

Progress Report Victorian Bushfires Royal Commission

Implementation of
recommendations
and actions

1 August 2015

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Preface

This is the first progress report prepared by the Inspector-General for Emergency Management (IGEM) on the implementation progress of the recommendations and associated actions from the 2009 Victorian Bushfires Royal Commission.

Established on 1 July 2014, IGEM provides assurance to government and the community in respect of emergency management arrangements in Victoria and fosters continuous improvement of those arrangements.

Regular monitoring and reporting on progress of the implementation of desired changes is an integral element of IGEM's assurance role, enabling us to determine if the implementation of state-based improvements in emergency management arrangements are effective and sustainable in the long-term and are actively contributing to achieving the sector's vision of 'safer and more resilient communities'.

The establishment of IGEM is one of the many reforms introduced to strengthen the State's emergency management arrangements through the enactment of the *Emergency Management Act 2013* (the Act).

Since his appointment in 2010, Bushfires Royal Commission Implementation Monitor, Mr Neil Comrie AO, APM produced a total of four progress updates on implementation actions in relation to the Royal Commission recommendations. In his final report tabled in August 2014, he advised that implementation of 56 of the 67 recommendations was complete.

Following the conclusion of Mr Comrie's appointment in 2014, the Victorian Government asked IGEM to monitor recommendations and related actions from the 2009 Royal Commission reported as 'ongoing' in his 2014 annual and final report.

The progressive implementation of the 67 recommendations has provided a platform for continuous improvement in the State's emergency management arrangements, and consistent with the provisions of the Act, it is fitting that as the State's new emergency management assurance body, IGEM continues monitoring implementation of the remaining recommendations and actions.

It is also fitting that IGEM continues this implementation monitoring function utilising the same robust and transparent approach established by Mr Comrie.

As detailed in this first annual report, of the 21 actions previously reported by Mr Comrie as ongoing, IGEM has identified eight actions that are now complete and two that have been closed.

IGEM considers the sector to be making satisfactory progress towards completing the implementation of the remaining seven recommendations and 11 actions – many of which are scheduled for completion within the next 12 months.

While bushfire will always be present in Victoria's landscape, over time the emergency management sector has improved its capability to manage the consequences of such emergencies.

It is essential however, that lessons from all emergencies are identified, and turned into sustainable improvements in our emergency management arrangements that make a lasting difference for Victorian communities.

Tony Pearce
Inspector-General for Emergency Management

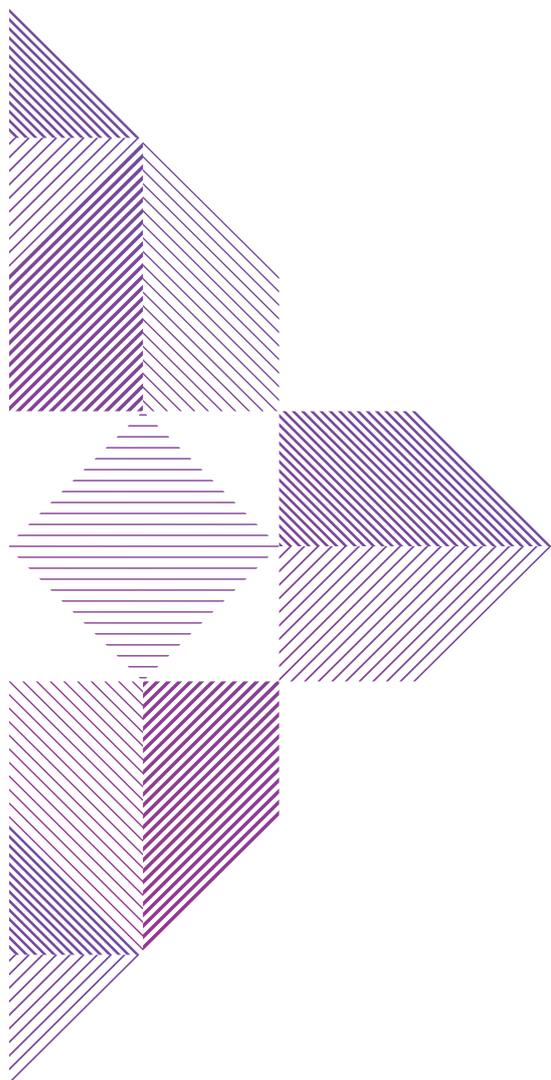
Acronyms

ACR	Automatic Circuit Recloser
BAL	Bushfire Attack Level
BNHCRC	Bushfire and Natural Hazards Cooperative Research Centre
BRCIM	Bushfires Royal Commission Implementation Monitor
CFA	Country Fire Authority
DEDJTR	Department of Economic Development, Jobs, Transport & Resources
DELWP	Department of Environment, Land, Water & Planning
DPC	Department of Premier & Cabinet
EA	Emergency Alert
EARDS	Enhanced Aircraft Request and Dispatch Service
EMCOP	Emergency Management Common Operating Picture
EMV	Emergency Management Victoria
ESV	Energy Safe Victoria
ICT	Information and Communications Technology
IGEM	Inspector-General for Emergency Management
MFB	Metropolitan Fire & Emergency Services Board
MFPO	Municipal Fire Prevention Officer
NAFC	National Aerial Firefighting Centre
NFDRS	National Fire Danger Rating System
OSOM	One Source One Message
PBSP	Powerline Bushfire Safety Program
PBST	Powerline Bushfire Safety Taskforce
PRF	Powerline Replacement Fund
PSP	Precinct Structure Plan
R&D	Research and Development
REFCL	Rapid Earth Fault Current Limiter
RIS	Regulatory Impact Statement
RMRCC	Regional Mobile Radio Command Communications
RRDS	Regional Radio Dispatch Service
SERP	State Emergency Response Plan
VBA	Victorian Building Authority
VBRC	Victorian Bushfires Royal Commission
VICSES	Victoria State Emergency Service
VINE	Victorian Information Network for Emergencies

Contents

Preface	iii
Acronyms	iv
Executive summary	2
1. Introduction	6
2. Background	7
3. Approach	8
4. Reader's guide	10
5. Status of VBRC implementation actions	11
6. Progress update of VBRC implementation actions	12
7. Action 20(d) update	27
8. Concluding remarks	28
9. References	29

Executive summary



This is the first progress report by the Inspector-General for Emergency Management (IGEM) on the implementation progress of the 2009 Victorian Bushfires Royal Commission (VBRC) recommendations and associated actions from 17 May 2014 to 1 May 2015.

The Bushfires Royal Commission Implementation Monitor (BRCIM) tabled his 2014 Annual Report in Parliament on 5 August 2014. It was the BRCIM's final report and listed 11 recommendations and 21 associated implementation actions as ongoing (Section 5, p.11).

On 2 September 2014, the Victorian Government requested IGEM complete a progress report by 1 August 2015 on all ongoing VBRC recommendations and actions, including advice as to when each action had been satisfactorily implemented, and to do so annually until all of the implementation actions are complete.

Overall, IGEM has found evidence of satisfactory progress being made with the implementation of the remaining recommendations and actions reported as ongoing in the BRCIM's 2014 Annual Report.

The completion of three further actions relating to the Powerline Bushfire Safety Program (PBSP) is tangible evidence of progress with this major, ten-year program that will reduce the likelihood that Victoria's electricity distribution system will be the cause of a catastrophic bushfire in the future.

Significant progress is being achieved with proposed reforms to emergency management planning legislation. The reforms include emergency management planning arrangements that will be implemented with the proposed Emergency Management Planning Bill, scheduled to be introduced into Parliament by September 2016.

Another major achievement was the passage in Parliament of the *Inquiries Act 2014* in September last year. The State now has a comprehensive and flexible framework for the establishment and conduct of three forms of executive inquiry (Royal Commission, Board of Inquiry and Formal Review).

IGEM is pleased to note the completion of the Resilient Community Program (formerly Fire Ready Communities). The program included 20 projects, funded to a value of \$1.5 million that will help communities in high-risk, bushfire-prone areas to be safer and better prepared.

Of the 21 actions previously reported by the BRCIM as ongoing, eight are now complete and two have been closed.

Overall, seven recommendations and 11 actions remain ongoing.

Summary of implementation progress Completed and closed actions

IGEM assigned each action a status based on an assessment of implementation progress (Table i).

Table i: Implementation status descriptions

STATUS	DESCRIPTION
Complete	Action has been satisfactorily implemented.
Closed	An action may be closed if: <ul style="list-style-type: none"> the intent of the action can no longer be met, or the action is long-term, progressing satisfactorily with robust governance arrangements in place. The IGEM will continue to monitor the progress of the action through the lead agency's annual report until the IGEM deems that the action has been satisfactorily implemented.
Ongoing	Action will continue to be monitored.

VBRC recommendations and actions that have been completed or closed since the BRCIM's 2014 Annual Report and up to 1 May 2015 are listed in Table ii and Table iii, respectively.

Table ii: Closed and complete VBRC recommendations

RECOMMENDATION	STATUS
<p>Recommendation 3</p> <p>The State establish mechanisms for helping municipal councils to undertake local planning that tailors bushfire safety options to the needs of individual communities. In doing this planning, councils should:</p> <ul style="list-style-type: none"> urgently develop for communities at risk of bushfire local plans that contain contingency options such as evacuation and shelter document in municipal emergency management plans and other relevant plans facilities where vulnerable people are likely to be situated, for example, aged care facilities, hospitals, schools and child care centres compile and maintain a list of vulnerable residents who need tailored advice of a recommendation to evacuate and provide this list to local police and anyone else with pre-arranged responsibility for helping vulnerable residents evacuate. 	Complete
<p>Recommendation 4</p> <p>The State introduce a comprehensive approach to shelter options that includes the following:</p> <ul style="list-style-type: none"> developing standards for community refuges as a matter of priority and replacing the 2005 Fire Refuges in Victoria: Policy and Practice designating community refuges – particularly in areas of very high risk – where other bushfire safety options are limited working with municipal councils to ensure that appropriate criteria are used for bushfire shelters, so that people are not discouraged from using a bushfire shelter if there is no better option available acknowledging personal shelters around their homes as a fallback option for individuals. 	Complete
<p>Recommendation 7</p> <p>The Commonwealth lead an initiative through the Ministerial Council for Police and Emergency Management, facilitated by Emergency Management Australia, to develop a national bushfire awareness campaign.</p>	Closed
<p>Recommendation 67</p> <p>The State consider the development of legislation for the conduct of inquiries in Victoria – in particular, the conduct of royal commissions.</p>	Complete

Table iii: Closed and complete VBRC actions

RECOMMENDATION	REFERENCE	ACTION	STATUS
1	1(k)	National Research Program – forecasting fire risk	Closed
7	7(a)	Development of national bushfire awareness campaign	Closed
3	3(e)	Role of Municipal Fire Prevention Officers (MFPOs) in planning/prevention	Complete
	3(k)	Review emergency and fire management planning regimes	Complete
	3(q)	Fire Ready Communities	Complete
4	4(a)	Development of shelter options as part of revised Bushfire Safety Policy Framework	Complete
27	27(d)	Targeted work program for distribution businesses to reduce bushfire risk	
		(iii) Research and Development (R&D) funding used to test Powerline Bushfire Safety Taskforce (PBST) findings for Automatic Circuit Reclosers (ACRs) settings for future bushfire seasons	Complete
		(viii) Confirmation of capability of Rapid Earth Fault Current Limiter (REFCL) to provide cost effective bushfire risk mitigation without impairing power reliability or quality	Complete
		(x) Installation of first replacement powerline in high bushfire risk areas	Complete
67	67(a)	Develop a policy proposal for a Public Inquiries Bill	Complete

Action 1(k) is linked to the National Fire Danger Rating System project, a long-term program that is likely to extend for several years. IGEM is satisfied that robust governance arrangements are in place for this program and has closed the action.

Action 7(a) has been progressed in Victoria, as recommended by the BRCIM. The sector's bushfire awareness activities are considered to be 'business as usual' and, although the action is not complete, its original intent has changed. Action 7(a) and its related recommendation are now closed.

Actions 3(e), 3(k), 3(q), 4(a), and 67(a) are complete, therefore fulfilling Recommendations 3, 4, and 67 respectively.

Three of the four actions relating to the PBSP, (Actions 27(d)(iii), (viii) and (x)) are complete.

Ongoing actions

VBRC recommendations and actions that IGEM has assessed as ongoing are listed in Table iv.

Table iv: Ongoing VBRC actions

RECOMMENDATION	REFERENCE	ACTION	STATUS
1	1(n)	Ensure integration of One Source One Message (OSOM) and Emergency Alert	Ongoing
13	13(a)	Review state of disaster provisions in the <i>Emergency Management Act 1986</i> (EM Act) to introduce a graded scale of emergency declarations	Ongoing
	13(b)	Amend the State Emergency Response Plan (SERP) based on amendments to the EM Act re: state of disaster	Ongoing
22	22(i)	Standardise interconnections of radio networks between CFA and DEPI	Ongoing
	22(k)	Fire agencies to develop and enhance fire information systems and upgrade existing tools such as FireWeb	Ongoing
27		Targeted work program for distribution businesses to reduce bushfire risk	
	27(d)	(ix) Energy Safe Victoria (ESV) considers new standards for powerline construction in highest bushfire risk areas	Ongoing
49	49(h)	Amend Building Regulations 2006 to adopt performance requirements	Ongoing
	49(i)	Develop guidelines for retrofitting class 9 buildings	Ongoing
56	56(d)	Increased planned burning to 390,000 ha	Ongoing
	56(f)	Identify changes required to effectively and efficiently achieve the target planned burn	Ongoing
59	59(b)	Amend operational manuals and guides and advise all staff	Ongoing

The remaining action relating to Recommendation 27, 27(d)(ix) *Energy Safe Victoria considers new standards for powerline construction in highest bushfire risk areas*, is scheduled for completion in June 2016.

The four actions grouped under 27(d) are milestones in a major program consisting of five significant projects scheduled for completion in 2022. The completion of Action 27(d)(ix) will conclude IGEM's monitoring responsibilities in relation to Recommendation 27.

Action 49(i) *Develop guidelines for retrofitting class 9 buildings*, was described by the BRCIM in his 2014 report as 'problematic'. This action is linked to Action 49(h) *Amend Building Regulations 2006 to adopt performance requirements*, which is well overdue. Guidelines for retrofitting Class 9 buildings cannot be developed until the amendments to the Building Regulations 2006 are made.

The Department of Environment, Land, Water & Planning (DELWP) has advised that options relating to the amendment of the Building Regulations 2006 to extend bushfire construction requirements to 'vulnerable use' buildings, as anticipated by this action, are expected to be developed following a decision on the most effective approach to mapping bushfire hazard in Precinct

Structure Plan areas. This is expected in September or October 2015.

Implementation of Action 49(h) will be considered in the context of planning and building changes since 2012, whether the problem still exists and, if so, how it should be addressed.

The regulatory options previously assessed in relation to bushfire construction requirements for vulnerable use buildings will be reviewed and updated (including, if necessary, preparation of a revised Regulatory Impact Statement (RIS) for consultation purposes). If a new RIS is required, DELWP expects that new regulations would be in place by late 2016.

IGEM urges DELWP to progress this action as a priority, recognising its significantly overdue status.

Actions 56(d) and 56(f) will remain ongoing until the government hands down a decision on recommendations made in the IGEM's report, *Review of performance targets for bushfire fuel management on public land*.

Overall, IGEM considers that the ongoing actions are progressing satisfactorily, with most actions likely to be implemented within the next year.

1. Introduction

The 2009 Victorian Bushfires Royal Commission (VBRC) made 67 recommendations to improve the State's preparation for, response to, and recovery from bushfires.

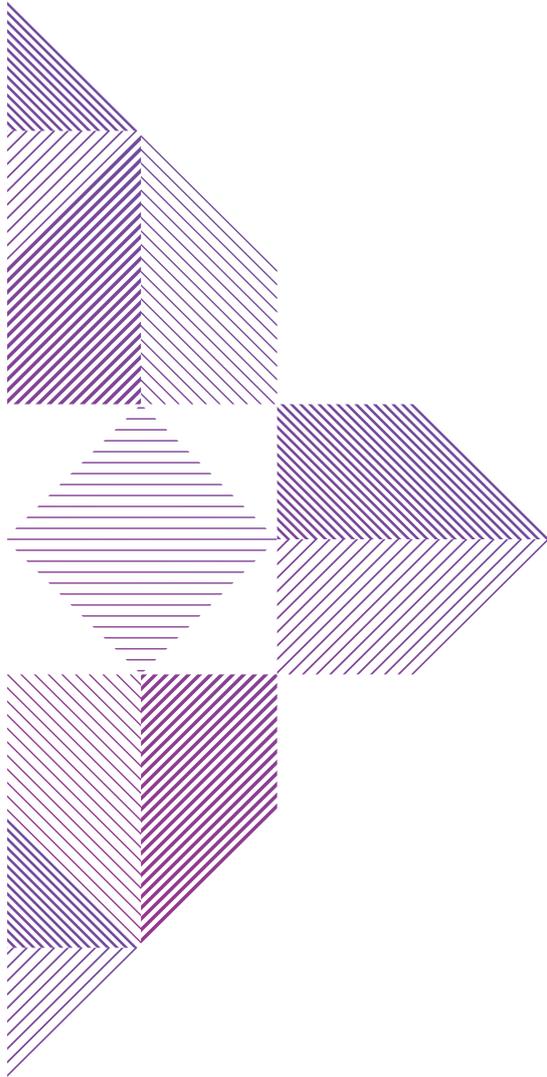
The Bushfires Royal Commission Implementation Monitor (BRCIM) was appointed to monitor and report on the implementation of these recommendations and associated actions.

In his 2014 annual, and final report, the BRCIM noted that 11 recommendations and 21 associated actions remained ongoing. The BRCIM also recommended that the Inspector-General for Emergency Management (IGEM) assume responsibility for ongoing monitoring of the remaining recommendations and related actions.

IGEM now has responsibility for ensuring that recommendations and actions continue to be monitored in a transparent and robust manner.

IGEM will prepare an annual progress report for the Minister for Emergency Services on all ongoing VBRC recommendations and related actions until they have been satisfactorily implemented.

This is IGEM's first report on the implementation of VBRC recommendations and actions, and reports on progress from 17 May 2014 to 1 May 2015.



2. Background

2009 Victorian Bushfires Royal Commission

The 2009 Victorian bushfires claimed 173 lives, destroyed or damaged more than 2,000 homes and burned about 430,000 hectares of land (VBRC 2010).

The VBRC was established to investigate the causes of, and response to, these bushfires. The VBRC Final Report was handed down on 31 July 2010 and included 67 recommendations, addressing a broad range of issues including community warnings, shelter options, emergency management governance and incident management, powerline safety, planning and building, and land and fuel management.

The Victorian Government released *Implementing the Government's Response to the 2009 Victorian Bushfires Royal Commission May 2011* (State Government of Victoria 2011) (the Implementation Plan), supporting all of the VBRC's recommendations in the Final Report and outlining over 300 actions that would be undertaken to address them.

Bushfires Royal Commission Implementation Monitor

On 14 October 2010, the Victorian Government appointed Mr Neil Comrie AO, APM as the independent Bushfires Royal Commission Implementation Monitor. The BRCIM was responsible for monitoring, reviewing, and reporting on the progress of agencies in carrying out the actions described in the government's Implementation Plan.

The BRCIM met with stakeholders including the heads of the fire services and representatives from departments and agencies involved in implementing the VBRC's Final Report recommendations. These meetings confirmed the agreed timeframes between the BRCIM and each stakeholder for the implementation of actions.

The BRCIM delivered the following reports:

- Progress Report - July 2011
- Final Report - July 2012
- Annual Report - July 2013
- Annual Report - July 2014

The Annual Report, July 2014 was the BRCIM's final report¹. It was tabled in Parliament on 5 August 2014 and listed 11 recommendations and 21 actions as ongoing.

In his 2014 report, the BRCIM recommended that IGEM prepare an annual progress report for the minister, for publication, on all ongoing VBRC recommendations and related actions (BRCIM 2014, p. 8). This would ensure that the ongoing actions continued to be monitored in a robust and transparent manner.

The Victorian Government issued the *Government Response to the Bushfires Royal Commission Implementation Monitor 2014 Annual Report* in August 2014 (State Government of Victoria 2014).

Inspector-General for Emergency Management

The Inspector-General for Emergency Management is a legislated appointment established under the *Emergency Management Act 2013* (the Act) to:

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

IGEM is a business unit of the Regulation Division within the Department of Justice & Regulation.

The Act requires IGEM to develop and maintain a monitoring and assurance framework for emergency management, against which the capacity, capability and performance of the emergency management sector is to be assessed (*Emergency Management Act 2013*, s. 64(1)(a)).

Implementation monitoring is a key element of the *Monitoring and Assurance Framework for Emergency Management* (IGEM 2015a).

On 2 September 2014, the Victorian Government requested that IGEM complete a progress report on the ongoing VBRC implementation actions in accordance with section 64(1)(c) of the Act.

IGEM is required to produce a progress report by 1 August 2015 on all ongoing recommendations and actions, including advice as to when each action has been satisfactorily implemented, and to do so annually until all of the implementation actions are complete.

The government also directed departments and agencies with responsibility for the implementation of actions to provide an update on the progress of each action in their annual reports until IGEM has reported that the action has been satisfactorily implemented.

Machinery of government changes

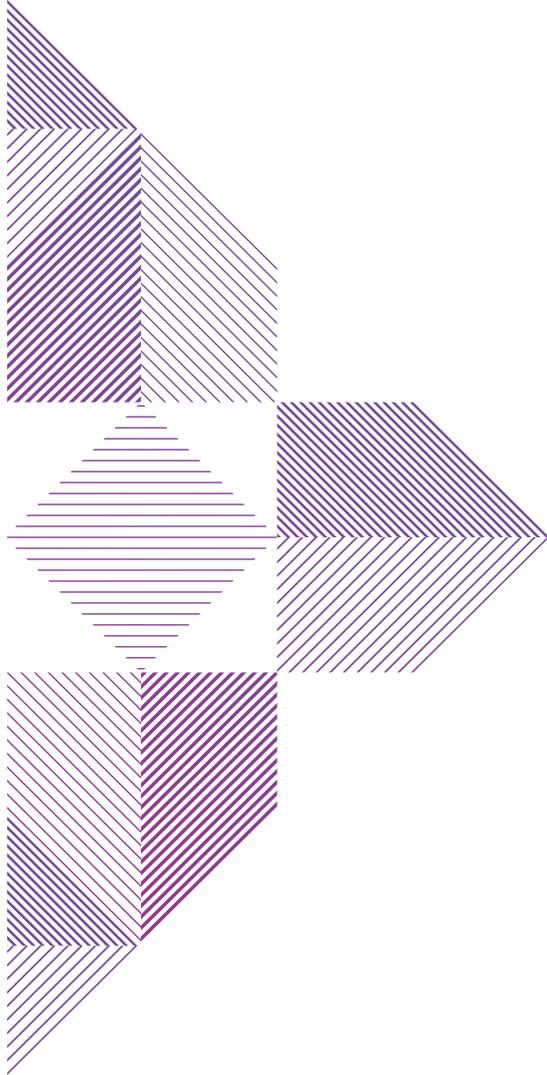
Since the tabling of the BRCIM's final report in August 2014, there has been a change of government in Victoria. Machinery of government changes resulted in some re-allocations of functions and responsibilities between ministers and departments.

Actions previously listed as being the responsibility of the former Department of Environment and Primary Industries have been transferred to the Department of Environment, Land, Water & Planning (DELWP). The planning portfolio, which was previously part of the Department of Transport, Planning and Local Infrastructure, is also now with DELWP.

Actions previously the responsibility of the former Department of State Development, Business and Innovation are now the responsibility of the Department of Economic Development, Jobs, Transport & Resources (DEDJTR).

¹ Due to a number of implementation actions not due for completion until after the BRCIM's Final Report in July 2012, the Parliament passed legislation in June 2012 requiring the BRCIM to prepare two additional annual reports.

3. Approach



IGEM has adopted a monitoring and reporting process closely aligned with that employed by the BRCIM. It requires responsible agencies to provide progress updates twice a year on actions for which they are responsible.

Current departments and agencies with responsibility for implementing ongoing VBRC recommendations and actions include:

- Country Fire Authority (CFA)
- DEDJTR
- DELWP
- Emergency Management Victoria (EMV)
- Energy Safe Victoria (ESV)
- Victorian Building Authority (VBA).

IGEM wrote to Chief Executive Officers and heads of departments and agencies in November 2014 and again in April 2015 requesting implementation updates supported by documentary evidence of progress such as policies, procedures, manuals, guides and meeting minutes.

IGEM assessed the updates to determine their status, and met with nominated representatives from departments and agencies to clarify information or request additional documentation.

Some VBRC actions fall within the scope of IGEM's monitoring and assurance role in relation to the *Emergency Management Strategic Action Plan* (EMV 2015) and the *Hazelwood Mine Fire Inquiry Report* (Hazelwood Mine Fire Inquiry 2014). To avoid duplication and minimise the administrative burden on agencies, IGEM utilises relevant information provided in relation to all three roles.

Table 1 describes the implementation status that IGEM has assigned to each of the remaining VBRC actions.

Table 1: Implementation status descriptions

Status	Description
Complete	Action has been satisfactorily implemented.
Closed	An action may be closed if: <ul style="list-style-type: none"> the intent of the action can no longer be met, or the action is long-term, progressing satisfactorily with robust governance arrangements in place. The IGEM will continue to monitor the progress of the action through the lead agency's annual report until the IGEM deems that the action has been satisfactorily implemented.
Ongoing	Action will continue to be monitored.

As part of its approach, IGEM consulted with relevant departments and agencies prior to finalisation of the report.

Progress in relation to the ongoing actions is reported up to 1 May 2015.

IGEM will provide the minister with a progress report by 1 August each year until all of the implementation actions have been completed. Additionally, IGEM may also provide the minister with progress updates and verbal or written advice from time to time on issues relating to any of the actions.

Acknowledgements

IGEM acknowledges the high level of cooperation and support received from Victorian Government departments and agencies in preparing this report. IGEM also wishes to thank former BRCIM staff for their assistance with information and clarification in relation to the BRCIM's reports.



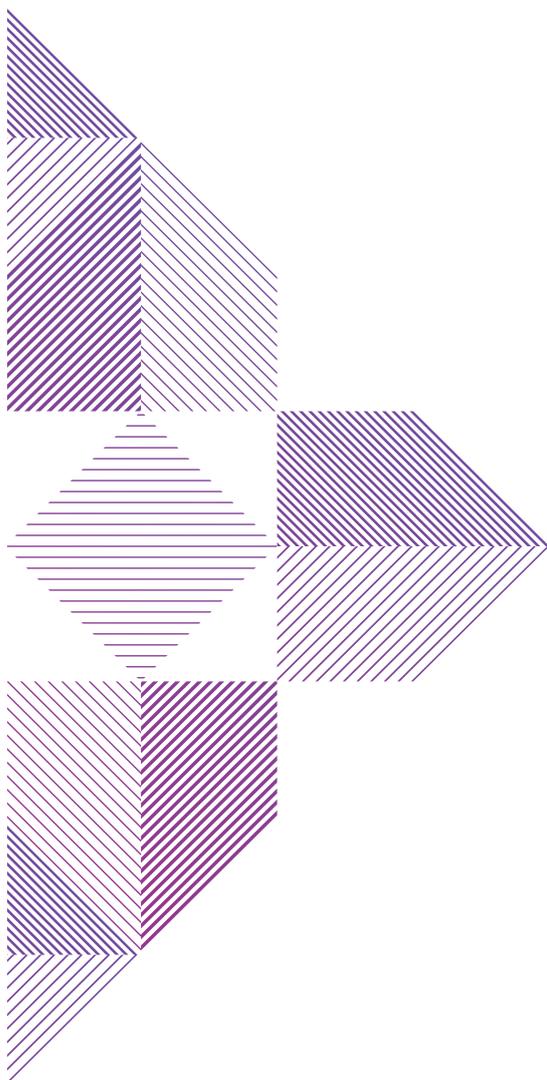
4. Reader's guide

This progress report is IGEM's assessment of the status of each implementation action reported as 'ongoing' as at 31 July 2014, or identified by the BRCIM as requiring further monitoring (BRCIM 2014).

The report does not repeat all of the VBRC recommendations. Readers wishing to review all VBRC recommendations and implementation actions are referred to the BRCIM's earlier reports.

The BRCIM provides comprehensive background to VBRC recommendations and the actions implemented by the State, including detailed overall findings in relation to certain recommendations (BRCIM 2012).

That level of detail is not reproduced in this report.



5. Status of VBRC implementation actions

IGEM has found that, of the 21 actions previously reported by the BRCIM as ongoing, eight are now complete, two are closed, and 11 remain ongoing.

Table 2 provides a full listing of the implementation actions with their updated status. The references in the first column are prefaced with the recommendation numbers.

Table 2: Status of VBRC recommendations and actions

REFERENCE	ACTION	DUE DATE	LEAD AGENCY	STATUS
1(k)	National Research Program – forecasting fire risk	31/07/2013	EMV	Closed
1(n)	Ensure integration of One Source One Message (OSOM) and Emergency Alert	30/06/2014*	EMV	Ongoing
3(e)	Role of Municipal Fire Prevention Officers (MFPOs) in planning/prevention	30/06/2012	EMV	Complete
3(k)	Review emergency and fire management planning regimes	01/12/2012	EMV	Complete
3(q)	Fire Ready Communities	2015	DEDJTR	Complete
4(a)	Development of shelter options as part of revised Bushfire Safety Policy Framework	01/12/2010	EMV	Complete
7(a)	Development of national bushfire awareness campaign.	30/11/2011	EMV **	Closed
13(a)	Review state of disaster provisions in the <i>Emergency Management Act 1986</i> (EM Act) to introduce a graded scale of emergency declarations	31/12/2012	EMV	Ongoing
13(b)	Amend the State Emergency Response Plan (SERP) based on amendments to the EM Act re: state of disaster	31/12/2012	EMV	Ongoing
22(i)	Standardise interconnections of radio networks between CFA and DEPI	30/06/2014*	CFA	Ongoing
22(k)	Fire agencies to develop and enhance fire information systems and upgrade existing tools such as FireWeb	14/10/2014	DELWP	Ongoing
27(d)	Targeted work program for distribution businesses to reduce bushfire risk			
	(iii) Research and Development (R&D) funding used to test Powerline Bushfire Safety Taskforce (PBST) findings for Automatic Circuit Reclosers (ACRs) settings for future bushfire seasons	01/09/2013	DEDJTR	Complete
	(viii) Confirmation of capability of Rapid Earth Fault Current Limiter (REFCL) to provide cost effective bushfire risk mitigation without impairing power reliability or quality	30/04/2014	DEDJTR	Complete
	(ix) Energy Safe Victoria (ESV) considers new standards for powerline construction in highest bushfire risk areas	30/06/2016	ESV	Ongoing
	(x) Installation of first replacement powerline in high bushfire risk areas	30/06/2014	DEDJTR	Complete
49(h)	Amend Building Regulations 2006 to adopt performance requirements	31/03/2012	DELWP	Ongoing
49(i)	Develop guidelines for retrofitting class 9 buildings	30/06/2014*	VBA	Ongoing
56(d)	Increased planned burning to 390,000 ha	30/06/2014*	DELWP	Ongoing
56(f)	Identify changes required to effectively and efficiently achieve the target planned burn	30/06/2014*	DELWP	Ongoing
59(b)	Amend operational manuals and guides and advise all staff	01/12/2012	DELWP	Ongoing
67(a)	Develop a policy proposal for a Public Inquiries Bill	30/06/2014*	DPC	Complete

*Bushfires Royal Commission Implementation Monitor reporting date

**Implementation of action previously led by the Commonwealth Attorney-General's Department

6. Progress update of VBRC implementation actions

This section provides a progress update and finding for each of the 21 actions considered as 'ongoing' in the BRCIM's 2014 Annual Report.

Recommendation 1:

The State revise its Bushfire Safety Policy. While adopting the national Prepare. Act. Survive. Framework in Victoria, the policy should do the following:

- enhance the role of warnings – including providing for timely and informative advice about the predicted passage of a fire and the actions to be taken by people in areas potentially in its path
- emphasise that all fires are different in ways that require an awareness of fire conditions, local circumstances and personal capacity
- recognise that the heightened risk on the worst days demands a different response
- retain those elements of the existing bushfire policy that have proved effective
- strengthen the range of options available in the face of fire, including community refuges, bushfire shelters and evacuation
- ensure that local solutions are tailored and known to communities through local bushfire planning
- improve advice on the nature of fire and house defendability, taking account of broader landscape risks.

Implementation actions

ACTION REQUIRED	DUE DATE	STATUS
1(k) National Research Program – forecasting fire risk	31/07/2013	Closed
1(n) Ensure integration of One Source One Message (OSOM) and Emergency Alert	30/06/2014*	Ongoing

*Bushfires Royal Commission Implementation Monitor reporting date

1(k) National Research Program – forecasting fire risk

The BRCIM, in 2013, reported that the Commonwealth Attorney-General’s Department was leading work in relation to this action under the auspices of the National Fire Danger Rating System (NFDRS) project.

Australia’s Fire Danger Rating System is being comprehensively revised to provide a more accurate description of bushfire hazard, damage potential, and to better inform community and fire agency decision-making. A framework is being established to ensure the development of a community, consequence-focused system for the prediction of fire behaviour.

In May 2014, the Australia New Zealand Emergency Management Committee and the Law Crime and Community Safety Council agreed that the NFDRS be endorsed as a national priority.

A multi-jurisdictional NFDRS Working Group, chaired by EMV, is responsible for providing national leadership and advocacy for the NFDRS program and overseeing the development and implementation of significant improvements to current national fire danger rating systems.

Bushfire and Natural Hazards Cooperative Research Centre (BNHCRC) research on next generation fire modelling is generating a suite of outputs that will inform the revised NFDRS.

On behalf of the Commonwealth Attorney-General’s Department and the Working Group, the BNHCRC arranged for a business analysis and preparation of functional requirements documentation, implementation options and an outline of the NFDRS Program of Works over the next five years to deliver the new NFDRS.

The National Fire Danger Rating System – Phase 1 project will deliver the road map and statement of functional requirements for the system. The project is scheduled for completion in October 2015 and will outline a five-year program management plan for the staged implementation of a modular NFDRS.

Project governance is provided by the NFDRS Working Group, which fills the roles of Project Owner and Project Board.

The Working Group is made up of full jurisdictional members from the Australian, state, and territory governments. The Commonwealth Attorney-General’s Department is the project sponsor and represents the Commonwealth on the Working Group. The BNHCRC is responsible for delivery of research-related aspects of the project and the project itself.

Finding

IGEM considers this action to be closed as the NFDRS project is a long-term, national program with robust governance arrangements in place.

IGEM will monitor the progress of the project as it is reported in EMV’s annual reports.



Fire Danger Rating sign in Moyston, Victoria (Image: Keith Pakenham, CFA)

1(n) Ensure integration of One Source One Message (OSOM) and Emergency Alert

OSOM is a web-based messaging system, currently used in Victoria by CFA and DELWP, the Metropolitan Fire & Emergency Services Board (MFB), and Victoria State Emergency Service (VICSES), to issue emergency warnings.

The system aims to provide a single source of information for each agency's website from Incident Control Centres, to be published within a few minutes of being authorised by an Incident Controller.

The same information also goes to the Victorian Bushfire Information Line and official emergency broadcasters such as ABC Radio.

Emergency Alert (EA) is the national telephone warning system used by emergency services to send voice messages to landlines and text messages to mobile phones, within a defined area, about likely or actual emergencies.

The BRCIM reported that the former Fire Services Commissioner had determined that the integration of OSOM and EA would not proceed. EMV would instead focus on developing the standards and capability to provide an interface between the technical architecture for the Victorian Information Network for Emergencies (VINE) and EA (BRCIM 2014).

EMV has confirmed that the direct integration of OSOM and EA in the short-term through adapting the existing technology and delivery platforms had been discounted on the basis of cost and timeframes for delivery.

OSOM and EA are scheduled for integration into the Emergency Management Common Operating Picture (EMCOP) prior to the 2015–16 summer season.

Finding

This action is progressing satisfactorily and IGEM will continue to monitor its implementation.



Community engagement © DELWP

Recommendation 3:

The State establish mechanisms for helping municipal councils to undertake local planning that tailors bushfire safety options to the needs of individual communities. In doing this planning, councils should:

- urgently develop for communities at risk of bushfire local plans that contain contingency options such as evacuation and shelter
- document in municipal emergency management plans and other relevant plans facilities where vulnerable people are likely to be situated, for example, aged care facilities, hospitals, schools and child care centres
- compile and maintain a list of vulnerable residents who need tailored advice of a recommendation to evacuate and provide this list to local police and anyone else with pre-arranged responsibility for helping vulnerable residents evacuate.

Implementation actions

ACTION REQUIRED	DUE DATE	STATUS
3(e) Role of Municipal Fire Prevention Officers (MFPOs) in planning/prevention	30/06/2012	Complete
3(k) Review emergency and fire management planning regimes	01/12/2012	Complete
3(q) Fire Ready Communities	2015	Complete

3(e) Role of Municipal Fire Prevention Officers (MFPOs) in planning/prevention

The BRCIM reported in 2013 that the role of MFPOs in planning and prevention would be reviewed in the context of reforms arising from the December 2012 *Victorian Emergency Management Reform White Paper* (the White Paper) (State Government of Victoria 2012). The reforms would require several tranches of legislation over a number of years.

In his 2014 report, the BRCIM linked Actions 3(e) and 3(k), stating they were 'inextricably bound' with the reforms proposed in the White Paper.

Finding

Refer to finding for Action 3(k).

3(k) Review emergency and fire management planning regimes

The reforms referred to in the previous section included emergency management planning arrangements that would be implemented under the proposed Emergency Management Planning Bill.

The proposed planning legislation will provide enhanced governance arrangements at state, regional, and municipal levels to enable integrated, comprehensive, collaborative and adaptable all hazards emergency management planning across Victoria.

The BRCIM encouraged the State to implement the required legislative reform to establish truly integrated local, community-based emergency management planning in Victoria as a priority (BRCIM 2014).

EMV is reviewing the current planning framework for emergency management and developing options for a new legislative framework. This includes the review of existing plans that relate to emergency management such as the State Emergency Response Plan and municipal emergency plans, to examine ways in which current work may be captured in the new legislation.

EMV is also working with the Department of Premier & Cabinet (DPC) to develop guidelines and regulations under the recent critical infrastructure amendments to the *Emergency Management Act 2013*. This will inform the new planning framework, particularly in relation to the role of private operators.

In April 2015, EMV presented a paper to the State Crisis and Resilience Council that sets out the current issues facing emergency management planning. In the paper, EMV asserts that both legislative and non-legislative measures are necessary to achieve meaningful reform

in emergency management planning and to provide for the approach proposed in the White Paper and recent inquiries. The paper will form the basis of the drafting instructions for the legislation.

The Bill is likely to be introduced to Parliament by September 2016, with the proposed commencement date to be determined.

EMV reports that all Regional Emergency Management Teams have been involved in developing risk and consequence plans for bushfire and heat, having completed revised iterations in October 2014 and reviewing these where appropriate.

The State Fire Management Planning Committee approved the *Strategic Directions for Fire Planning in Victoria 2013* in October 2013. The document focuses on high-level strategic directions to support continuation of fire planning while new emergency management reforms are established.

EMV has developed an action plan for 2014–15 that complements the strategic directions and can be modified to reflect changes through emergency management reform, such as an all hazards approach and community emergency management planning.

Finding

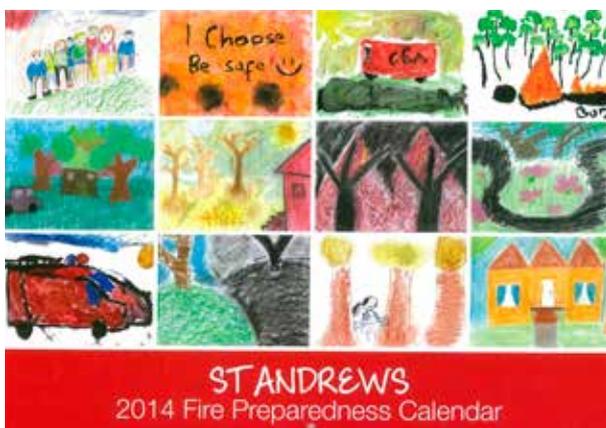
IGEM considers Actions 3(e) and 3(k) to be complete. A considerable body of work has been conducted in relation to the review and development of fire and emergency management planning and the proposed Emergency Management Planning Bill.

3(q) Fire Ready Communities

Fire Ready Communities commenced in July 2011 as a four-year grants program designed to fund local solutions that help high-risk bushfire prone communities to be safer and better prepared. The program provided funding for 36 projects in high fire-risk communities to a total value of \$1.4 million.

A review of the program resulted in its replacement by the Resilient Community Program in July 2013 to reflect an all hazards and all agencies focus. The program was scheduled to operate until June 2015.

DEDJTR has reported that two rounds of Resilient Community Program applications were completed, with all applications received and assessed. Projects from the first round are due to be completed by July 2015 and projects from the second round are due in late 2015.



St Andrews 2014 Fire Preparedness Calendar
(Image: Nillumbik Shire Council)

Under the Resilient Community Program, 20 projects have been funded to a value of \$1.5 million and applications for funding are now closed. Examples of projects included local government planning, community education, and programs to build community networks. All projects are scheduled for completion by December 2015, and are subject to formal funding agreements and stringent reporting obligations to Regional Development Victoria, part of DEDJTR.

DEDJTR has started planning to ensure that the resources developed and lessons identified from the projects will be available for use by other communities.

Finding

IGEM considers this action to be complete as the Resilient Community Program concluded in June 2015.

Recommendation 4:

The State introduce a comprehensive approach to shelter options that includes the following:

- developing standards for community refuges as a matter of priority and replacing the 2005 Fire Refuges in Victoria: Policy and Practice
- designating community refuges – particularly in areas of very high risk – where other bushfire safety options are limited
- working with municipal councils to ensure that appropriate criteria are used for bushfire shelters, so that people are not discouraged from using a bushfire shelter if there is no better option available
- acknowledging personal shelters around their homes as a fallback option for individuals.

Implementation actions

ACTION REQUIRED	DUE DATE	STATUS
4(a) Development of shelter options as part of revised Bushfire Safety Policy Framework	01/12/2010	Complete

4(a) Development of shelter options as part of revised Bushfire Safety Policy Framework

The BRCIM reported that, although the revised Bushfire Safety Policy Framework contained some information on shelter options, it did not clearly communicate advice about leaving options, shelter options or survival options (BRCIM 2011).

The BRCIM also reported that:

The section on shelter options in the revised [Bushfire Safety Policy] Framework has been reorganised to clarify advice and provide a more coherent description of shelter options. Priority area five of the Framework... discusses leaving early, shelter options for people in areas threatened by bushfire, last resort shelter options and evacuation.

... the BRCIM is satisfied that the range of shelter options is now clearly set out in the Framework. However, as there is still a considerable amount of work to be done in practical terms to make some of these options available to the community, particularly community fire refuges, the BRCIM will continue to monitor this matter and report on further progress in future Annual Reports (BRCIM 2012, p.55–56).

EMV prepared a Bushfire Shelter Options Position Paper, scheduled for publication by June 2015.

The key findings included the need for a comprehensive approach to bushfire shelter options, evacuation, warnings and community engagement. The paper also highlighted the lack of community understanding of the differences between various shelter options already available.

The paper commits EMV to further action that reflects the need for continuous improvement in providing bushfire shelter options as technology improves and the resilience of high bushfire risk communities develops. EMV is currently preparing a communications strategy for its release.

The Community Fire Refuges Policy has been revised and refreshed and is now available on the EMV website.

Construction has started on Victoria's fourth community fire refuge at Millgrove. The refuge is incorporated with a new CFA fire station, using the model of the Blackwood CFA station, which was developed as part of the community refuges pilot.

EMV expects the refuge to be operational before the 2015–16 fire season. The three existing community fire refuges were available for community use during the 2014–15 fire season, however, none were required to be used in an emergency situation.

Finding

IGEM considers this action to be complete as the Bushfire Safety Policy Framework was updated to include a range of shelter options. In addition, the Bushfire Shelter Options Position Paper addresses concerns about making options available to the community by committing EMV to a series of actions reflecting the need for continuous improvement in providing bushfire shelter options.

Recommendation 7:

The Commonwealth lead an initiative through the Ministerial Council for Police and Emergency Management, facilitated by Emergency Management Australia, to develop a national bushfire awareness campaign.

Implementation actions

ACTION REQUIRED	DUE DATE	STATUS
7(a) Development of national bushfire awareness campaign	30/11/2011	Closed

7(a) Development of national bushfire awareness campaign

In 2014, the BRCIM found that, due to the complexities associated with developing and implementing agreed national arrangements, this action was best progressed in Victoria under the ongoing activities related to Victoria's Bushfire Safety Policy, including community warnings and advice.

Prior to the 2014–15 summer season, EMV undertook a number of activities in relation to community bushfire awareness, including the replacement of Fire Danger Rating signs across the state and the Summer Fire Preparedness Campaign.

The overarching objectives of the Summer Fire Preparedness Campaign included:

- increasing community awareness of bushfire/grassfire risks and fire safety
- increasing the number of people undertaking positive changes in behaviour to prompt them to leave early.

The campaign engaged with the community through a variety of ways including:

- local engagement
- paid advertising
- culturally and linguistically diverse media
- social media
- events such as Fire Action Week
- faith-based organisations.

Awareness campaigns are based on seasonal forecasts and fire risk and conducted each year.

EMV considers the ongoing commitment and activities of the State in relation to community warnings, advice and education to be part of the sector's normal business.

Finding

IGEM considers this action to be closed as the sector's activities in relation to community warnings, advice and education (for example, the annual Summer Fire Preparedness Campaign) are part of routine business.

Recommendation 13:

The State consider amending the *Emergency Management Act 1986* to introduce a graded scale of emergency declarations short of a state of disaster.

Implementation actions

ACTION REQUIRED	DUE DATE	STATUS
13(a) Review state of disaster provisions in the <i>Emergency Management Act 1986</i> (EM Act) to introduce a graded scale of emergencies	31/12/2012	Ongoing
13(b) Amend the State Emergency Response Plan (SERP) based on amendments to the EM Act re: state of disaster	31/12/2012	Ongoing

13(a) Review state of disaster provisions in the *Emergency Management Act 1986* (EM Act) to introduce a grade scale of emergency declarations

The BRCIM noted that, although the Victorian Government had committed to introducing amending legislation to Parliament in 2012, he had been advised that the review of the state of disaster provisions in the *Emergency Management Act 1986* was occurring as part of the White Paper process (BRCIM 2012).

The BRCIM was further advised by the former Department of Justice that these substantial reforms were likely to require several tranches of legislation across a number of years commencing in 2013 (BRCIM 2012).

EMV is conducting a review of the need for a graded scale of emergencies in Victoria and has presented a discussion paper to the State Crisis and Resilience Council's Capability and Response Sub-Committee.

The paper includes:

- an examination of the existing regime in Victoria, including the revised warnings system for major fires that has been in place since Black Saturday
- the current legislative provisions in the *Emergency Management Act 1986* relating to the declaration of a State of Disaster
- an examination of the different schemes that operate in other Australian states
- an analysis of the chief purpose of declarations.

EMV is considering the sub-committee’s feedback along with research conducted to inform the discussion paper. It will circulate another paper to the sub-committee outlining the outcome of the review and the proposed recommendation to the minister.

EMV has advised that the review will be finalised within the next few months.

Finding

This action is proceeding satisfactorily and IGEM will continue to monitor its implementation.

13(b) Amend the State Emergency Response Plan (SERP) based on amendments to the EM Act re: state of disaster

Contingent on completion of Action 13(a).

Any changes to the SERP will be considered and addressed as part of the outcome of the review and recommendation to the minister.

Finding

This action is proceeding satisfactorily and IGEM will continue to monitor its implementation.

Recommendation 22:

The Country Fire Authority and the Department of Sustainability and Environment standardise their operating systems and information and communications technologies with the aim of achieving greater efficiency and interoperability between agencies.

Implementation actions

ACTION REQUIRED	DUE DATE	STATUS
22(i) Standardise interconnections of radio networks between CFA and DEPI	30/6/2014*	Ongoing
22(k) Fire agencies to develop and enhance fire information systems and upgrade existing tools such as FireWeb	14/10/2014	Ongoing

*Bushfires Royal Commission Implementation Monitor reporting date



Fire refuge sign - intersection of School Rd and Old Main Rd Ferny Creek, Mount Dandenong (Image: Keith Pakenham, CFA)

22(j) Standardise interconnections of radio networks between CFA and DEPI

In August 2014, CFA received ministerial approval to extend the timeline and the carry-forward budget for three existing radio communications projects, including the Radio Communication Interoperability project, to 30 June 2015.

The projects were re-scoped to deliver the Regional Mobile Radio Command Communications (RMRCC) program, a statewide, multi-hazard, digital, interoperable command channel radio system.

The BRCIM, in 2014, acknowledged the benefits of the revised approach, believing they justified the longer delivery time.

CFA has reported that the Regional Radio Dispatch Service (RRDS), a contemporary, digital radio network, is now in service across the 16 regional CFA districts.

The RRDS was originally funded as a digital dispatch service for the CFA; however, the Victorian Government decided to leverage its infrastructure and technology to form the base for the Regional Mobile Radio network, a multi-agency government network that will include all emergency management agencies.

DELWP radios are now compatible with RRDS, and are accessing RRDS on the Regional Mobile Radio network.

All CFA and DELWP radios will be fully interoperable on all CFA dispatch talk groups in Victoria when DELWP completes the radio conversion project.

The conversion of radios used by aircraft and helicopters was completed in February 2015. The conversion of other DELWP radios (including fire towers) will be completed at the end of August, in preparation for the 2015–16 fire season.

All CFA and DELWP radios with access to the Regional Mobile Radio network will have access to the new RMRCC program when it is commissioned.

CFA reports that the delivery of the infrastructure program associated with the RMRCC is scheduled for completion by 30 June 2015.

Finding

This action is proceeding satisfactorily and IGEM will continue to monitor its implementation.

22(k) Fire agencies to develop and enhance fire information systems and upgrade existing tools such as FireWeb

In 2010, the Victorian Government allocated \$21.5 million for the Department of Sustainability and Environment (now DELWP) to develop and enhance fire information systems and upgrade existing tools such as FireWeb.

DELWP initiated a program of work, the Information and Communications Technology (ICT) project, which was due for completion in October 2014.

Although the BRCIM (2014) reported the ICT project as being on target for completion in 2014, DELWP has advised IGEM that the project was halted in November 2014 and a program review undertaken due to vendor delivery not aligning with departmental needs and budgetary constraints.

The program has now been rescheduled as a result of the review.

The following projects are yet to be completed:

- **Infrastructure** – Completion of documentation relating to the current build and implementation of user portals is scheduled for June 2015. The base integration platform is expected to be completed in November 2015.
- **eWeb** – Defects in test pages halted the project. The vendor is rectifying defects and FireWeb continues to be used while these defects are addressed. Completion is expected after the 2015–16 summer season.
- **Fuel Management System** – The Fuel Management Information System will replace the existing Fuel Management module (Burns and Works) within FireWeb. It will support the Planned Burning Reform Program by providing tools to deliver an expanded burning target. Initial release is scheduled for November 2015 with subsequent releases in 2016.

Finding

IGEM notes the rescheduling of the ICT project and will continue to monitor its implementation.

Recommendation 27:

The State amend the Regulations under Victoria's *Electricity Safety Act 1998* and otherwise take such steps as may be required to give effect to the following:

- the progressive replacement of all SWER (single-wire earth return) powerlines in Victoria with aerial bundled cable, underground cabling or other technology that delivers greatly reduced bushfire risk. The replacement program should be completed in the areas of highest bushfire risk within 10 years and should continue in areas of lower bushfire risk as the lines reach the end of their engineering lives
- the progressive replacement of all 22-kilovolt distribution feeders with aerial bundled cable, underground cabling or other technology that delivers greatly reduced bushfire risk as the feeders reach the end of their engineering lives. Priority should be given to distribution feeders in the areas of highest bushfire risk.

Implementation actions

ACTION REQUIRED	DUE DATE	STATUS
27(d) Targeted work program for distribution businesses to reduce bushfire risk		
(iii) Research and Development (R&D) funding used to test Powerline Bushfire Safety Taskforce (PBST) findings for Automatic Circuit Reclosers (ACRs) settings for future bushfire seasons	01/09/2013	Complete
(viii) Confirmation of capability of Rapid Earth Fault Current Limiter (REFCL) to provide cost effective bushfire risk mitigation without impairing power reliability or quality	30/04/2014	Complete
(ix) Energy Safe Victoria (ESV) considers new standards for powerline construction in highest bushfire risk areas	30/06/2016	Ongoing
(x) Installation of first replacement powerline in high bushfire risk areas	30/06/2014	Complete

27(d) Targeted work program for distribution businesses to reduce bushfire risk

The Victorian Government established the ten-year Powerline Bushfire Safety Program (PBSP) to introduce a range of infrastructure initiatives to reduce the likelihood that Victoria's electricity distribution system will be the cause of a catastrophic bushfire in the future.

The program is managed by a dedicated business unit within the Agriculture, Energy and Resources Group of DEDJTR and is scheduled for completion in 2022.

The State established a comprehensive set of governance arrangements for the PBSP, with the highest level of decision-making resting with the PBSP Oversight Committee, chaired by the Secretary of DPC². A Program Control Board, chaired by a senior executive of DEDJTR, is responsible for delivery of the program.

The PBSP also provides the Victorian Government with annual performance reports, assessing performance against 20 key indicators relating to progress made towards the implementation of VBRC Recommendations 27 and 32.

The PBSP Oversight Committee developed a detailed, forward works program that outlined specific deliverables and due dates in relation to Action 27(d).

In 2013, the BRCIM in conjunction with DEDJTR, established a focused monitoring and reporting framework that included ten milestones, (described as Actions 27(d) (i) – (x) in his report) against which the BRCIM would report progress over the first two years of the program (BRCIM 2013).

These were developed for monitoring purposes and to provide assurance that tangible outcomes were being achieved prior to the conclusion of the BRCIM's tenure.

The BRCIM, in 2014, reported four of the 10 actions as ongoing (Actions 27(d)(iii), (viii), (ix) and (x)). Their progress is summarised in the following sections.

DEDJTR will continue to report on the progress of the PBSP in its annual reports until the program is completed.

27(d)(iii) Research and Development (R&D) funding used to test Powerline Bushfire Safety Taskforce (PBST) findings for Automatic Circuit Reclosers (ACRs) settings for future bushfire seasons

Electricity distribution networks, due to their size and exposure to the elements experience a large number of faults – the majority of which are temporary. Occasionally, faults occur which can transmit electrical current to the ground and, under certain conditions, start a fire.

² In January this year, the Secretary of DPC dissolved the Oversight Committee with its responsibilities assumed by the Project Control Board in addition to its program management responsibilities.

ACRs are devices that shut off power in the event of a fault, but then restore power (reclose) quickly if the fault has cleared.

ACRs may be set to attempt a number of recloses and for varying time intervals. The more reclose attempts allowed, and the longer the gap between attempts, the less the impact will be on customer reliability. Research into how powerlines start bushfires enables better decision-making to optimise the operation of network safety devices such as ACRs, thereby minimising disruptions to power supplies for customers.

In December 2011, the Victorian Government announced the provision of \$10 million for R&D over the following five years to identify cost effective risk reduction technologies and procedures. The determination of the optimum operation of ACRs on high fire risk days was identified as a high priority area undertaken in Stage 1 of the R&D project.

On Total Fire Ban and Code Red days, electricity distribution businesses change the settings of network safety devices, such as ACRs, to more safely manage how networks behave when a fault occurs.

The number of devices subject to enhanced settings varies from year to year and is based on annual considerations of bushfire risk that take into account all new available information. Such information includes consequence maps and models provided for the PBSP and available to both ESV and the distribution businesses.

Finding

This action is considered to be complete as ACR settings are reviewed prior to each fire season as part of routine business.

27(d)(viii) Confirmation of capability of Rapid Earth Fault Current Limiter (REFCL) to provide cost effective bushfire risk mitigation without impairing power reliability or quality

REFCLs are a category of network protection technologies that address a particular type of electric fault (phase-to-ground). As this fault type accounts for an estimated 53 per cent of all powerline bushfire ignitions, the potential for REFCLs to reduce bushfires is significant.

REFCLs have been deployed globally for over a decade, for the specific purpose of maintaining power supply reliability in the event of electrical faults. To date, they have not been deployed for the specific purpose of preventing bushfires.

The PBSP undertook technology trials in early 2014 that confirmed the capability of REFCLs to prevent bushfire ignition. Specifically, the trials found that, under Total Fire Ban conditions, REFCLs can detect a phase-to-ground fault and reduce the voltage sufficiently, and with sufficient speed, to prevent ignition. REFCLs are capable of eliminating about half of all fires started by powerlines, and can do so more cost effectively than any known alternative.

DEDJTR is undertaking further research to determine the capability of other REFCL technologies on a live Victorian network. This research will provide electricity distributors with proven additional technical options for meeting proposed new regulatory standards. AusNet is currently in the process of installing two REFCLs (one at Kilmore South and one at Woori Yallock).

Further research, development, and testing of REFCLs is continuing with a view to identifying further cost efficiencies.

The PBSP Program Control Board has noted that:

REFCLs can prevent half of all powerline bushfires, as indicated in the deployment strategy. No other technology was capable of delivering this quantum of bushfire risk reduction within the parameters of the program (\$500 million in consumer costs and no material reduction in supply reliability).³

DEDJTR, in a brief to the Minister for Energy and Resources⁴, sought endorsement for regulatory changes relating to the deployment of REFCLs that would oblige electricity distributors to achieve heightened performance standards for that portion of its networks in high bushfire risk areas. The performance standards would be based on the known capability of REFCLs to eliminate the risk of ignition as demonstrated in testing.

The PBSP Director subsequently advised the Board that the minister had endorsed the \$500 million regulatory approach to ensure REFCLs are deployed in satisfactory numbers and in a timely fashion across the highest bushfire risk consequence areas. A RIS process to support this approach had begun.

Finding

IGEM is satisfied with the evidence provided to confirm the capability of REFCLs and considers this action to be complete.

³ Powerline Bushfire Safety Program Project Control Board – Meeting minutes, 9 December 2014

⁴ Powerline Bushfire Safety Program: Regulatory Initiatives – Briefing to the Minister for Energy and Resources, 2 April 2015

27(d)(ix) Energy Safe Victoria (ESV) considers new standards for powerline construction in highest bushfire risk areas

ESV continues to collaborate with Victorian electrical distribution businesses and the PBSP group within DEDJTR to develop new standards for design and network operations in the highest bushfire risk areas.

New standards will include both the adoption of existing construction standards replacing bare-wired conductors with insulated conductors, and the adoption of new technologies. These have the effect of reducing the risk from the remaining bare-wired powerlines in the highest bushfire risk areas.

The key activities in relation to this action have included:

- defining the area to which the new construction standards will apply
- the limited introduction of materials, network designs and construction methods different to those previously adopted by the electrical distribution businesses in the highest bushfire risk areas
- the development and acceptance of equipment and methods used for the operation of networks which include new technologies with the potential to reduce the available fault energy so as to limit bushfire starts.

ESV is working closely with PBSP and DEDJTR to develop Electricity Safety Management Schemes legislation to underpin the adoption of new performance-based standards and the deployment of revised construction standards.

ESV will consult and agree with the Victorian Electrical Supply Industry on the new lowest cost technically acceptable standard for powerline construction to be applied for all new and substantially reconstructed powerlines in the highest bushfire risk areas.

In addition to exploring developing technologies, ESV is considering the application of appropriate regulatory requirements to implement powerline replacement projects. This has involved ongoing discussions with distribution businesses, commercial technology providers, academia, research bodies, PBSP and the Australian Energy Regulator.

Finding

This action is proceeding satisfactorily and IGEM will continue to monitor its implementation.



Powerline in Darnum, Gippsland (Image: Anne Morley)

27(d)(x) Installation of first replacement powerline in high bushfire risk areas

The Powerline Replacement Fund (PRF) is a 10-year PBSP project to fund the targeted replacement of bare-wire powerlines with safer underground or overhead, insulated powerlines. The objective is to reduce the likelihood of bushfire ignition from powerlines in the areas of highest bushfire risk where the consequences of bushfire are likely to be catastrophic.

The PRF targets the replacement of high-voltage powerlines and low-voltage private overhead electricity lines within the PBSP Priority Area. As there are 25,450 kilometres of high-voltage, bare-wire power lines in the PBSP Priority Area, the high-voltage power line replacement is highly targeted.

The first phase of high-voltage deployment is targeting three high bushfire risk locations within the PBSP Priority Area – Dandenong Ranges, Otway Ranges and Warburton District.

In July 2014, the PBSP reported that the first high-voltage, bare-wire powerlines were replaced with safer underground or insulated powerlines in the Dandenong Ranges and the Otway Ranges (covering 43.3 kilometres). The first powerlines owned by private landowners had been replaced in eight Local Government Areas.

As of February 2015, 163 private powerlines had been replaced, representing 40 kilometres of bare-wire overhead lines in high-risk areas that had the potential to start fires. Work was underway on a further 47 private powerlines, replacing an additional 10 kilometres of lines.

The program is currently targeting broader regional Victoria in 16 Local Government Areas with a further eight Local Government Areas targeted by mid-2015.

The PBSP is also funding the replacement of high-risk, high-voltage powerlines using a range of safer technologies including insulated overhead powerlines, underground powerlines and other conductor technologies.

Six high-voltage projects have been completed to date with a further 12 planned for completion by December 2015, which will retire a total of 96 kilometres of high-voltage powerlines across the Dandenong Ranges, Otway Ranges and Warburton District.

Finding

IGEM is satisfied that the installation of the first replacement powerline in high bushfire risk areas has occurred and considers this action to be complete.

Recommendation 49:

The State modify its adoption of the Building Code of Australia for the following purposes:

- to remove deemed-to-satisfy provisions for the construction of buildings in BAL-FZ (the Flame Zone)
- to apply bushfire construction provisions to non-residential buildings that will be occupied by people who are particularly vulnerable to bushfire attack, such as schools, child care centres, hospitals and aged care facilities
- other than in exceptional circumstances, to apply a minimum AS 3959-2009 construction level of BAL-12.5 to all new buildings and extensions in bushfire-prone areas.

Implementation actions

ACTION REQUIRED	DUE DATE	STATUS
49(h) Amend Building Regulations 2006 to adopt performance requirements	31/03/2012	Ongoing
49(i) Develop guidelines for retrofitting class 9 buildings	30/06/2014*	Ongoing

*Bushfires Royal Commission Implementation Monitor reporting date

49(h) Amend Building Regulations 2006 to adopt performance requirements

The BRCIM, in his 2014 report, noted that this action was more than two years overdue. He described this matter as problematic and observed that no progress had been made in applying the Building Code to Class 9 vulnerable use buildings such as schools, child-care centres, hospitals and aged care facilities, as recommended by the VBRC.

The government's response to the BRCIM's 2014 Annual Report stated that finalisation of building regulation changes in relation to vulnerable use buildings would be progressed now that updates to bushfire planning requirements had been settled.

In November 2014, IGEM was advised of work undertaken by the former Department of Transport, Planning and Local Infrastructure to address a request from the previous Minister for Planning that, before proceeding with proposed regulatory changes to implement Action 49(h), the department should:

- finalise an accurate and up-to-date system of mapping bushfire risk to ensure that specific bushfire construction requirements are only applied in areas that are bushfire prone and to ensure that undue regulatory or financial burden is not imposed
- amend the Building Regulations to remove the requirement for buildings in Precinct Structure Plan (PSP)⁵ areas which are designated as bushfire prone to comply with the minimum Australian Standard 3959-2009 construction level of Bushfire Attack Level (BAL) 12.5.

Up-to-date, statewide mapping of designated Bushfire Prone Areas has been finalised and is available on DELWP's website.

Having aligned the Bushfire Prone Area designations with the existing bushfire hazard across Victoria, the next step was refining how Bushfire Prone Area designations are made in high-growth, lower-risk areas such as PSP areas, to provide more certainty about the construction standards that will apply to all buildings when new urban subdivisions are complete.

DELWP is in the final stages of consulting with relevant state authorities and local government on the future approach to mapping bushfire prone areas in approved PSP areas. In August 2015, DELWP will provide the Minister for Planning with options for consideration, consistent with the VBRC recommendation to map bushfire risk for the purpose of planning and building controls.

The options will relate to whether to continue with the current practice of aligning designations with bushfire hazard, or to remove Bushfire Prone Area designations from PSP areas before they are developed, provided that effective bushfire hazard management procedures are in place.

A decision on the most effective approach to mapping PSP areas is expected in September or October 2015. Options will then be developed in relation to amending the Building Regulations 2006 to extend bushfire construction requirements to 'vulnerable use' buildings (such as schools, kindergartens and aged care facilities) in Bushfire Prone Areas across Victoria, as anticipated by Action 49(h).

Implementation of Action 49(h) will be considered in the context of the other planning and building changes that have been implemented since 2012. An analysis will determine whether the problem still exists and, if it does, to what extent, and how it should be addressed.

The analysis will assess whether or not, since the VBRC made its recommendation and since the 2012 RIS, vulnerable use buildings are being constructed to a sufficient standard to provide appropriate resistance to bushfire attack.

The analysis will also consider any new regulatory frameworks that may have an impact on how resistant a vulnerable use building is to bushfire. The regulatory options previously assessed in relation to bushfire construction requirements for vulnerable use buildings will be reviewed and updated (including, if necessary, preparation of a revised RIS for consultation purposes). If a new RIS is required, DELWP expects that new regulations would be in place by late 2016.

Finding

IGEM acknowledges the complicated history associated with acquitting this action and will continue to monitor its implementation. IGEM urges DELWP to progress this action as a priority, recognising its significantly overdue status.

49(i) Develop guidelines for retrofitting class 9 buildings

This action is linked to Action 49(h).

The guidelines for retrofitting Class 9 buildings cannot be developed until the final regulations are implemented.

Finding

This action is contingent on the completion of Action 49(h). IGEM will continue to monitor its implementation.

Recommendation 56:

The State fund and commit to implementing a long-term program of prescribed burning based on an annual rolling target of 5 per cent minimum of public land.

Implementation actions

ACTION REQUIRED	DUE DATE	STATUS
56(d) Increased planned burning to 390,000 ha	30/06/2014*	Ongoing
56(f) Identify changes required to effectively and efficiently achieve the target planned burn	30/06/2014*	Ongoing

*Bushfires Royal Commission Implementation Monitor reporting date

⁵ PSPs are long-term master plans for the development of communities in Melbourne's growth areas.

56(d) Increased planned burning to 390,000 ha

The VBRC recommended a rolling target of five per cent of public land treated for fuel reduction per annum (VBRC 2010). In 2010, the Victorian Government supported this recommendation with a commitment to achieve a rolling annual target of 390,000 hectares.

DELWP has continued to implement a range of reforms to facilitate the delivery of a planned burning program to reduce the threat and impact of bushfires for Victoria. DELWP has improved processes that focus on addressing key performance indicators to enable the department to achieve annual targets.

DELWP's planned burning target for 2014–15 is 275,000 hectares. As of 30 June 2015, 85 per cent (233,769 hectares) had been treated.

The BRCIM advocated for the State to reconsider the planned burning rolling target and replace it with a risk-based approach focused on the protection of life and property (BRCIM 2012; 2013; 2014). The BRCIM believed that the 390,000 hectare target may not have been achievable, affordable or sustainable and noted the substantial progress made by the former Department of Environment and Primary Industries in developing a strategic risk management approach to planned burning (BRCIM 2013; 2014).

In February 2015, the Minister for Environment, Climate Change and Water and the Minister for Emergency Services requested that IGEM conduct a review of matters relating to bushfire fuel management on public land in Victoria and make recommendations in relation to future performance targets for the fuel management program.

Government released IGEM's report, *Review of performance targets for bushfire fuel management on public land* (IGEM 2015b) on 21 May 2015.

The review made four recommendations for a way forward in Victoria's bushfire fuel management, including a shift away from a hectare-based fuel reduction target to a risk-reduction target.

The Victorian Government is consulting with communities and stakeholders, including fire management agencies, before making a decision on IGEM's recommendations later this year.

Finding

IGEM will continue to monitor the implementation of this action pending the Victorian Government's response to the recommendations outlined in the *Review of performance targets for bushfire fuel management on public land* (IGEM 2015b).

56(f) Identify changes required to effectively and efficiently achieve the target planned burn

The BRCIM described the former Department of Environment and Primary Industries' development of a strategic, risk-based approach to bushfire management (the Bushfire Management Reform Program) under which fuel management was targeted where it delivered the greatest bushfire risk reduction (BRCIM 2014).

This approach demonstrated a shift away from a nominal annual treated area of land to a risk-based approach.

In October 2014, DELWP published three Strategic Bushfire Management Plans for priority, bushfire risk areas in the state – Barwon Otway, West Central, and East Central.

The plans detail the bushfire fuel management strategy and other actions that are taken to minimise the impact of major bushfires on people, property, infrastructure and economic activity, and maintain and improve the resilience of natural ecosystems.

An additional four strategic bushfire management plans, covering the remainder of Victoria are due for completion in mid-2015.

As referenced in the previous section, this action will be informed by the government's response to recommendations made by IGEM in the *Review of performance targets for bushfire fuel management on public land* (IGEM 2015b).

Finding

IGEM will continue to monitor the implementation of this action pending the Victorian Government's response to the recommendations outlined in the *Review of performance targets for bushfire fuel management on public land* (IGEM 2015b).

Recommendation 59:

The Department of Sustainability and Environment amend the Code of Practice for Fire Management on Public Land in order to achieve the following:

- provide a clear statement of objectives, expressed as measurable outcomes
- include an explicit risk-analysis model for more objective and transparent resolution of competing objectives, where human life is the highest priority
- specify the characteristics of fire management zones – including burn size, percentage area burnt within the prescribed burn, and residual fuel loading
- adopt the use of the term ‘bushfire’ rather than ‘wildfire’.

Implementation actions

ACTION REQUIRED	DUE DATE	STATUS
59(b) Amend operational manuals and guides and advise all staff	01/12/2012	Ongoing

59(b) Amend operational manuals and guides and advise all staff

The BRCIM reported that the former Department of Sustainability and Environment (now DELWP) had embarked on a two-year program to update directions to operational staff to reflect the revised 2012 Code of Practice for Bushfire Management on Public Land (BRCIM 2012).

Amendments to DELWP’s fire management manuals have taken longer than initially anticipated due to the need for a new document control system and completing the architecture for new manuals. This has involved engagement with users and subject matter experts, establishing a governance process and prioritising the areas of highest risk.

DELWP has reported that six manuals are relevant to this action:

- Response (completed)
- Preparedness (expected completion by end of 2015)
- Prevention (expected completion by end of 2015)
- Fuel Management (expected completion by June 2015)
- Recovery (expected completion in 2016)
- Occupational Health and Safety (not yet started)

The Response manual has been completed.

The Preparedness, Prevention, Fuel Management, and Recovery manuals are still under development with expected completion dates in 2015 and 2016.

The Occupational Health and Safety manual is still under consideration.

The Fuel Management manual has been redrafted entirely since May 2014, ensuring alignment of key improvements in DELWP processes such as:

- strategic bushfire management plans
- operational planning
- tactical planning
- delivery, including technical improvements in field operations.

As manuals, or sections of manuals, are approved, they will be made available to CFA, DELWP, EMV and Networked Emergency Organisation partners (Parks Victoria, Melbourne Water and VicForests), through FireWeb.

Finding

This action is proceeding satisfactorily and IGEM will continue to monitor its implementation.

Recommendation 67:

The State consider the development of legislation for the conduct of inquiries in Victoria – in particular, the conduct of royal commissions.

Implementation actions

ACTION REQUIRED	DUE DATE	STATUS
67(a) Develop a policy proposal for a Public Inquiries Bill	30/06/2014*	Complete

*Bushfires Royal Commission Implementation Monitor reporting date

67(a) Develop a policy proposal for a Public Inquiries Bill

The *Inquiries Act 2014* was passed by Parliament on 18 September 2014 and received Royal Assent on 23 September 2014. The State now has a comprehensive and flexible framework for the establishment and conduct of three forms of executive inquiry (Royal Commission, Board of Inquiry and Formal Review).

Finding

This action is complete as the *Inquiries Act 2014* was passed by Parliament on 18 September 2014 and received Royal Assent on 23 September 2014.

7. Action 20(d) update

Recommendation 20:

The Country Fire Authority and the Department of Sustainability and Environment amend their policies on aerial preparedness and standby arrangements, their dispatch protocols and the management of aircraft in order to do the following:

- require that at locations that attract the risk assessment or preparedness level A on Code Red days all personnel needed for air operations must be on standby by 10.00 am
- establish a system that enables the dispatch of aircraft to fires in high risk areas without requiring a request from an Incident Controller or the State Duty Officer.

Implementation actions

ACTION REQUIRED	DUE DATE	STATUS
20(d) Develop a system that will enhance dispatch arrangements	30/06/2014	Complete

20(d) Develop a system that will enhance dispatch arrangements

In 2014, the BRCIM reported that this action, the last ongoing action related to Recommendation 20, had been satisfactorily implemented and was complete.

At the time the BRCIM was preparing the 2014 Annual Report, the Enhanced Aircraft Request and Dispatch System (EARDS) project, managed by the Aviation Services Unit was about to go to tender for an appropriate information technology solution for a system to enhance dispatch arrangements.

DELWP has since advised that the development of the information technology system went to public tender. During the procurement process, however, the National Aerial Firefighting Centre (NAFC) and the EARDS project team identified an alternative solution that could also address Action 20(d).

After seeking guidance from the EARDS Project Control Board, the EARDS Project Team in conjunction with NAFC, proceeded with the alternative solution. A governance framework has been developed and endorsed in principle.

The alternative solution forms part of a wider strategy to work in a national collaborative infrastructure and offers potential benefits such as cost savings for EARDS and standardised systems and processes for all states.

Finding

IGEM considers that the alternative information technology solution meets the intent of Action 20(d) and the cost benefits and streamlined systems and processes provide a better outcome for the State.



8. Concluding remarks

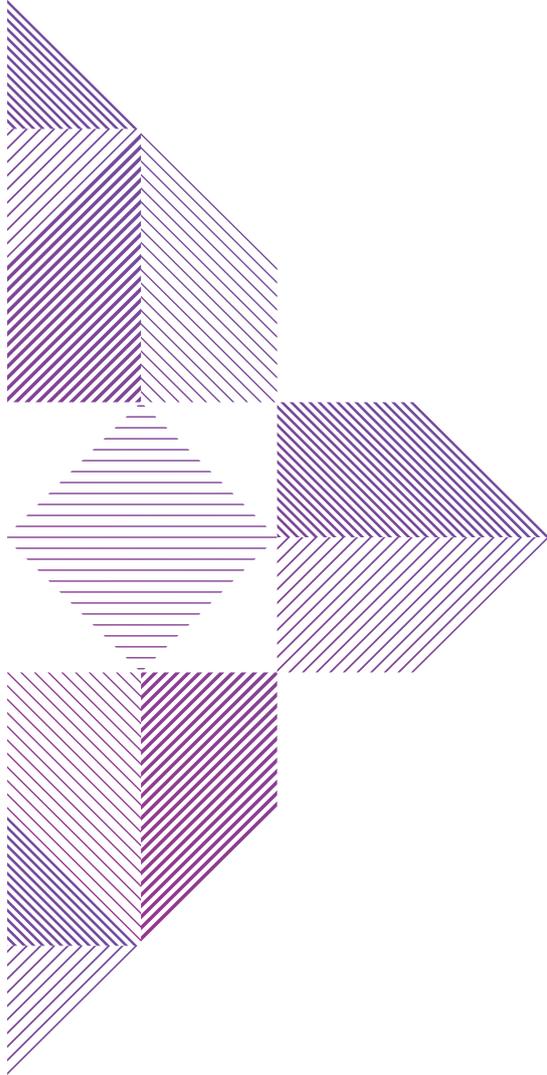
In preparing this 2015 progress report, IGEM considers the sector is making satisfactory progress towards completing the implementation of the VBRC recommendations and actions.

At the conclusion of the reporting period, 1 May 2015, seven recommendations and 11 actions remain ongoing.

Many of these are scheduled for completion within the next 12 months and are likely to be reported as complete in IGEM's 2016 report.

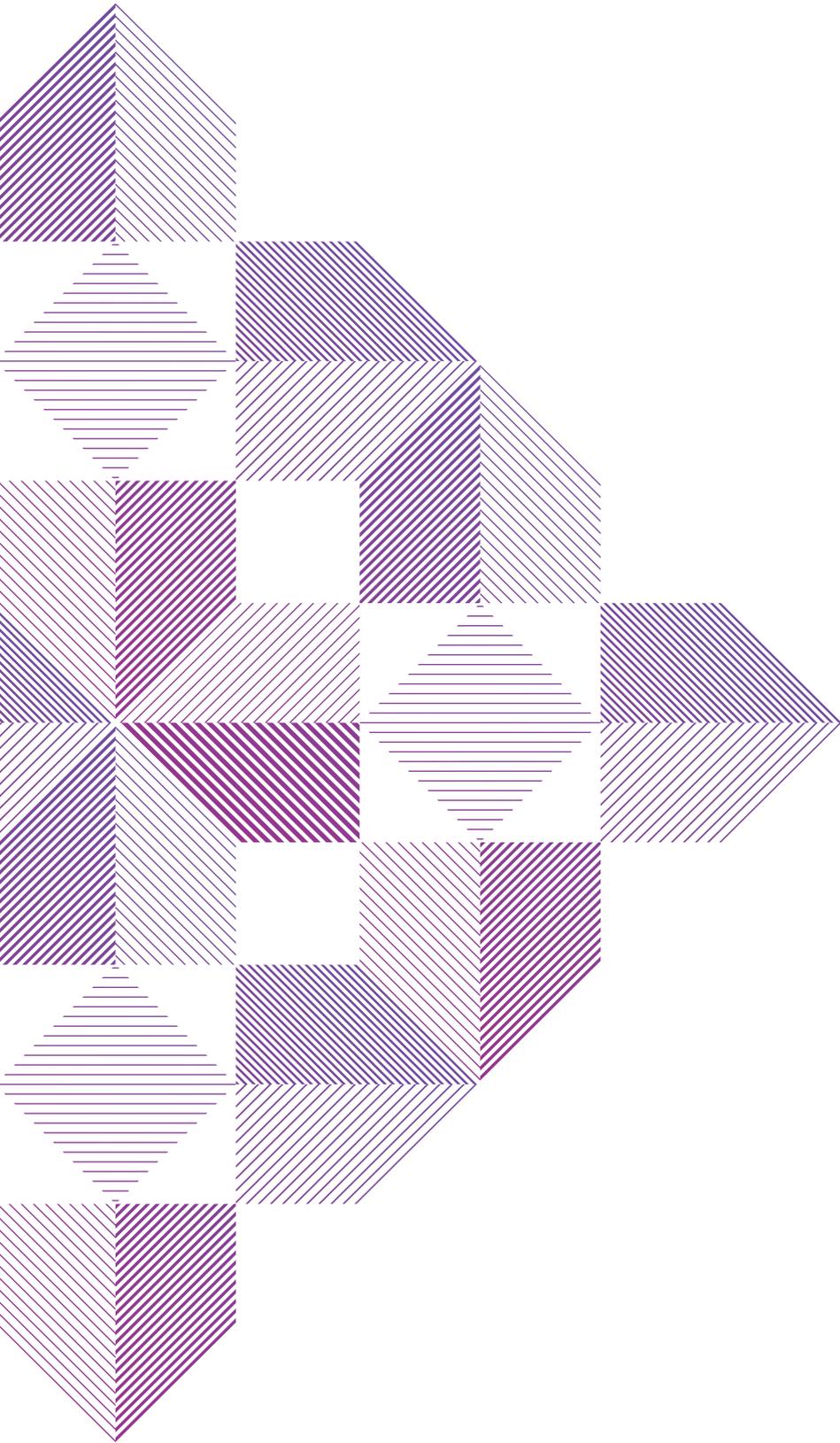
IGEM will continue to monitor implementation of the ongoing recommendations and actions until their completion, providing assurance to government and community that the improvement of emergency management arrangements recommended through the VBRC support a safer and more resilient Victoria.

The Inspector-General wishes to express his appreciation to representatives from the lead agencies for their participation and assistance in the preparation of this report.



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