, in order to develop the Resilient Recovery Strategy. Based on the feedback received, EMV identified a need to gain consensus on three key elements:

- the case for change to Victoria's relief and recovery system
- an outcomes framework for the relief and recovery system
- the role of government in relief and recovery.

EMV ran a series of workshops with key stakeholders between November and December 2017 to work through these three elements and the next steps in the development of the Resilient Recovery Strategy, which are:

- finalising actions in consultation with local government stakeholders
- developing relief and recovery specific indicators and measures
- finalising principles for the role of government in relief and recovery.

In May 2018, in partnership with DHHS, EMV began a second stage of consultation with a series of workshops across the state targeted at local councils, community, industry, regional and local stakeholders. The purpose of these workshop was to test these initial ideas and further develop a strategy for sector-wide reform.

Following these workshops, EMV will continue to work with key stakeholder to refine and finalise the Resilient Recovery Strategy.



Image: Emergency Management Victoria

5.3 Future directions

Evaluation of community recovery programs and initiatives

In June 2017, Victoria was selected as one of two states to participate in a formal trial of *A Monitoring and Evaluation Framework for Disaster Recovery Programs*⁽⁵⁵⁾, an outcomes based framework which seeks to ensure that disaster recovery programs can be evaluated for their effectiveness, and that these evaluations are undertaken in a consistent way.

The Australian and New Zealand School of Government led the development of the framework, with significant contributions from all states and territories through the Australia-New Zealand Emergency Management Committee Recovery Sub-Committee.

The framework aims to provide a consistent approach to the evaluation of any individual disaster recovery program, and will contribute to a body of knowledge that will allow the lessons learned from each evaluation to feed into an evidence base that will improve subsequent disaster recovery programs.

The Victorian trial focused on outcomes-based evaluations for recovery programs in Mildura, including concessional loans and clean-up and recovery grants for primary producers, and community and wellbeing events.

The findings from the trial will be used to inform the next iteration of the national framework, and continue to inform the Victorian approach to monitoring and evaluation of community recovery programs and initiatives.

Impact assessment and consequence management

Under its *Annual Forward Plan of Reviews – 2018 Forward Projection of Reviews*⁽⁵⁶⁾ IGEM will conduct a review into selected arrangements for impact assessment and consequence management in the sector to ensure alignment to performance expectations, leading practice and intended community outcomes.

The SAP⁽⁴⁾ requires the sector to implement a comprehensive impact assessment model across all hazards and all phases of emergency management, taking into consideration the national Impact Assessment Model. The model includes a process to collect, analyse and communicate impact information, to better inform response, and relief and recovery planning processes.

A range of initiatives relating to consequence management are also underway within the sector, including the development of a consequence management paper by EMV and consequence-focused emergency management planning.

IGEM will conduct an analysis of initiatives and programs associated with impact assessment and consequence management within the sector to further refine the focus of its review.

6 Concluding remarks

IGEM commends the sector for embracing a culture of continuous improvement and maintaining the momentum in progressing the reform program.

Assurance activities and implementation of improvement actions identified through assurance activities are critical to achieving the vision of *safer and more resilient communities*.

IGEM recognises the time and resources committed by the sector, and all its people, in embarking on this reform journey and improving emergency management in Victoria.

IGEM will continue to report on performance, risks, progress against the reform agenda and future directions in the 2019 Annual Assurance Summary.



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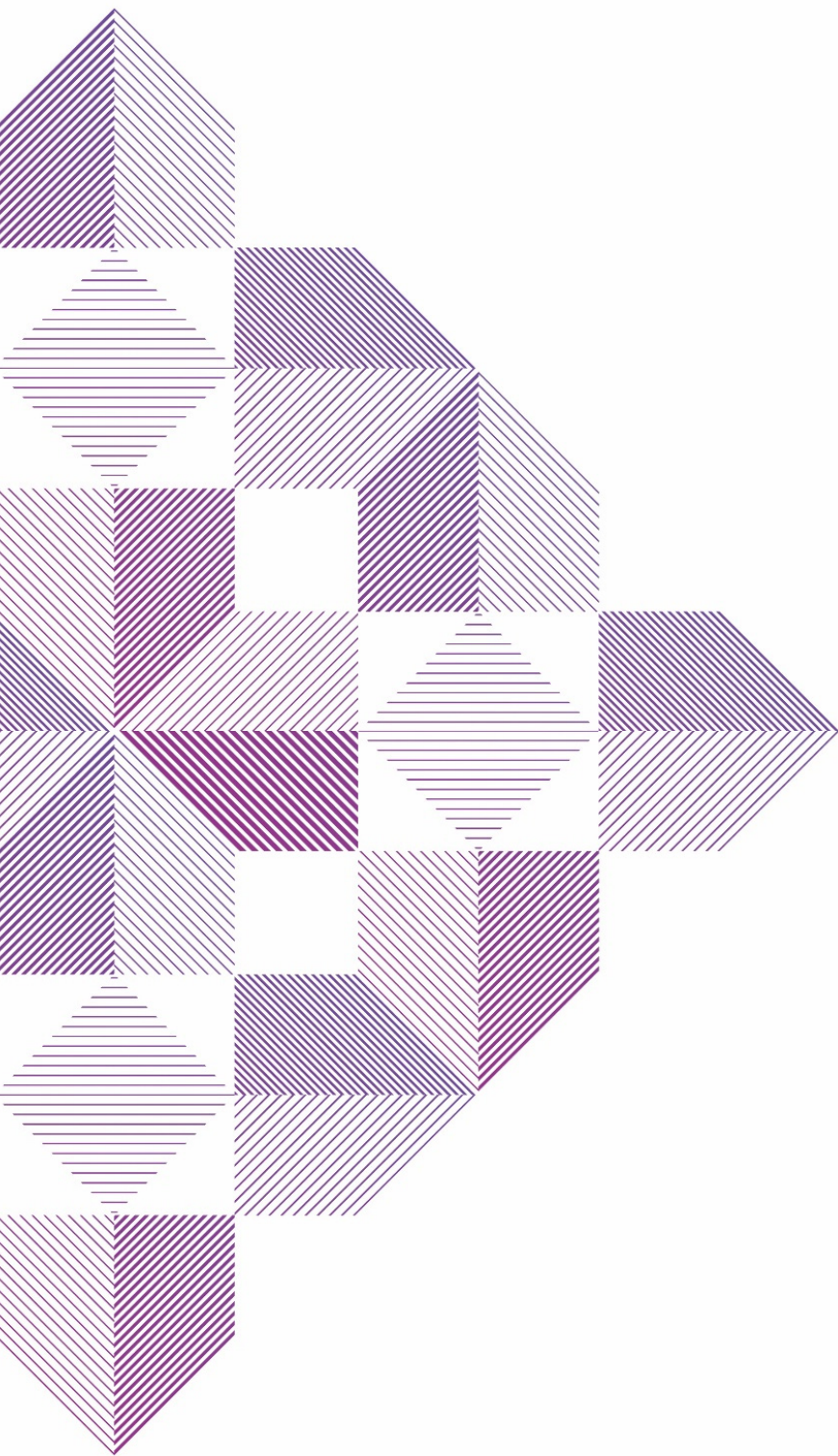
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