

# Best Practice Guide for Warning Originators

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[Publication information]

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# 1 Introduction

## Context

- 1.1 This guide has been developed as an aide for warning originators. It outlines best practice in the creation and dissemination of emergency warnings to assist originators and managers to make critical decisions about what to warn about, when to warn, who to warn, and how to issue an emergency warning.
- 1.2 This Best Practice Guide was endorsed by the Standing Council on Police and Emergency Management (SCPEM) on 4 July 2013. The Guide complements two other documents, *Australia's Emergency Warning Arrangements*, and the *Code of Practice for Warning Redistributors*. The Best Practice Guide is advisory —it is not intended to limit flexibility and individual jurisdictional practice or to impose mandatory requirements. It should be used to complement existing state and territory guidelines and the *National Telephony Warning System Guidelines*.

## Purpose

- 1.3 Combined with the community's understanding of environmental risks, strong community education and engagement, and effective disaster preparedness, emergency warnings have the potential to significantly reduce the impact of disasters on communities and protect lives, properties and the environment, and support community resilience. Emergency warnings continue to be a primary tool for disaster management.
- 1.4 A **warning** is the dissemination of a message signalling an imminent hazard, which may include advice on protective measures.<sup>1</sup>
- 1.5 The purpose of an 'emergency warning' is to inform the community of an impending or current hazard and to prompt an appropriate response or action. The required action is usually contained in the warning message, for example, 'seek further information', 'take shelter', or 'activate your emergency plan'.
- 1.6 For the purposes of these arrangements, a **warning originator** is defined as a government agency with the authority to warn the public of an imminent hazard.<sup>2</sup>

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<sup>1</sup> Emergency Management Australia, Attorney-General's Department, *Australian Emergency Manuals Series: Glossary*, 1998, p 115. The *Australian Emergency Manuals Series Glossary* defines a warning as the 'dissemination of a message signalling an imminent hazard, which may include advice on protective measures'.

<sup>2</sup> Commonwealth and state and territory government agencies with the authority to warn communities are listed in *Australia's Emergency Warning Arrangements*.

# 2 The National Emergency Warning Framework

2.1 The National Emergency Warning Framework (see page 3 for diagram) endorsed by states and territories covers the following stages in emergency warnings:

1. Community and jurisdictional preparedness
2. Situational awareness and analysis
3. Decision to warn
4. Message construction, authorisation and dissemination
5. Management of warning consequences
6. Real-time monitoring, and
7. Real-time closure<sup>3</sup>

2.2 Underpinning the decision to warn and the construction of warning messages, is agencies' ability to rapidly analyse available intelligence, monitor emerging risks, predict future impacts and decide on the best course of action.<sup>4</sup>

2.3 This Best Practice Guide focuses on the following considerations (associated with stages 3-7 of the National Emergency Warning Framework):<sup>5</sup>

- Why warn?
- What to warn about
- When to warn
- Who to warn
- How to warn, and
- Monitoring and closure (issuing 'stand-down' messages).

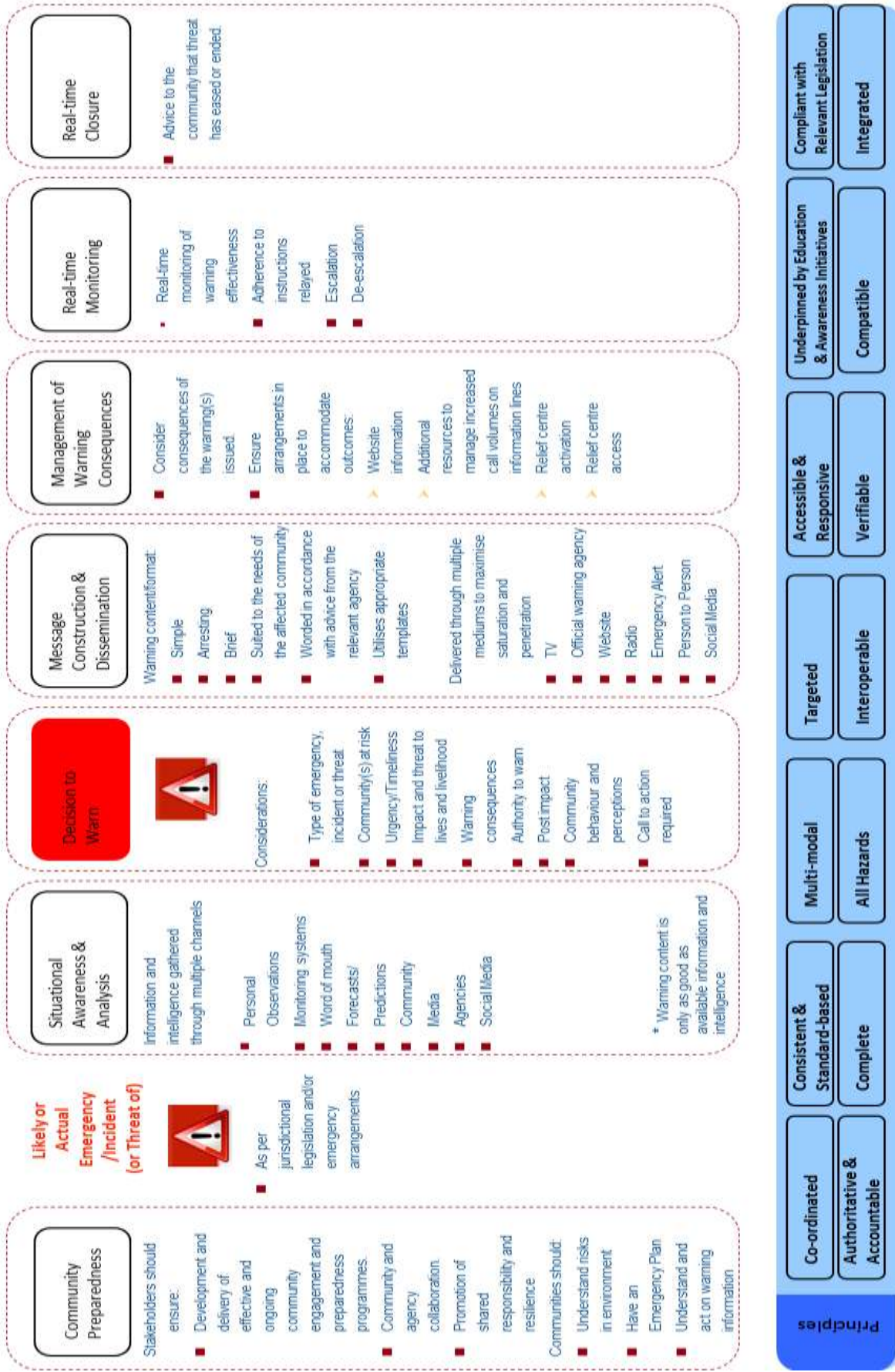
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<sup>3</sup> *National Telephony Warning System Guidelines*, Version 1.4, November 2012, p 9.

<sup>4</sup> *National Telephony Warning System Guidelines*, Version 1.4, November 2012, p 15.

<sup>5</sup> *National Telephony Warning System Guidelines*, Version 1.4, November 2012, p 15.

# The National Emergency Warning Framework



# 3 Why Warn?

- 3.1 Warnings are a means to provide the community with appropriate information and advice on heightened risk situations to enable the community to make informed decisions about preparedness and safety and the steps to be taken in responding to an emergency. The importance of issuing timely, tailored and relevant warnings to the community in the event of actual or likely emergencies cannot be overstated. Warnings are a key element in managing and responding to emergencies and can help the community and authorities protect lives and property.<sup>6</sup>
- 3.2 Warnings play a central role in building and holding public confidence. Their purpose is to provide information to the public about the actions that are being taken by emergency services to address a prospective or actual threat to the public, and offer an authoritative 'voice' to correct misinformation, or provide informed and timely advice in an emergency. Targeted and informative warnings are an important tool in maintaining emergency service organisations' status as trusted, authoritative sources.
- 3.3 Warnings may help members of the community to anticipate and manage risks and have the potential to reduce panicked and uninformed decision-making in the face of a disaster.
- 3.4 Community perception, coupled with technological advances, drives the expectation that, where feasible, specific, tailored and transparent information will be made available to the community.

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<sup>6</sup> Office of the Emergency Services Commissioner, Victoria, *National Telephony Warning System Guidelines*, Version 1.4, November 2012, p 4.

# 4 What to warn about

- 4.1 Warnings are generally issued because there is a need to provide a community with appropriate information and advice on heightened risk situations, to enable them to make informed decisions about their preparedness and safety.
- 4.2 Warnings should be based on verified information to the greatest extent possible. Real-time intelligence received from personnel at the scene of the hazard has a greater bearing than modelled or projected outcomes. In instances where information cannot be verified, it is advisable for a caveat to be attached to a warning advising of this fact.
- 4.3 Warning the community and providing them with appropriate, verified information to make informed decisions is the primary objective. A warning should be timely and, to the greatest extent possible, be issued as soon as an appropriate recommendation for protective action can be made. “It is better to issue a preliminary warning message, and then refine it later, than to wait for perfect information that may arrive too late”.<sup>7</sup>
- 4.4 Each jurisdiction has a system of warning levels, as follows:
  - **Advice** – General information to keep the community up to date with developments.
  - **Watch and Act** – The community is likely to be impacted by the emergency and should start taking action to protect their life.
  - **Emergency Warning** – The community will be impacted by the emergency and must take action immediately.

A number of jurisdictions have an additional warning level of ‘All Clear’, which is issued when the threat has subsided.<sup>8</sup>

- 4.5 The threshold values for each warning level vary from jurisdiction to jurisdiction. For example, fire weather warnings and/or total fire bans are issued in jurisdictions when the fire danger index exceeds a certain level. Environmental factors in different jurisdictions could affect the trigger point for issuing a warning.<sup>9</sup>

## Message content

- 4.6 Warning content should cover:
  - Type of threat

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<sup>7</sup> Art Bottrell, *incident.blog: A Standard of Practice for Public Warning*, 27 February 2009, viewed 30 August 2012 <<https://www.incident.com/blog/?p=57>>.

<sup>8</sup> Example from Victoria DSE-CFA Joint SOP: Incident Information and Warnings SOP J4.01 – Version 3 dated 3/2/2010;

<sup>9</sup> In Tasmania, for example, a fire weather warning is triggered at a higher level on the fire danger index than for other states.



- Issuing agency
  - Affected area
  - Action required
  - Information about where further information can be found, and
  - Where relevant, the timing of the threat impact (e.g. when a cyclone would be expected to make landfall).
- 4.7 It is important that the content of a warning align with the phase of a disaster event at the time it is issued. For example, advice for people to relocate elsewhere is valid in the ‘watch and act’ phase of an emergency but may not be appropriate in the ‘warning’ stage; where a disaster is imminent or underway.
- 4.8 Ideally, emergency warnings will be composed using a pre-agreed template.<sup>10</sup> This can ensure that all necessary information will be appropriately communicated to the public, and in turn reinforces public confidence in emergency management authorities. The Attorney-General’s Department publication [Emergency Warnings - Choosing Your Words](#) is a useful reference for composing warning content.
- 4.9 Occasions may arise that necessitate inclusion of ad hoc information not already identified in a standard template.
- 4.10 Warning originators should consider including the [Standard Emergency Warning Signal](#) (SEWS) in audible warnings. SEWS is a distinctive audio signal used in Australia to alert the public to the broadcast of an urgent safety message relating to a major disaster or emergency. It is meant to attract listener’s attention to an impending emergency message. For example, Emergency Alert warnings sent to landline telephones commence with the SEWS signal.

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<sup>10</sup> See also Paragraph 7.11 re the Australian Government Standard for the Common Alerting Protocol – Australia Profile.

# 5 When to warn

- 5.1 An important component of the guidelines and operating procedures of warning originator agencies is when to move from a 'watch' footing to a 'warning' footing.
- 5.2 It is likely that a 'warning' would be issued by a warning originator after it has confirmed that:
- the warning originator has responsibility to warn in this specific instance; and
  - the authority to issue a warning has been obtained / verified.
- 5.3 Timeliness of a warning is intrinsic to the 'success' of the warning process. However, timing for dissemination of warnings is complex. The National Emergency Warning Framework lists the following considerations for taking 'the decision to warn':
1. Type of emergency, incident or threat
  2. Characteristics of the community/communities at risk
  3. Urgency/timelines
  4. Impact and threat to lives and livelihood
  5. Warning consequences
  6. Authority to warn
  7. Post impact
  8. Community behaviour and perceptions, and
  9. Call to action required.
- 5.4 Warning originators should plan the dissemination of warnings so as to allow for the time it will take for the draft warning to clear the authorisation process. In a rapidly changing situation, warnings that are, or appear to be, based on information that is no longer current will potentially be counterproductive and may create confusion.
- 5.5 Awareness of warnings issued by other agencies is also relevant as it may impact the decision about when to warn. Warnings distributed by other authorities could impact loading on telecommunication networks (e.g. mobile telephone networks for telephone-based warnings). This could delay the distribution of warnings, and may create confusion.
- 5.6 The timing for the dissemination of a warning should take into account the urgency of the information to be communicated and the need to protect life and property. Warning originators should also consider the capacity of agencies (own and others) to manage consequences following the warning distribution.

# 6 Who to warn

- 6.1 In the context of emergency warnings, the highest priority for emergency services organisations is the development of policies and strategies which warn those communities and persons most at risk. There will be instances where it will not be feasible to warn those most at risk in all situations, however efforts to do so should be planned for, to the greatest extent possible.
- 6.2 A decision about who to warn, and how those people or organisations should be warned, may be influenced by the state of preparedness of intended recipients. For example, does the target community have the capacity to act on the information or directions outlined in the warning? Would that community understand their responsibility to enact an emergency plan?
- 6.3 Communities that are well-prepared and informed before a disaster are likely to respond to and share warning messages with similarly affected friends, family and neighbours as well as those who may be isolated or vulnerable (for example, someone isolated by a disability, homelessness, or a language barrier). The possible designated role of local government and non-government organisations (NGOS) may also be considered when providing warnings to vulnerable groups or individuals in an emergency situation.
- 6.4 Transitory or recently arrived members of the community are groups who warrant consideration when deciding who to warn.
- Consider whether the selected warning mechanism will reach people transiting through the targeted warning area.
  - Will the language/s used and the content of the warning adequately communicate action required, especially by someone unfamiliar with local arrangements?
- 6.5 Vulnerable groups in the community may also require special arrangements. Such groups may reside or congregate together. For example, a nursing home or early childhood centre (particularly on working days) will, by their nature, constitute a concentrated group of vulnerable people.
- What are the implications for warning these groups, or the institutions providing care for these groups?
  - Are there any feasible special arrangements which could be utilised for providing warnings to vulnerable groups?
- 6.6 The process of identifying target communities to receive emergency warnings should include an assurance process so that isolated or very small communities are identified, within a designated warning area, and a feasible means of warning those communities is selected, if possible.
- 6.7 Real-time verification of the penetration of a warning message into a warning area will assure the emergency service organisation that the message is reaching its targeted warning recipients. If the penetration rate is low alternate warning mediums may need to be employed.

# 7 How to warn

- 7.1 Warnings should be disseminated by selected means which will reach the greatest majority of targeted recipients in a timely fashion. The preferred policy approach in Australia is that emergency warnings be communicated using a multi-modal approach that recognises diversity within the target community and provides for redundancies in the case of critical infrastructure failure (for example, power or telecommunications).<sup>11</sup>
- 7.2 The *National Telephony Warning System Guidelines* outline the following range of considerations for choosing the most appropriate warning medium. They include, but are not limited to:
- Type of emergency, incident or threat
  - Geographic location
  - Scale of emergency or likely emergency
  - Urgency/ immediacy of the threat
  - Severity/expected impact of the emergency
  - Consequences
  - Required authorisation
  - Post impact
  - Community behaviours and expectations, and
  - The call to action required.<sup>12</sup>
- 7.3 Selecting the appropriate warning mechanisms for a target community is important to ensure penetration of the warning to the vast majority of recipients. Considerations may include:
- the demographics of the target audience (for example, age and cultural background),
  - geographic issues, such as blackspots or weak or dead transmission zones,
  - the ability of the of the warning mechanisms to cope with the volume of warnings, and
  - redundancy mechanisms, which could operate outside the traditional emergency management information channels.
- 7.4 The urgency of a warning will also dictate the warning mechanisms selected. Warnings should be disseminated using the most technically feasible available option to reach the target community or

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<sup>11</sup> 'National Warning Principles', *Australia's Emergency Warning Arrangements*, p. 8-10.

<sup>12</sup> *National Telephony Warning System Guidelines*, Version 1.4, November 2012, p 11.

segments of it. A 'high technology' solution may not be appropriate in all situations if, for example, the solution is not sufficiently robust to warn the greatest majority in a timely manner.

- 7.5 Delays in converting a warning message into multiple formats should not suspend the distribution of the warning through available mechanisms.
- 7.6 Where possible, agencies should attempt to verify in real-time whether the warning has reached its intended recipients.

## **Public warning and parallel emergency management arrangements**

- 7.7 Arrangements should be put in place to ensure that warning content is made available to emergency service organisations in adjacent areas, as there may be cross-border/boundary consequences following the dissemination of a warning. Sharing warning content will improve the consistency of cross-border/boundary advice and lessen public confusion.
- 7.8 Agencies operating Triple Zero (000) call centres and disaster information lines should be informed when an emergency warning is issued. There may be a requirement to make provision for a surge in calls to each of these services.
- 7.9 Agencies that are not necessarily included, as a matter of course, in the scope of warning activities may need to be provided with a copy of a warning. These agencies may include animal shelters and departments or regional authorities with responsibility for the environment, human health, animal and plant health, immigration, human services and related areas.
- 7.10 Warning authorities should be mindful of the need to keep executive level appointments informed of warning activity. This will assist in seeking to ensure that public announcements and briefings for government are consistent with warning message content.
- 7.11 Where possible, warning mechanisms and message content should be compliant with the [Australian Government Standard for the Common Alerting Protocol – Australia Profile \(CAP- AU-STD\)](#) to allow consistent and easy to understand emergency messages to be broadcast across a variety of communication systems.

# 8 Monitoring, closure and review

- 8.1 Monitoring the actual transmission process for a warning, as well as its effectiveness (penetration into target area) is an integral part of best practice for emergency warning. Agencies should seek, where possible, to confirm the effectiveness of the warning medium utilised through real-time monitoring. Information gained through real-time monitoring of warnings may inform situational awareness and identify the need for and content of further warnings.<sup>13</sup>
- 8.2 Working with and monitoring media output (including social media) is one method for real-time monitoring of the dissemination and effectiveness of an emergency warning.
- 8.3 Where possible, it is important that a disaster affected community is informed when the threat of an emergency has eased or ceased. This may or may not be through the same medium(s) used to issue a warning.<sup>14</sup>
- 8.4 As part of any post-disaster emergency management evaluation, the warning process undertaken for an event should be evaluated where possible to assist in developing best practice and building future resilience.

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<sup>13</sup> *National Telephony Warning System Guidelines*, Version 1.4, November 2012, p 13.

<sup>14</sup> *National Telephony Warning System Guidelines*, Version 1.4, November 2012, p 13.