Victorian Warning Protocol

Version 3
2017

VICTORIA
State Government

Agreement to the Victorian Warning Protocol

The revision of the Victorian Warning Protocol is noted by the State Crisis and Resilience Council (SCRC) as a whole of government protocol. The information contained in this protocol reflects contemporary Victorian emergency management arrangements, legislation and Machinery of Government (MOG) changes. The following stakeholders have been consulted on the updates to version three of the Victorian Warning Protocol, as the agencies and departments who hold responsibility in issuing information and warnings to the Victorian community.

The following list of agency and department stakeholders have reviewed, are cognisant of, and agree with the principles contained therein.

- Country Fire Authority
- Department of Economic Development, Jobs, Transport and Resources
- Department of Environment, Land, Water and Planning
- Department of Health and Human Services
- Emergency Management Victoria
- Emergency Services Telecommunications Authority
- Environment Protection Agency Victoria
- Metropolitan Fire and Emergency Services Board
- Victoria Police
- Victoria State Emergency Service

The stakeholders acknowledge that full consultation was undertaken throughout the development of this Protocol and that the contents are an extension of existing emergency management arrangements.

The stakeholders undertake to comply with this Protocol to the best of their ability and as far as is reasonably practicable in the circumstances, subject to any laws, regulations and/or other legally binding protocols and agreements.

Record of Amendments

Version	Date	Amendment(s)	Author(s)
3.0	October 2017	SCRC noted Version 3 - changes reflect all emergencies focus - incorporation of reviews	Emergency Management Commissioner
2.0	July 2013	SERPC acknowledge Version 2 - Updates to language, CAP AU STD and Appendix 3	Fire Services Commissioner Victoria
1.0	Nov 2009	Approved by stakeholders acknowledged in Agreement to the Victorian Warnings Protocol	Office of the Emergency Services Commissioner Victoria

This protocol is a living document that will be reviewed periodically. New versions will only be published when sufficient changes warrant revision.

Changes to this Protocol will require the agreement of the above stakeholder organisations.

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1. Background

The Victorian Warning Protocol (hereafter referred to as “the Protocol”) was established to provide emergency response agencies with a coordinated and consistent direction to provide information and/or warnings to inform the Victorian community of a potential or actual emergency event.

The Protocol was developed in accordance with the national warning principles agreed to by the Ministerial Council for Police and Emergency Management – Emergency Management in September 2008. In accordance with these principles, a national warning process was subsequently developed. Both the national warning principles and process are outlined at Appendix 1.

The Protocol has been further updated to reflect the need to provide community focused information and warnings for all emergencies. Information and warnings that are tailored to the community, contain accurate localised information, and are issued and updated in a timely fashion have the ability to significant impact upon the lives and safety of communities.

2. Introduction

A warning is issued when an emergency that threatens life or property could impact or is impacting a community. Warnings should provide communities with advice and information about the emergency with the intention of helping people make good decisions to protect themselves and their property. Providing effective community information and warnings is a key component in enabling the community to act to prevent the loss of life as well as limiting material, infrastructure and economic damage.

The State Emergency Management Priorities outline the factors for consideration by control and supporting agencies during any emergency, including Class 1 and 2 emergencies. The intent of the priorities is to minimise the impacts of an emergency on the community. The priorities (in order of importance) include the protection and preservation of life, providing the community with information and warnings.

It is important to acknowledge that while warnings are a critical tool, they are just one part of a communications structure that exists to educate, prepare, inform / warn and support the community before, during and after emergencies. To best serve the community control agencies need to be strategic in their communications. The intent of emergency communication is to foster safer and more resilient communities. Key to achieving resilience is sharing the responsibility for preparedness, response and recovery with the Victorian Community.

The channels the community uses to source information will continue to evolve as advances in technology drive change. To keep pace with this change there is a need to ensure systems and processes built are that are based on principles that will guide the provision of information and warnings to the Victorian community while offering flexibility to adapt.

This Protocol encompasses information and warnings in the lead up to and during the response phase to inform and warn communities of potential threats and actions to be taken for their safety. This Protocol also covers providing information to the community during the relief and early phases of recovery. Given that the recovery phase starts almost immediately after the response phase starts, greater consideration must be given to supporting the community through the early phases of recovery. Information about relief must be included

even as emergency services warns the community about the threatening or actual emergencies.

For the purposes of consistency and practicality, agencies should integrate the Victorian Warning Protocol into their respective agency emergency management arrangements. Agencies shall ensure that warning procedures are well documented, communicated and understood by all relevant emergency management staff. Standard agency procedures, as outlined in business rules and Joint Standard Operating Procedures supplement this Protocol.

3. Authority and Responsibility

This Protocol is issued by the Emergency Management Commissioner (EMC) under section 44 of the *Emergency Management Act 2013* (Vic) (EM Act 2013) insofar as it relates to fires. This Protocol also applies to other types of emergencies to promote a consistent approach to warning the community.

Part three of the Emergency Management Manual Victoria (EMMV) contains the State Emergency Response Plan (SERP) prepared in accordance with the *Emergency Management Act 2013*. The SERP also states the protection of life must be the main priority when agencies are responding to an emergency. The State Emergency Management Priorities provide clear direction that the dissemination of information and warnings to potentially affected communities for the purpose of protecting life is a priority during any emergency. The agency or department responsible for the response to an emergency is determined under the Emergency Management Manual Victoria – Part 7 – Emergency Management Agency Roles and the State Emergency Response Plan.

Warnings and the release of other public information should be authorised by the Incident Controller[1] prior to dissemination. Where an extreme and imminent threat to life exists and authorisation from the Incident Controller is not practicable in the circumstances, warnings may be issued by any response agency personnel.

Although the Incident Controller is required to authorise all information and warning notifications, the Regional/Area Operations Controller/Commander/Duty Officer and/or State Controller/Commander/Duty Officer may authorise warnings on behalf of the control agency in the event that the Incident Controller is unable to do so in a timely manner as described above.

The control agency, as identified in the EMMV, will work closely with the relevant supporting agencies and departments to provide the community with consistent and coordinated information, when practicable.

In the event that none of the tiers of the control agency are able to issue warnings, or require assistance with the issuing of warnings, the control agency must advise the State Response Controller (SRC) who in turn will facilitate the issuing of warnings[2].

[1] In the case of fires, the Incident Controller performs this function on behalf of the specified officer who has the statutory duty to issue warnings under legislation. See section 3.1 below.
[2] In the case of fires, the State Response Controller performs this function of ensuring warning are issued on behalf of the EMC. See section 3.1 below.

The State Emergency Response Plan (SERP) acknowledges that in the initial stages of some emergencies, it is possible that there may be no warnings provided to the community or that warnings will contain minimal information.

3.1. Authority and Responsibility to issue warnings in relation to fires

The State Response Controller, Chief Officer of the MFB, Chief Officer of the CFA, or the Secretary to DELWP (as the case may be) has the responsibility to issue warnings to potentially affected communities in relation to fires. The control agency will, when practicable, work closely with the relevant supporting agencies and departments to provide the community with consistent and coordinated information.

The responsibility for issuing community warnings for fires is as follows:

Type of emergency	**Person or body responsible for issuing warning**	**Duty to issue warning**
Major fire	State Response Controller	Section 43(1) of the EM Act 2013
Fire in the metropolitan district (other than major fire)	Chief Officer of the MFB	Section 32AA of the *Metropolitan Fire Brigades Act 1958* (Vic) and section 43(2) of the EM Act 2013
Fire in the country area of Victoria (other than major fire)	Chief Officer of the CFA	Section 50B of the *Country Fire Authority Act 1958* (Vic) and section 43(2) of the EM Act 2013
Fires in State forests, national parks and on protected public land (other than major fire)	Secretary to DELWP	Section 62AA of the *Forests Act 1958* (Vic) and section 43(2) of the EM Act 2013

The State Response Controller, Chief Officer of the MFB, Chief Officer of the CFA and Secretary to DELWP have a statutory duty to have regard to this Protocol when issuing warnings in relation to fires.

The EMC has a duty to ensure that community warnings are issued in relation to fires in Victoria to protect life and property, in accordance with section 42(1) of the EM Act 2013. This gives the EMC an oversight role in relation to warnings for fires.

3.2. Other responsibilities

The control agency should work with the local council, agencies and departments responsible for recovery to ensure that consistent, timely and community focused public information continues as the emergency transitions from response to recovery. The impacted communities' information needs will change as the community begins to start to recover. The control agency should seek intelligence and feedback to ensure they are providing the information the community needs during this transition. This process is outlined in the Relief and Recovery Communications Manual and the Relief and Recovery Public Information and Communications Framework.

The relevant control agency will create and maintain templates for the hazards they are allocated responsibility for under the EMMV. Templates will contain community action statements relevant to the hazard. These pre-approved action statements will be created by the control agency to ensure warnings are accurate and promptly provided to the community. Based on the intelligence provided by the control agency and supporting agencies, and

having regard to the possible impacts on communities, the control agency will endeavour to add tailored information relevant to at risk communities beyond the statements in the templates.

4. Protocol

The Protocol is based on an all-hazards approach, as legislated; with Victoria broadening the approach to consider all communities, all emergencies. Taking such an approach will reassure the community that regardless of the emergency type, any information or warnings disseminated will be authoritative, consistently constructed, timely and appropriate. This is achieved through responsible control agencies using the Victorian Warnings System.

In Victoria, the warnings system is available to issue information and warnings for Class 1 and Class 2 emergencies. To be able to provide appropriate warnings and information to the community during all hazards emergency services must be flexible in their use of systems. To enable flexibility below are key principles for issuing warnings to the community:

Relevant:

- Warnings should assume that people in the affected community are not prepared and that they will start preparation activities when warnings are issued.
- Warnings should not assume that people in the affected community have local knowledge. Local knowledge should be incorporated to help those who live in the area understand that the warning applies to them.
- Warnings should not assume that people in the affected community have knowledge of the emergency.
- Warnings should include, when possible, impacts the community will experience or might experience.
- Warnings should address the community which is impacted or likely to be impacted.

Timely

- Warnings are issued promptly.
- Warnings are updated regularly.
- Warnings are updated before the previous warning expires.

Tailored

- Warnings should include specific details about the emergency and the likely or actual impacts.
- Warnings are tailored to the people in the impacted community.
- Warnings should include recommended actions that are tailored to the event and are realistic.

Accessible

- Warnings are provided through multiple channels. Channels are listed at 4.4.2 Message dissemination.
- Warning templates are consistently structured across all hazards.
- Warnings are written in plain language, to ensure accessibility for community members who are culturally and linguistically diverse. Research shows that everyone’s reading and comprehension ability decreases during high stress situations.
- People with disabilities are provided with advice on how they can access warnings and information.

These principles have been built into the warnings system.

The Protocol adopts a systems approach to provide timely and appropriate warnings to communities. The systems approach recognises that the intrinsically linked components of warnings rely on and build upon each other to ensure the timely and effective dissemination of advice and warnings to the community. The following seven elements are therefore to be applied in their entirety to ensure for an effective warning system:

1. Resilience
2. Community preparedness
3. Decision-making and authorisation
4. Message construction and multi modal dissemination
5. Management of warning consequences
6. Real-time monitoring
7. Real-time closure

A diagrammatic view of the warning process is provided at Appendix 2.

4.1. Resilience

The Community Resilience Framework defines resilience as “the capacity of individuals, communities, institutions, business and systems to survive, adapt and thrive no matter what kinds of chronic stresses or acute shocks they experience” (100 Resilient Cities 2016). Part of a resilience approach is accepting that despite emergency services best efforts, challenges and losses from emergencies are inevitable.

The application of the framework into warnings, means recognising that warnings and information can support a community to undertake actions that minimise the impacts of an emergency.

To ensure warnings and information provided to the community are meeting the needs of the community control agencies should, when feasible, seek community feedback. Feedback can be provided through social media, media, community meetings and After Action Reviews (AARs).

4.2. Community preparedness

Whilst emergency service agencies can provide information and warnings to communities at risk of emergencies, the overall success of the warning is determined by the communities’ awareness of emergencies, ability to understand the warning and undertake subsequent action.

It is essential that communities understand their risk environment and know what to do on receiving information and/or a warning message. Communities should be aware that emergencies can start quickly and threaten lives and property within minutes and in these situations they will need to act quickly and not wait for a warning. Empowering communities to act in a timely and safe manner will reduce the loss of life, personal injury and damage to property and infrastructure, and contribute to the effectiveness of any warning system.

Effective and on-going community education and preparedness programs emphasising the importance of practical and tested emergency plans and safety strategies are essential. Community preparedness needs to be driven by engagement between community and the emergency management organisations. Where they exist preparedness messages should be extended into warnings. An example of this is reflecting the language used in education and promotional campaigns.

As per the EMMV, agencies should, as far as possible, inform the community regarding warning systems and procedures likely to be used during an emergency. Warnings will be most effective, and reach the most people, when a combination of warning channels are used. This should form part of the community education process.

4.3. Decision-making and authorisation

Activation of the Protocol will be dependent on a number of factors that will be informed by available information and intelligence.

Organisations are encouraged to have in place, systems for monitoring hazards, pre-planned triggers for activation, clear lines for authorisation and a good understanding of roles and responsibilities for decision making to ensure that timely, tailored and relevant warnings are provided based on the best available information at the time.

As outlined in part 3 of this Protocol above, there are specific statutory duties to warn in the case of fires. The State Response Controller is responsible for issuing warnings for major fires. The Chief Officer of the CFA is responsible for issuing warnings for fires in the country area of Victoria, the Chief Officer of the MFB is responsible for issuing warnings in the metropolitan district, and the Secretary to DELWP is responsible for warnings in relation to fires in State forests, national parks and on protected public land.

For other types of emergencies, the control agency is responsible for issuing warnings in accordance with this Protocol.

The primary responsibility for issuing information and warnings to the community for these other types of emergencies lies with the Incident Controller, and in the event that she/he is unable to do so, the subsequent tiers of the control agency and then the State Response Controller (SRC) for Class 1 emergencies, the State Controller (SC) for Class 2, or the Emergency Management Commissioner (EMC).

Preferably all information and warning messages are to be authorised by the control agency at the incident level, however if necessary, at the regional or state level, prior to dissemination. The State Commander/Duty Officer and/or Regional/Area of Operations Commander/Duty Officer will be responsible for monitoring and ultimately ensuring that appropriate warnings for emergencies are initiated.

Underpinning the decision to warn, and the construction of warning messages, is an agencies' ability to rapidly analyse available intelligence, monitor emerging risks, predict future impacts and decide on the best course of action. Once the appropriate authorities evaluate this information, it becomes intelligence. Intelligence should be interpreted for the potential impacts on the community. Intelligence collection and analysis is an ongoing activity that should inform decision-making and ongoing review of warnings. Agencies should be mindful that bureaucracy does not impede the operational decision making processes.

A number of factors need to be considered by the control agency when applying the Protocol and considering the most appropriate way to provide public information. These include but are not limited to:

- type of emergency, incident or threat
- communities at risk
- urgency/timeliness
- impact and threat to lives and livelihood
- consequences of information and warnings
- actions required of community
- consequence of the emergency
- community behaviour and perceptions
- connections with the community

At the very minimum, the following is to be considered:

- likelihood
- consequence

- timeframes

4.3.1. Cross-jurisdictional considerations

Emergencies do not respect borders and may impact multiple jurisdictions. Each jurisdiction is responsible for engaging with other impacted jurisdiction/s to discuss cross-border issues and warning requirements.

These arrangements should mirror existing cross-boundary arrangements as far as possible, but need to take into account a number of particular considerations:

- Plan before an event using agency-to-agency contacts. Agencies are encouraged to undertake planning locally and between relevant state agencies on how a warning affecting both sides of the border will be managed. Planning should cover the decision-making, notification and management of issued warnings that affect multiple jurisdictions.
- Act with the urgency that the situation demands. Agencies should ensure that their operational protocols reflect the primary objective of the system. The principle to note is that **if an emergency is potentially life threatening - issue the warning**. Where practical, the agency issuing the warning should advise the other jurisdiction/s during the warning process that the emergency may or is impacting on that jurisdiction and that the warning issued has cross-border coverage. If early notification is not possible, information about the warning should be passed on as soon as practical.
- Talk during the event to support issuing of warning that meets needs of communities on both sides of the border.
- Work locally; inform centrally. Some agencies may operate the system on a decentralised basis, while others may retain a centralised model. Contact between state and incident control centres of neighbouring jurisdictions is essential in any use of the system across borders.

4.3.2. Complex emergencies

Although a single control agency is identified for an emergency as outlined in the EMMV emergencies can cross government departments and agency jurisdictions.

The control agency holds responsibility for issuing warnings however where feasible, the control agency should undertake appropriate consultation with relevant partner and support agencies and incorporate their advice within the warnings and information as appropriate. Agencies must be mindful of the criticality of a timely warning to the community when undertaking the consultation process.

4.3.3. Strategic communications

A strategic approach to communications during complex emergencies is expected by communities. Strategic communications should be incorporated and integrated through readiness, response, relief and recovery. A lack of coordination between agencies involved in a response can result in confusing and contradictory public information and warnings which can erode communities trust in respective agencies.

Control agencies are to ensure that they liaise with relevant stakeholder and support agencies, utilising an Emergency Management Team (EMT) where appropriate, that includes regular and timely information sharing with the SRC. The Emergency Management Joint Public Information Committee (EMJPIC) and Incident Joint Public

Information Committee (IJPIC) are mechanisms to help support strategic communications during complex emergencies.

The Strategic Communications Cell links the Control, Consequence Management and Community Connection approaches. The SSCC function leads the state strategic communication planning and whole of community approach to communicating during an emergency.

In the event of multiple types of incidents within relative proximity and which involve more than one control agency issuing warnings, the relevant Controller is responsible for ensuring that warnings are co-ordinated. Dependent on the incident and its severity and scale, the coordination will occur at either the incident, regional/area of operations or state level. A measure of coordination for the management of warnings issued must also be maintained within each agency.

4.4. Message construction and multi-modal dissemination

It is important that sound judgement and effective decision-making inform the message content and that messages are disseminated using appropriate methods to maximise message saturation and penetration. It is important to note that they may change over the course of time, with new legislation, reviews, etc.

Warnings should, where possible, be simple and brief and utilise a range of dissemination methods. Consideration should be given to the differing communication needs of the relevant communities. Message construction and dissemination should consider:

- culturally and linguistically diverse (CALD) individuals or communities
- hearing impaired individuals or communities
- vision impaired individuals or communities
- Other vulnerable people

The warnings system has four layers used for community warnings in Victoria. The decision-making process will identify which of the following levels of alert will need to be issued to the community:

Advice	Issued to notify the community that an incident/event is occurring or has occurred that may escalate to impact on life or property. Actions may be recommended for preparedness or vulnerable groups.
Warning (Watch & Act)	Issued when an incident/event is likely to, or is directly impacting the community. They need to take action now.
Emergency Warning	Issued when the community is in imminent danger of an incident/event and need to take action now.
Evacuate Now / Prepare to Evacuate	Issued when the community should quickly prepare to, or must immediately leave an area.

If a warning (watch & act), emergency warning or evacuation message is issued then it is essential to “close the loop” or inform the community that the threat has passed and they can resume normal activities. An Advice – All Clear should be used for this purpose.

Other types of notifications that can be issued from the warnings platform includes Safe to Return and Community Information messages. Community Information messages are issued to provide the community with information that isn’t urgent during and after an emergency.

4.4.1. Message construction

Warnings are intended to achieve two distinct outcomes:
1. Inform the community of an impending or current threat.
2. Promote appropriate actions.

Agencies should aim to achieve both of these outcomes when creating warnings. Transparency in public information and warnings helps to foster trust in the message and the source. Wherever possible, intelligence should inform warning content. Relevant intelligence can help the community understand the hazard they are facing and the relevant actions to respond should be included in warnings.

The content and format of the warning must:

- be simple and brief
- consist of clear language and avoid euphemisms
- contain explicit information
- be suited to the needs of the community

In addition to the above, warnings should

- be worded in accordance with advice from the relevant agencies
- utilise appropriate templates

Information contained within the warning should include:

- the type of emergency
- the location(s) of the area affected by the emergency
- the predicted time of impact of the emergency
- the predicted severity of the emergency
- how people should respond to the warning
- identify the agency providing the warning

Messages are to be constructed utilising available information, decision making and risk assessment tools.

Warnings should reflect the principles outlined in the template guidelines found in EM-COP Public Publishing Business Rules. The Template Guidelines are based upon research including the Bushfire and Natural Hazards CRC *Emergency Warning Message Comprehension: Community Focus Groups (2016)* and the Commonwealth policy paper *Emergency Warnings – Choosing Your Words (2008).*

Templates

Where possible, control agencies should create pre-planned warning templates for the hazards they have responsibility for under the EMMV, to assist in the timely dissemination of warnings to the community. Pre-planned templates offer control agencies the opportunity to ensure consistency and to reference the community education and community planning they have undertaken.

Templates should be compliant with the Australian Government Standard for the Common Alerting Protocol – Australia Profile (CAP AU STD, August 2014) which provides the Australian community with a common standard for the dissemination of all hazard alert and warning messages during any emergency.

4.4.2. Message dissemination

The Victorian Warnings System includes EM-COP Public Publishing, VicEmergency channels and Emergency Alert. This system is used by control agencies to create and publish information and warnings to the Victorian community. VicEmergency, as a suite of tools, provides a single source of information about all emergencies for the community to access through a range of channels.

Public Publishing is the platform within EM-COP, that is used to push information and warnings to the various channels as explained earlier. The warnings system is supported by other platforms and mediums that are used to inform and warn the community of emergencies.

When the decision to issue a warning or publish public information is made, consideration should be given to the channels used to disseminate the messages informed by, but not limited to:

- community need
- where the community sources information
- community demographics (including internet usage)
- type and severity of the emergency
- availability of warning systems (or the ability of the community to access warnings for example power outages).

A multi-faceted warning approach is recommended to ensure the warning can be accessed by the impacted community across a range of channels. Doing this accounts for the diverse ways the Victorian community accesses information during an emergency. It also helps ensure consistency across channels which contributes to the trustworthiness of the warning. There are a number of channels utilised to warn the community of potential or imminent emergencies, including but not limited to:

- VicEmergency website and app
- official emergency broadcasters who have signed MOUs[3]
- mainstream media outlets
- proactive telephony based (e.g. Emergency Alert via landline and SMS to mobile)
- reactive telephony based information lines (e.g. VicEmergency hotline)
- control and supporting agency social media channels

[3] Emergency broadcasting agreements can be found at the Emergency Management Victoria website – www.emv.vic.gov.au (under Our Work/Victoria's Warning Systems)

- person-to-person (including doorknocks, community meetings, and virtual 'town hall' meetings conducted over live radio or web feeds)
- local automated warning systems, e.g. community sirens, speakers and roadside signage

In addition to using a multiple channels approach for warning the community control agencies should consider other channels that can be used to warn industry, business and the wider emergency management sector.

Although a number of dissemination methods are pre-determined by the warnings platform, agencies must identify other pre-planned dissemination methods, including social media, to be utilised during an incident. Control agencies will have contingency plans in place in the event that the selected warning dissemination platform/system fails. This is supported by a redundancy process for the Victoria Warnings System.

Consideration for the use of telephony based messaging should be based around alerting requirements. Further information on telephony based warning is provided in Appendix 3.

Messages disseminated to the community must be consistent across the platforms utilised to minimise community confusion. Emergency Warnings and evacuation messages are, where appropriate, to be preceded by the Standard Emergency Warning Signal[4] (SEWS). Agencies are to note that the control agency is responsible for the use of SEWS. Caution should be exercised to avoid the overuse of SEWS as this may lead to public complacency. When relevant, including overnight, the Incident Controller may direct emergency broadcasters to reduce the use of SEWS and the frequency of broadcasters[5].

An aide memoir depicting important considerations for community warnings is provided at Appendix 4. The aide memoir should be modified to meet agency requirements and is to reflect available communication dissemination methods and procedures.

4.5. Management of warning consequences

Agencies responsible for issuing warnings must give due consideration to the consequences of the warnings. These considerations should include the likely community response to the warning and the impact on other systems (such as websites, information phone lines and traffic management, etc.), and arrangements implemented to accommodate these outcomes.

Some activities involving the management of warning consequences include updating information available on official websites, rostering additional resources to manage increased call volume, arrangements for the activation of a relief centre/s and road access to the relief centres, etc.

During the construction of the message, consideration should be given to the potential impact on Triple Zero (000). Messages should be clear and ensure that Triple Zero (000) is not identified as the first point of contact for further information, unless the impacts of the emergency on the community necessitate that Triple Zero be listed first. Appropriate information must be available at the alternate information sites (radio, web, etc.) prior to the release of the warning to reduce the reliance on telephony information services.

4 The guidelines for the use of SEWS are in EMMV Part 8, Appendix 14
5 This is outlined in both the Emergency Broadcaster Practice Note and JSOP 4.01.

Activities to manage the consequences of the warning should, where practicable, be performed prior to and/or concurrent to the message being disseminated to the community.

4.6. Real-time monitoring

Agencies, where practicable and feasible, should monitor in real time the effectiveness of the dissemination of the warnings. This includes monitoring to ensure that the system has delivered the warning and having redundancies in place in the event of failure.

Where practicable and feasible, agencies should also monitor the impact and quality of the warning. Real-time monitoring can assist agencies with situational awareness and identify the need for further messaging requirements. This may include monitoring sources of community feedback, such as social media, and adjusting messaging when required.

Reviewing messages for quality and consistency can reassure the community that warnings are an authoritative and trustworthy source of information.

Real time monitoring should be informed by ongoing intelligence collection and analysis. This includes ensuring that the warnings issued are appropriate for the evolving emergency.

4.7. Real-time closure

If the community has been asked to undertake actions then consideration should be given to the need to inform the community that the emergency no longer poses a threat to them and they can return to normal behaviour. The message is to be issued through the appropriate authorising channels utilising the relevant dissemination methods. Agencies should be mindful of the wording of the message as there may be residual sensitivities or risk within the community as a result of the emergency.

5. Governance

Control agencies issuing the warning will be responsible for meeting the costs associated with providing that warning. Warnings and information are a critical part of the Public Information functional unit with in the AIIMS structure.

Agencies should ensure that they maintain accurate records of all decision-making activities and processes, messages disseminated and associated costs, and that these issues form part of each agency's debrief.

It should be ensured that post-emergency assessments by relevant agencies, routinely review the effectiveness of warning systems, including the degree to which the warnings resulted in intended changes in behaviour, the appropriateness of information provided, the effectiveness of warning delivery methods, and the cost benefit and cost efficiency of the warning system.[6] This may form part of a broader lessons learnt/debrief process that could include more than one emergency.

Agencies should commit to sharing learnings about public information during emergencies and the Victorian Warnings System through appropriate committees. Where relevant the

[6] Recommendation of the COAG Report on Natural Disasters in Australia (2002)

Warnings Evaluation Framework should be used as part of lessons learnt or reviews. This will bring benefit to all organisations and improve future areas of investment before, during and after an emergency.

Acknowledgements

This Protocol has been developed utilising a range of sector wide research, reviews and resources produced by a number of agencies. The following are thereby acknowledged:

2009 Victorian Bushfires Royal Commission – Interim and Final Reports

Council of Australian Governments (COAG) National Inquiry on Bushfire Mitigation and Management (2004)

COAG Report on Natural Disasters in Australia, August 2002

Australasian Fire and Emergency Services Authorities Council, A National Systems Approach to Community Warnings – Discussion Paper May 2009

Victorian Office of the Emergency Services Commissioner, Victorian Community Information and Warning System Guidelines, July 2013

Australian Governments and the Broadcast Media Industry, Emergency Warnings Choosing Your Words, Edition 2, November 2008

Heads Up Early Warning Systems for Climate, Water and Weather Related Hazards: United Nations University 2009.

Molino Stewart Review of Community Bushfire Warnings 2011

Australian & New Zealand Counter Terrorism Committee language project 2012

National Telephony Warning System Guidelines V1.4 November 2012

Australian Government standard for Common Alerting Protocol - Australia Profile (CAP-AU-STD) V3.0, August 2014

National Review of Warnings and Information - Final Report, November 2014

National Review of Emergency Alert – Consolidated Report Findings, December 2014

Emergency Warning Message Comprehension: Community Focus Groups. Bushfire and Natural Hazards CRC 2016

Emergency Management Victoria, “The six c’s” - https://www.emv.vic.gov.au/news/the-six-cs and https://www.youtube.com/watch?v=Tdr7cK2y2v4, July 2017.

Victorian Preparedness Framework: Emergency Management Victoria, May 2017

Community Resilience Framework for Emergency Management: Emergency Management Victoria, April 2017

Interim Relief and Recovery Public Information and Communications Framework: Emergency Management Victoria, January 2017

Hazelwood Mine Fire Inquiry - Final report and Recommendations, August 2014

Review of response to the thunderstorm asthma event of 21–22 November 2016 – Final Report

6. Appendix 1 – National Warning Principles & Process

In September 2008, the Ministerial Council for Police and Emergency Management – Emergency Management agreed to the following twelve principles for the development of a national framework on warnings for emergencies:

1. **Coordinated:** a warning system should avoid duplication of effort where possible and support a shared understanding of the situation among different agencies involved in managing the incident.
2. **Authoritative and accountable:** warnings are to be disseminated on the decision of an authorised person. Authorities should be able to interrogate the system components for later analysis.
3. **Consistent/Standards based:** the information content is coordinated across all of the mechanisms used for warnings. Messages must be consistent across different sources if they are to be believed by the community. Conflicting messages tend to create uncertainty and will delay responsive action. Any relevant identified standards will underpin the agreed System Framework.
4. **Complete:** message content should include relevant pertinent details, including possibly a direction on the need to consult other sources, presented in a way that is easily and quickly understood by the community. This includes multiple languages in some cases, as well as the use of multi-media for those who are culturally and linguistically diverse or people with a disability such as being hearing or vision impaired.
5. **Multi-modal:** warnings are to be disseminated using a variety of delivery mechanisms and in multiple information presentation formats that will, in some circumstances, complement each other to produce a complete picture, with planning and processes to allow for maximum reach to all members of the community and to provide for redundancies in the case of critical infrastructure failure (e.g. Power or telecommunications).
6. **All hazards:** any emergency warning system developed will be capable of providing warnings, where practicable, for any type of emergency.
7. **Targeted:** messages should be targeted to those communities at risk in order to reduce the complacency that can result from people receiving warnings that do not apply to them – ‘over warning’.
8. **Interoperable:** has coordinated delivery methods, capable of operation across jurisdictional borders for issuing warnings.
9. **Accessible and responsive:** capable of responding to and delivering warnings in an environment of demographic, social and technological change. Recognise the criticality of adopting universal design and access principles, particularly in the development and acquisition of technologies.
10. **Verifiable:** the community is able to verify and authenticate the warnings to reduce incidents of accidental activations and prevent malicious attempts to issue false alerts to a population.
11. **Underpinned by education and awareness raising activities:** the system, any delivery mechanisms that constitute it and the language used in the warning messages it delivers, should be underpinned by appropriate education and awareness raising activities.

12. **Compatible:** with the existing telecommunications networks and infrastructure without adversely impacting on the normal telephone and broadcast system. The system should avoid any adverse operational, technical or commercial implications for the provision of current communications services to consumers and on the integrity of communications networks.

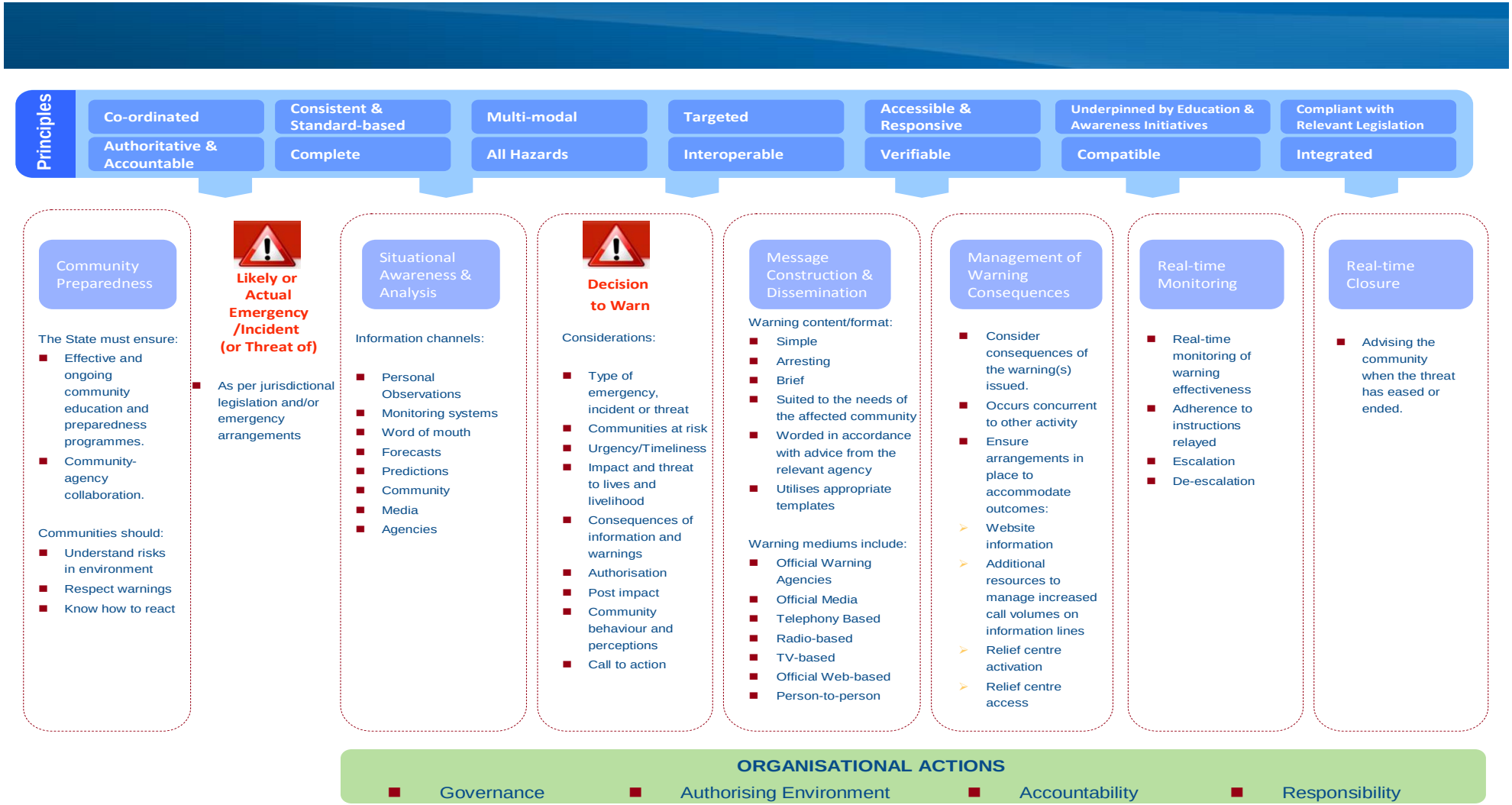
The states and territories agreed to these principles out of session.

At the National Emergency Warning System Protocol Workshop in July 2009, representatives further agreed to expand the scope of the '12 Guiding Principles' to include the following two additional principles:

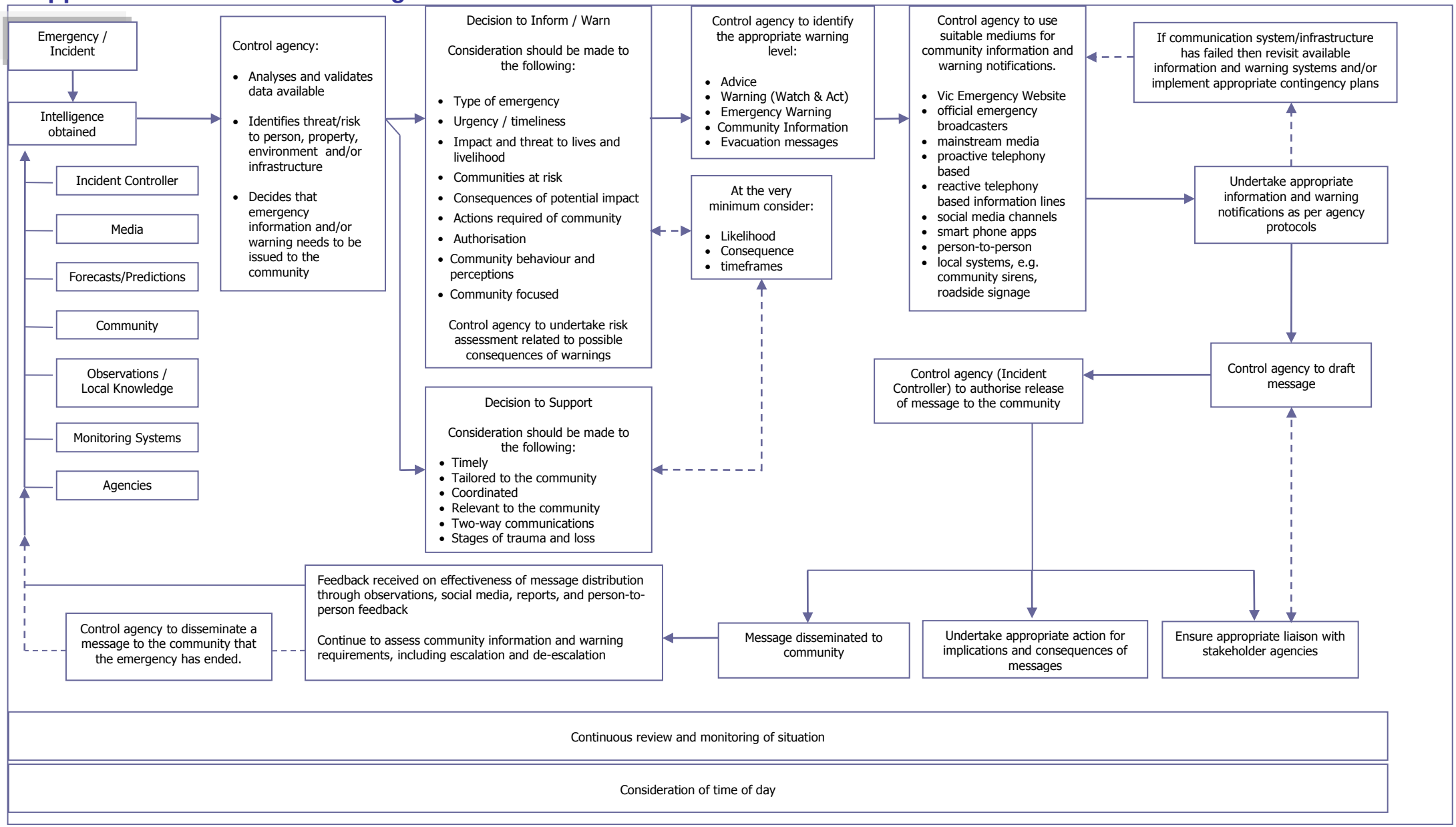
13. **Compliant with relevant legislation:** warnings should be compliant with relevant Commonwealth, State and Territory legislation, associated regulations and policy.
14. **Integrated:** warnings should be integrated to ensure timely notification to multiple organisational stakeholders and communication channels.

In accordance with the above 14 principles, the National Emergency Warning System Protocol Workshop developed and agreed to the national warning processes outlined on the following page. The process was validated at the October 2009 workshop.

7. Appendix 1 (cont) - National Warning Process



8. Appendix 2 – Victorian Warning Notification Process



9. Appendix 3 – Telephony Based Warnings

9.1. Background

In April 2009, following the devastating Victorian bushfires the Council of Australian Governments agreed:

> *to take immediate steps to enhance Australia's emergency management arrangements through the development of a telephone-based warning system that will enable the States and Territories to deliver warnings to landline and mobile telephones based on the billing address of the subscriber to be operational by October 2009 and to undertake further research into a capability to deliver warnings based on the location of a mobile telephone*[7].

Emergency Alert is the national telephone warning system and enables State and Territory emergency management agencies to send information during emergencies to the vast majority of individuals in potentially affected communities. The information is sent to mobile and fixed line telephones in geographically identified areas based on the Service Address. The information is also sent to mobile phones based on their location as determined based upon the last phone tower they connected to.

Emergency Alert was realised following the Victorian Bushfire Royal Commission, becoming the first operational national telephone warning system on 1 December 2009. The system provides an intrusive large-scale warning capability, which was not available prior to 2009.

A Royal Melbourne Institute of Technology (RMIT) consolidated research study reviewed 14 major community safety research reports. The three high level findings were:

- Emergency Alert is proving itself a positive additional emergency warning medium.
- Awareness of Emergency Alert is high and there is a high level of satisfaction amongst message recipients, with most stating that the system fully met or exceeded their expectations.
- There is strong support for the utility of the Emergency Alert system in both disseminating warnings and prompting action.

9.2. Data protection and legislation

A legislative amendment to the *Telecommunications Act 1997* (Cth) (the Act) was required to enable access to this data for emergency warning purposes. The Act contains obligations regarding the use and disclosure of information from IPND, industry wide collection of all listed and unlisted phone numbers and subscriber information in Australia. Those obligations fall on all who use, access, receive or disclose IPND information.

The Location Based Number Store (LBNS) was created to protect phone subscriber's personal information but enable a regular data feed of Integrated Public Number Database (IPND) phone numbers and address data. The LBNS assigns each address a latitude and longitude value (geo-coding) that enables the LBNS to locate the list of telephone numbers within each defined geographic warning area.

[1]COAG Communique 30 April 2009

The IPND information must only be used for the purposes allowed under the Act, that is:

a) a purpose connected with persons being alerted to an emergency or a likely emergency; and

b) the purpose of reasonable testing of whether, in the event of an emergency occurring, persons would be able to be alerted to that emergency ('permitted purposes').

This obligation equally applies to the use of LBNS data. Disclosures from the LBNS and to and from Emergency Alert will generally be allowed by section 295W(3) of the Act, provided that the disclosure is for a permitted purpose. This allows the LBNS Contractor, upon receipt of a query, to provide the requested information to Emergency Alert. There are penalties for the use of the information for purposes other than those intended.

A Deed Poll User Agreement in relation to LBNS (User Agreement) outlines the use and disclosure conditions specified in the Act together with other additional compliance requirements. The User Agreement was signed by all jurisdictions before data in the LBNS was made available for a State or Territory's use. Schedule A of the User Agreement lists the positions Victoria nominated to receive, disclose and use the LBNS.

9.3. Emergency alert

The Emergency Alert platform is underpinned by the following principles:

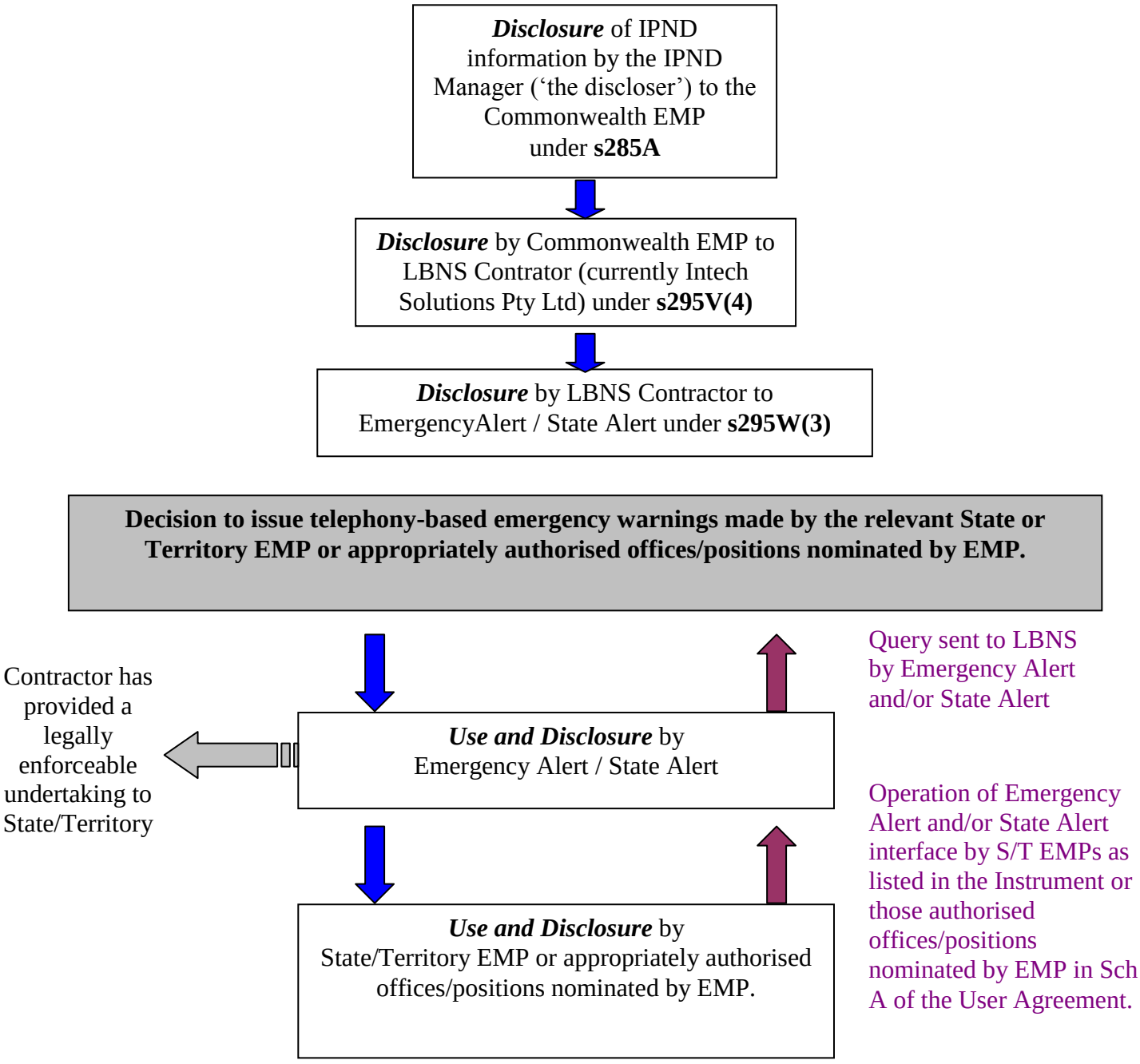
- be accessible, non-discriminative and reach the vast majority
- intrusive
- carrier grade and fully integrated with the telephone network
- operate across all carriers
- not adversely impact operation of the telecommunications network
- be future proof
- not encroach unnecessarily on the privacy of individuals
- be secure, verifiable and able to be authenticated – through 0444 444 444
- provide reporting capabilities
- meet emergency service and system operational requirements e.g. intuitive user interface

The Emergency Alert solution is designed to deliver:

- a carrier grade solution
- high availability
- scalability
- redundancy
- flexibility
- a high level of security
- high performance

- fixed line congestion management
- business continuity
- disaster recovery capability
- jurisdictional segregation
- wide compatibility and enable integration into other systems as designed around open industry standards
- a solid foundation for future upgrades and enhancements

10. Appendix 4 - Flow of IPND information to enable the delivery of telephone-based emergency warning messages by States and Territories



11. Appendix 5 – Warning aide memoir

Message

This **Warning level** is for Location (area this warning applies to).

- Critical details – the hazard the control agency is warning the community about and where it is located.
- Expected increase in risk or changes in situation the community needs to be aware of (i.e. change in wind direction).
- Key timings like when flood waters are expected to start rising.
- If relevant, details about what the hazard is (i.e. pandemic).

Action statement: 1-2 sentences about the most important action for the community to undertake (i.e. leave, shelter indoors, monitor, close windows).

What you should do:

- Actions the community should undertake to protect themselves.
- Assume that the community is not prepared to respond to the emergency.

Impacts in your area:

- Impacts on the community (road closures, school closures, impacts on critical services like hospitals, water, power, gas or communications).
- What the community can expect to see or experience.
- In longer running events you would include information on what emergency services are doing to manage the event or impacts on the community.

This message was issued by Control Agency.

The next update is expected by [warning_next_update] **or as the situation changes.**

More Information:

- Key contact details for further information, encourage the community to source information from multiple channels etc.

Hazard type	**As per CAP-AU***
Hazard subtype	As per CAP-AU*
Warning level required	Prepare to Evacuate Evacuate Now Emergency Warning Warning (Watch and Act) Advice Advice – All Clear Advice – All Clear – Safe to Return Community Information – Notification Community Information - Newsletter
Control agency	As per the EMMV

*Where the CAP-AU hazard type or subtype is likely to cause confusion for the community it has been renamed on the VicEmergency channels while maintaining a CAP-AU compliant feed.

12. Appendix 6 – Glossary

Word	Definition
Channels	A channel is a method used to communicate for example email or Facebook. Information and warnings should be provided through multiple channels because the community will source information during an emergency through different channels. Research tells us that people tend to check information sources (i.e. radio or social media) during an emergency that they normally use. The community are encouraged to always use more than one source for emergency information and warnings.
Common Alerting Protocol – Australian Standard	A simple format used for exchanging all hazard emergency alerts and public warnings. CAP allows a consistent warning message to be disseminated simultaneously over a range of technology networks and warning mediums, thus increasing warning effectiveness while simplifying the warning task.
Control agency	An agency nominated to control the response activities for a specified type of emergency in the EMMV.
Emergency	An emergency is defined in the EMMV as: An emergency due to the actual or imminent occurrence of an event which in any way endangers or threatens to endanger the safety or health of any person in Victoria or which destroys or damages, or threatens to destroy or damage, any property in Victoria, or endangers or threatens to endanger the environment or an element of the environment in Victoria including, without limiting the generality of the foregoing: a) an earthquake, flood, wind-storm or other natural event; and b) a fire; and c) an explosion; and d) a road accident or any other accident; and e) a plague or an epidemic or contamination; and f) a warlike act or act of terrorism, whether directed at Victoria or a part of g) Victoria or at any other State or Territory of the Commonwealth; and h) a hi-jack, siege or riot; and i) a disruption to an essential service. [Act] **The phases of an emergency are:** Prevention: the elimination or reduction of the incident or severity of emergencies and the mitigation of their effects. Response: the combating of emergencies and the provision of rescue and immediate relief services Recovery: assisting people and communities affected by emergencies to achieve a proper and effective level of functioning.
Emergency Management Common Operation Picture (EM-COP)	EM-COP is a web-based information gathering, planning and collaboration tool that runs on any full screen device with a modern browser such as desktop computers, laptops and

	tablets. EM-COP is also used to disseminate warnings.
Intelligence	Intelligence is the process of collecting and analysing information or data, which is recorded and disseminated as intelligence to support decision making and planning.
Resilience	The capacity of individuals, communities, institutions, businesses and systems to survive, adapt and thrive no matter what kinds of chronic stresses or acute shocks they experience (100 Resilient Cities 2016).
Community	A group sharing common characteristics, attributes or interests including communities of place (township, locality etc.); and communities of interest (faith, club, business, virtual, etc.).
Victorian Warnings System	The Victorian Warnings System includes EM-COP Public Publishing, VicEmergency channels and Emergency Alert. This system is used by control agencies to create and publish information and warnings to the Victorian community.
VicEmergency	The VicEmergency platform provides a single source of information about all emergencies for the community to access through a range of channels. A platform is a place or opportunity for communicating ideas and information.
Warning	A warning is defined by the Australian Emergency Management Manual 3 as the dissemination of a message signalling an imminent hazard which may include advice on protective measures.