# Queensland Emergency Alert Manual – M.1.174



Last Updated: 15 February 2022

Version 1.5

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Revision Date	Version No.	Responsible Person(s)	Description of Changes
01/05/2018	1.0	Director, DM Guideline Unit, Queensland Fire and Emergency Services	Review and Update with Content Owners and consulted with Subject Matter Experts across Queensland's Disaster Management Arrangements, Published to the Disaster Management Website.
10/08/2018	1.1	Director, DM Guideline Unit, Queensland Fire and Emergency Services	Minor edits and updates requested by Content Owner, republished to Disaster Management Website
14/08/2018	1.2	Director, DM Guideline Unit, Queensland Fire and Emergency Services	Minor edits and updates requested by Content Owner, republished to Disaster Management Website
27/09/2018	1.3	Director, DM Guideline Unit, Queensland Fire and Emergency Services	Minor edits and updates requested by Content Owner, republished to Disaster Management Website
1/09/2021	1.4	Director, State Operations Coordination Branch, Queensland Fire and Emergency Services	Minor updates to align with enhancements to the Emergency Alert System and the National Information and Warnings language and principles.

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# **List of Acronyms**

AO Authorising Officer

**DDMG** District Disaster Management Group

**DM** Disaster Management

DMA Disaster Management Act 2003 (Qld)

**EA** Emergency Alert

Emergency Management Person

as defined in the Telecommunications Act 1997 (Cth)

**ESRI** Environmental System Research Institute

GIS Geographic Information SystemGML Geographical Markup Language

IC Incident Controller

IPND Integrated Public Number Database

ISM Information Security Manual

KML Keyhole Markup Language

**KMZ** Keyhole Markup Language (Zipped)

LBNS Location Based Number Store

**LDMG** Local Disaster Management Group

**PSPA** Public Safety Preservation Act 1986 (Qld)

**QDMTF** Queensland Disaster Management Training Framework

**QFES** Queensland Fire and Emergency Services

QPS Queensland Police Service

RO Requesting Officer

SDCC State Disaster Coordination CentreSEWS Standard Emergency Warning Signal

**SMS** Short Message Service



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Queensland is a large, diverse state with a unique mix of rural, regional, remote, urban and coastal communities. Each of these communities is faced with its own set of opportunities and challenges in a time of unprecedented change and uncertainty. To thrive in such an environment, it is essential that Queenslanders are prepared and empowered to adapt to circumstances as they change, with over 5 million Queensland residents being regularly exposed to a range of hazards. These hazards, in conjunction with a warming climate, represent a significant threat to our ongoing safety and prosperity. Community warnings and alerts provide the community with appropriate information, advice and steps to be taken in responding to a disaster or emergency. It is important any warning issued is timely, tailored and relevant to the community.

The Queensland Emergency Alert Manual (the Manual) provides guidance to all persons and roles involved in the use of Emergency Alert (EA) as a community warning messaging tool within Queensland and operating under the *Disaster Management Act 2003 (Qld)*, *Fire and Emergency Services Act 1990 (Qld)* and the *Public Safety Preservation Act 1986 (Qld)*.

The Manual governs the use of EA in Queensland as well as providing EA template message guides for various hazards and severities. Appendix 5 of the Manual also provides other relevant EA resources.

# 1.1. Community Warnings, Alerts and Information

Community warnings, alerts and information aim to protect lives and build community resilience. Emergency services and disaster management agencies disseminate information to educate people about preparing for and responding to hazards. Activities such as community engagement and education about risk and preparation for emergencies, have an integral role in enhancing the impact of public information and warnings. It is well recognised that timely, targeted and tailored public information and warnings empower people to take appropriate protective actions based on informed decisions, limiting the potential for negative outcomes<sup>1</sup>.

Three levels of warning can be issued via EA:

- Emergency Warning
- Watch and Act
- Advice

Message Severity	Priority	General Meaning
Emergency Warning		You are in danger and need to take life-saving action immediately.  Voice messages will be preceded by a four second sound of the SEWS, followed by the words "Emergency, Emergency".
Watch and Act		There is a heightened level of threat and conditions are changing. Act now to protect yourself and your family.
Advice		There is no immediate danger, but you need to stay informed in case the situation changes.

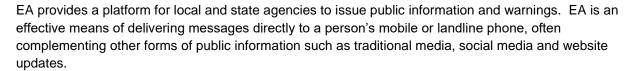
Figure 1: Emergency Alert message types categorised by urgency and warning level.

<sup>&</sup>lt;sup>1</sup> Public Information and Warnings Handbook (Australian Institute for Disaster Resilience)



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A transparent and consistent approach is required when determining the most appropriate warning delivery method to use. In preparing and sending an EA, consideration should also be given to the consequences of that choice and the likely community response. The management of consequences is through this consideration of any wider community ramifications.

Public information and warnings can be distributed by various state and local groups for disasters and emergency situations. Warnings should be timely and issued as soon as the appropriate recommendation for protective action can be made. Queensland's community warning, alert and information channels include:

- opt-in alerts through SMS, landline and emails from local governments, response agency websites, social media community messaging and disaster information boards, local events and activities;
- news media broadcasts and publications;
- Bureau of Meteorology weather warnings for tropical cyclones, severe thunderstorms, severe weather, tsunami and bushfires;
- Queensland Fire and Emergency Services (QFES) fire ban alerts and/or warnings:
- Emergency Warning: leave immediately or seek shelter immediately
- Watch and Act: prepare to leave or monitor conditions
- Advice: avoid smoke or stay informed); and,
- EA (Emergency Warning, Watch and Act or Advice level).

# 1.2. Emergency Alert

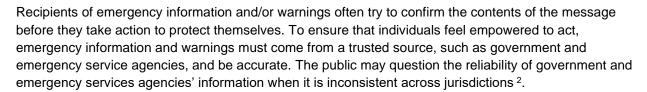
EA is a national telephone warning and alert system used to send voice messages to landlines and text messages to mobile phones, within a defined spatial area about a likely or actual disaster and/or emergency situation. The system was developed in April 2009 in response to a recommendation in the Victoria Bushfires Royal Commission, under a National Partnership Agreement on the development of a telephone based national emergency warning system, established by the Council of Australian Governments.

EA relies on Australian based telecommunication networks to send warning messages to landlines and mobile telephones. Text messages can be sent to the last known location of mobile handsets at the time of the disaster or emergency situation. This includes visitors and travellers if the mobile phones are registered to "roam" on an Australian network. International tourists who have not enabled international roaming on their mobile device and are not connected to an Australian network, will not receive an EA warning.



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The Integrated Public Number Database (IPND) is a Telstra maintained database which contains information related to all listed and unlisted public telephone numbers in Australia, regardless of service provider. Members of the public do not need to subscribe to 'opt in' to this service and cannot choose to 'opt out' of receiving the warnings. Interfacing with the IPND is the Location Based Number Store (LBNS) which identifies telephone numbers and geo-coded information located within a defined area for an EA Campaign.

Each use of the EA system is known as an EA Campaign. The management and administration of EA in Queensland is the responsibility of QFES. The State supports local government, where possible, to draft messages and prepare maps of potential warning and alert areas to ensure the timely dissemination of EA Campaigns.

All agencies using EA are to ensure warnings are consistent and complement any community alert messaging systems operated by local councils and other relevant stakeholders.

# 1.3. System Capabilities

EA provides the capability to send warning messages (voice and text messages) to targeted areas of Queensland.

The system has the ability to perform the following functions:

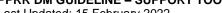
- Send a text message of up to 612 characters to all identified mobile phone services based on their physical location and/or service (billing) address.
- Define an area on a map, known as an EA Campaign Area (polygon), by utilising a Geographic Information System (GIS), or other mapping system (ie. Google Earth), to draw the polygon.
- Identify the phone services located within the polygon area by querying the LBNS. For mobile phones, this query can be based on the location of the phone, or by the billing address of the phone account holder.
- Selection of message severity (Priority 1: Emergency Warning, Priority 2: Watch and Act, Priority 3: Advice).
- Send a voice message of up to 35 seconds in duration to all identified landline telephone services based on their physical location. (Note: longer messages can be sent but may degrade the message delivery time.)
- A follow-up alert option sent to the original recipients of a campaign alert message.
- · Report on the delivery of these messages.

Any EA Campaign with higher priority than another will be processed first by the EA System. The delivery time of an EA Warning in Queensland can be delayed if there are simultaneous warnings occurring inter/intrastate of a higher priority/level.



<sup>&</sup>lt;sup>2</sup> Royal Commission into National Natural Disaster Arrangements 2020, Chapter 13

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The intent of a community warning or alert is to provide point-in-time information about a disaster or emergency situation that is impacting or about to impact a community. The community warning will provide information on the impact, expected consequences and actions for the community to take. Community warnings and alerts can be disseminated using a variety of delivery methods and formats which complement each other to produce a complete picture of the likely disaster or emergency situation. Developing plans and processes for the issuing of warnings and alerts via multiple channels, allows for broader community reach and also provides for redundancies in the case of critical infrastructure failure (e.g. power or availability of telecommunications network infrastructure).

When deciding to use EA as one of the delivery methods for a community warning or alert, consideration needs to be given to the effectiveness of the EA system to deliver the warning or alert in the likely disaster or emergency situation. Below are some impacts which need to be considered on the effectiveness of the EA system:

- the likely disaster or emergency situation;
- impact time of the disaster or emergency situation;
- the time available to warn or alert a community;
- damage to critical infrastructure (e.g. power or telecommunications);
- known power or telecommunication blackout areas; and
- EA system capabilities.

# CHAPTER 2: ADMINISTRATIVE REQUIREMENTS

#### 2.1. **Legislative Obligations and Processes**

# Commonwealth

The use or disclosure of information obtained by telecommunications carriers is prohibited under Sections 276 and 277 of the *Telecommunications Act 1997* (Cth) and Section 80Q of the *Privacy Act 1988* (Cth), this includes information held in the IPND. Access to this data imposes on Queensland a number of legal obligations which are summarised in Appendix 1.

Section 287 and 300 of the Telecommunications Act 1997 (Cth) authorise the use of the data where:

- use of the information for the EA is for the purpose of, or connection with, preventing or lessening a serious and imminent threat to the life or health of a person; or
- use of the information is reasonably necessary to prevent or lesson serious and imminent threat to the life or health of another person.

Section 285A of this legislation permits disclosure of the information to Emergency Management Persons (EMP) who are prescribed in the Telecommunications (Data for Emergency Warning Systems) Instrument 2020 (Cth) for purposes connected with alerting members of the public to a disaster or emergency situation.

#### Queensland

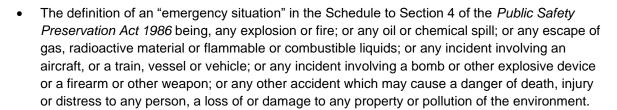
In using an EA, Section 275D(1) of the *Telecommunications Act 1997* (Cth) and the associated legislative instrument specify the definition of an "emergency law". In Queensland this relates to:

The definition of a "disaster" in Section 13(1) of the Disaster Management Act 2003 being, a serious disruption (as defined in section 13(2) of this Act) in a community, caused by the impact of an event (as defined in section 16(1)(2) of this Act) which requires a significant coordinated response by State and other entities to help the community recover from the disruption.



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The Queensland Police Service (QPS) is responsible for managing emergency situations as defined by the *Public Safety Preservation Act 1986 (Qld)*. These situations may be time critical and the use of an EA could assist with warning persons to avoid an area, shelter in an area or move away from an area.

The use of an EA can only be applied to a disaster or an emergency situation and must be <u>likely to occur</u>. For a disaster, the use of EA can only be applied during the preparedness, response and recovery phases. For an emergency situation the use of EA can only be applied during emergency situations as defined by the *Public Safety Preservation Act 1986*. If the emergency situation is ongoing, the definition of a disaster could then be applicable as defined under the *Disaster Management Act 2003 (Qld)*.

The use of an EA is permitted under the *Telecommunications Act 1997 (Cth) Section 295V* for the following reasons:

- for a purpose connected with persons being alerted to the emergency or likely emergency concerned; or
- reasonable testing of whether, in the event of an emergency occurring, persons would be able to be alerted to that emergency; or for a purpose connected with persons being alerted to an emergency or a likely emergency.

# 2.2. Security

Queensland ensures the security of EA through the following measures.

- Security of access to the EA system is managed via three avenues:
  - use of Telstra's Virtual Private Network and the QFES secure internal network;
  - o user log-in is required to access the EA system; and
  - physical security measures have been adopted to ensure that the Telstra EA telecommunications equipment is secure.
- Selection of appropriate agency staff to undertake EA roles
- Adherence to the Queensland Government Information Security Classification Framework and Australian Government Protective Security Policy Framework where relevant.

# 2.3. Management and Use of Emergency Alert

The management and administration of EA in Queensland is the responsibility of QFES and in accordance with legal obligations referenced in Appendix 1.

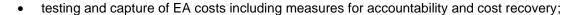
This includes:

- ongoing skills maintenance for all EA roles;
- the ongoing maintenance of training programs and EA documentation;
- regular review of EA documentation;
- coordinating and managing policies dealing with the use of EA;



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- · participation in procedural testing;
- record-keeping and reporting;
- future development;
- inter-government arrangements; and
- performance measurements.

# 2.4. Emergency Alert Roles and Responsibilities

Every person involved in the EA process should ensure situational awareness and credible intelligence informs all relevant decision making associated with EA.

The following roles ensure the legislation, guidelines and the EA process are adhered to. It is important all EA roles understand the legislative implications and the consequent use of LBNS and IPND data, which can only be lawfully obtained and used when creating an EA Campaign or during defined training and/or exercise periods (refer to Section 2.1 of this Manual):

- Incident Controller (Requestor)
- Emergency Management Person or Authorising Officer
- Emergency Alert User.

#### 2.4.1 Incident Controller

In the context of EA, the Incident Controller (IC) is the person who can request an EA. They have responsibility for ensuring an EA Campaign(s) is sent to a particular geographic area when required<sup>3</sup>. In some instances, the IC may also be the Authorising Officer (AO). All ICs, or prospective ICs, need to ensure they understand the use of EA and the EA system capabilities prior to requesting an EA. In an event (or a likely event) the IC may be one of the following, but not limited to:

- a QFES Officer in a fire or hazardous material incident;
- a Police Forward Commander or Terrorist Emergency Commander;
- a Local Disaster Coordinator or District Disaster Coordinator; and
- or any other functional lead agency, etc.

In a timely manner the IC is responsible for:

- assessing the use of an EA as an appropriate community messaging option;
- clearly defining the polygon where the EA will be delivered, type of EA message, message severity and the parameters of the EA Campaign (refer to Section 3); and
- managing consequences for example, surge of calls, other local authorities or affected agencies are aware, evacuation routes are clear.

If time permits, the IC must provide a completed EA Request Form to the EA User. Where circumstances are impractical and for expediency, the IC can phone through the EA request to the EA User and submit the EA Request Form in due course.

<sup>&</sup>lt;sup>3</sup> The term Incident Controller is not prescriptive and may be used in a variety of emergency events and systems.



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- confirm the polygon is correct; and
- confirm the audio and/or SMS messages are suitable to the operational situation and contain clear and relevant information.

Where appropriate the IC should contact Local Disaster Management Groups (LDMGs) and District Disaster Management Groups (DDMGs) prior to the release of an EA Campaign impacting their area to:

- ensure situational awareness;
- avoid duplicated EA requests; and
- provide additional quality assurance of EA messaging and the polygon.

# 2.4.2 Emergency Management Person

An Emergency Management Person (EMP) is prescribed in the *Telecommunications (Data for Emergency Warning Systems) Instrument 2020* (Cth). Within the Queensland jurisdiction, the EMP is also known as the AO and are determined by the Commissioner, QFES and Commissioner, QPS from within their relative agency. A review of AOs can be triggered by a change in government or agency roles. In Queensland, the AO has overall responsibility of all aspects of the EA Campaign.

Under Section 276 and 277 of the *Telecommunications Act 1997* (Cth), it is prohibited to disclose or use information obtained by telecommunication carriers and extends to the disclosure and use of information contained in the IPND. However, under this legislation, IPND information may be disclosed to an EMP for the purposes connected with alerting the public to an emergency through an emergency warning. An EMP is specified in a legislative instrument issued by the Commonwealth Attorney-General.

An EMP may use or disclose information for an emergency warning:

- if the EMP believes that an emergency is likely to occur;
- · for testing of the emergency warning system; and
- to persons "for the purpose of the information being later used, or disclosed for a purpose connected with persons being alerted to an emergency or a likely emergency".

An EMP must notify the Commonwealth of the full details associated with any breach on the use or disclosure of information gained from the LBNS database. An EMP commits an offence if information is used or disclosed and is not permitted under legislation with a penalty of imprisonment for two years.

The AO is responsible for:

- ensuring the management of consequence arrangements are in place (refer to Section 4.4);
- ensuring the checklist outlined in Appendix 7 have been completed and consequence management considerations have been complied with;
- authorising the release of the EA Campaign;
- ensuring all records, details and timings of the authorisation request and approval;
- when necessary, liaising with the IC to ensure all appropriate stakeholders are aware of the EA Campaign; and
- maintaining good situational awareness of the event, the appropriateness and timeliness of the EA Campaign, the consequences on the community and the political impact of the EA message.



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The scope of approved AOs changes depending on the warning priority level.

A list of persons within Queensland who have authority to authorise the release of an EA campaign are contained within the *Telecommunications (Data for Emergency Warning Systems) Instrument 2020* (Cth).

An extract of the Queensland positions are as follows. Definitions are provided in Appendix 8.

- Assistant Commissioner QFES
- Chief Superintendent QFES
- Chairperson, State Disaster Coordination Group
- Commander, State Disaster Coordination Centre
- Commissioner, Queensland Fire and Emergency Services
- Commissioner, Queensland Police Service
- Deputy Commissioner QFES
- Deputy Commander, State Disaster Coordination Centre
- Regional Director, State Emergency Service (Far Northern Region)
- Director, State Coordination Command, QFES
- Director, State Emergency Service
- Emergency Commander
- Executive Manager, Emergency Management (Far Northern Region), QFES
- Executive Manager, State Coordination Command, QFES
- Executive Officer, State Group
- Regional Manager, State Emergency Service
- State Disaster Coordinator
- Superintendent QFES
- Terrorist Emergency Commander

#### 2.4.3 EA User

The EA User is a person who has the required training and competency to use the EA system. All EA Users must be authorised by an EMP (AO) either by name or by position, as persons authorised to access the LBNS database. In Queensland the EA User is the State Disaster Coordination Centre (SDCC) 24/7 Watch Desk staff that have undertaken the required training to process an EA request.

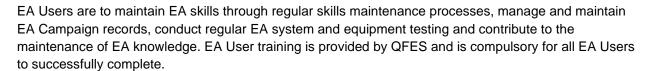
In accordance with the EA request, the EA User will:

- action EA requests through the EA system;
- complete EA processes, in accordance with agency specific doctrine; and
- monitor the progress of the EA Campaign and record the results.



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# 2.4.4 Queensland Fire and Emergency Services Media

QFES Media assumes responsibility for communicating the dissemination of an EA to a broader audience on behalf of all requesting agencies that don't have a 24/7 media/comms service.

This communication takes place through social media and traditional media as well as publishing information about the EA on the Queensland Disaster Management website.

The content of the EA is formatted for Facebook and Twitter and posted on QFES accounts and the Queensland Disaster website.

QFES Media personnel contact pre-determined contacts at Commercial Radio Australia – affiliated radio stations in the affected area, as well as the Emergency Broadcast representative for ABC in the area to advise them that an EA has been issued. This contact triggers a set of protocols to be followed by the aforementioned organisations to frequently and repeatedly broadcast information relevant to the EA.

The same external organisations are contacted when the EA is cancelled so they can adjust their broadcasting protocols. It is important to cancel an EA when it is no longer current to avoid inaccuracies and unnecessary saturation of messaging.

If the hazard is a bushfire, the QFES Information and Warnings team assumes the above responsibilities. If QPS is the lead agency, they assume the above responsibilities.

#### 2.4.5 EA Training

Section 16A(c) of the *Disaster Management Act 2003* (Qld) provides a legislative requirement for the Commissioner, QFES to ensure that persons involved in disaster operations are appropriately trained. EA training in Queensland is undertaken by disaster management stakeholders in accordance with the Queensland Disaster Management Training Framework (QDMTF) and includes training relating to community messaging through Module 1 "Introduction to Warnings and Alerts" and Module 2 "Working with Emergency Alert"; and is undertaken by officers in EA AO and User roles.

In accordance with the Queensland Disaster Management Training Handbook, it is the responsibility of all disaster management stakeholders to undertake the training relevant to their role.

EA process and system familiarisation sessions can be requested through the SDCC Watch Desk for LDMGs, DDMGs or State agencies. For EA training requirements or further information, contact your local Emergency Management Coordinator, QFES.

# **CHAPTER 3: EMERGENCY ALERT USE**

The use of EA in Queensland can be categorised in six stages, refer Figure 3:

- 1. Community and jurisdictional preparedness;
- 2. Situational awareness and analysis;
- Decision to warn;
- 4. Message construction, authorisation and dissemination;
- 5. Monitoring and closure; and
- 6. Review.

The stages of EA use are also underpinned by Australia's Warning Principles:

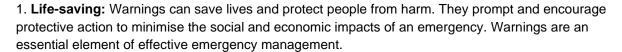


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# PPRR DM GUIDELINE - SUPPORT TOOLKIT

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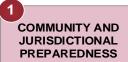
- 2. **Empowering:** The provision of warnings enacts a national commitment to building shared responsibility for disaster resilience, by empowering people to make decisions about their own safety.
- 3. **Trusted, authoritative and verifiable:** For greatest effect, warnings must come from a trusted source and be verifiable through multiple channels. Warnings should therefore be easily and widely shared to recognise the diversity of potential trusted sources. The official authority issuing a warning should always be clearly stated.
- 4. **Scaled based on risk:** Scaled warning frameworks should guide the delivery of all warnings and support the consistent risk assessment of a hazard, its impact and its consequence.
- 5. **Timely, targeted and tailored:** Warnings should be timely, targeted to communities at risk and tailored to provide detail and relevance. Specific consideration should be given to harder to reach and vulnerable members of the community.
- 6. **Conveying impact:** Warnings should describe the expected impacts and consequences of an approaching or current hazard, to assist people to understand and be motivated to take protective action.
- 7. **Including a call-to-action:** Warnings should include practical calls-to-action using language tailored to the level of risk, ranging from advice and persuasive recommendations to authoritative direction.
- 8. **Clearly communicated:** Warnings should be easy to understand and use a consistent structure to provide information. Both written and visual information should be considered to assist with clearly conveying risk and encouraging protective action.
- 9. **Readily accessible:** Warnings should be disseminated via multiple channels, tailored to suit each channel, and consider accessibility for diverse audiences. Ease of sharing and rapid dissemination should be supported with use of nationally agreed technical standards, and dissemination strategies should be in place to adapt to failure of technology or other systems.
- 10. **Part of a bigger picture:** Warnings are one component within a systems-based approach to community safety. Community engagement, education and awareness programs better prepare communities to receive, understand and act upon warnings.

Chapter 4 provides guidance to ICs and AOs who are considering using EA, across each stage and is also summarised in Appendix 2: EA Use Considerations. EA consequence management considerations are specifically described in Stages 3-5 in this Chapter and IC and AO checklists as provided in Appendix 6 and 7.



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- Community messages and EA Campaigns are most effective when delivered to an informed and prepared community.
- Are community preparedness arrangements for community warnings planned or occurring?
- EA Campaigns are not limited by disaster management boundaries.



LIKELY EMERGENCY OR DISASTER SITUATION

# SITUATIONAL AWARENESS AND ANALYSIS

- Timeliness of a community warning is intrinsic to the effectiveness of community warning messages.
- Consideration must be given to how those affected should be warned most effectively.
- Does the community warning cross boundaries or iurisdictions?

# DECISION TO WARN

• A request for EA is required.

#### EA use criteria:

- Is there a potential for loss of life and/or a major threat to a significant number of properties or the environment?
- Is the community required to take action or is urgent action required due to the time of the situation i.e. in the night?
- Is there adequate time available to process and approve the use of an EA to disseminate the community warning message?
- What is the priority level of the EA Message?
  - Priority 1 WARNING
  - Priority 2 WATCH
     AND ACT
- Priority 3 ADVICE

# MESSAGE CONSTRUCTION, AUTHORISATION AND DISSEMINATION

- Prepare an EA Request using the template EA Request Form (ensure it is clearly specified if the EA Campaign is a test or a actual request).
- In time critical situations an EA can be requested verbally followed asap by the EA Request Form.
- Use of pre-prepared EA messages and polygons is recommended.
- All pre-prepared polygons must be tested by the SDCC Watch Desk.
- Once approved by the Authorising Officer the EA Campaign will be issued by the SDCC Watch Desk.

# EA message content needs to include:

- the type of threat
- issuing agency
- area/s affected
- action required
- source of further information
- where relevant the timing of the threat impact.

# MONITORING AND CLOSURE

# Incident Controllers should:

- continue situational awareness.
- continue other community messaging methods.
- monitor the effectiveness of the EA message.
- Consider community messaging methods when threat has passed and/or closure of EA Campaign.

#### EA Users will:

- monitor the EA Campaign and record results.
- notify the Incident Controller of any large failure rates and seek further direction and advice from the Incident Controller and Authorising Officer.

# 6 REVIEW

 All agencies are required to conduct debriefs and capture feedback and improvements on experiences of the EA process and the community response.

#### Time Critical Action

#### **Consequence Management**



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# 4.1 STAGE 1: Community and Jurisdictional Preparedness

Prior to and during likely disaster or emergency situations, preparation of communities, particularly around community warning messaging is key in helping to anticipate and manage risks and potentially reduce panic and uninformed decision making. In collaboration with relevant agencies, disaster management groups should ensure community warning preparedness arrangements are considered in relevant plans (e.g. disaster management plans or community engagement plans).

During an emergency, members of the community require warning information to be sent from a trusted source such as government and emergency service agencies and be accurate<sup>4</sup>.

Community expectations of government agencies and emergency services continue to grow in an era of rapidly evolving information sharing technologies. Experience from previous disasters highlight challenging expectations that timely, targeted and tailored warnings will always be provided. Communities expect important information will be shared promptly and effectively <sup>5</sup>.Refer to the <a href="Public Information and Warnings Handbook">Public Information and Warnings Handbook</a> and companion documents for further guidance and considerations on why warn and what to warn about.

Refer Consequence Management Considerations of this Stage in Appendix 2.

# 4.2 Cross Border and Cross Boundary Arrangements

EA Campaigns are not limited to local, district, regional or state boundaries and can cross other jurisdictions. For disaster or emergency situations impacting on multiple borders and/or boundaries, IC agency and SDCC Watch Desk agency arrangements are required for engaging with those impacted to advise of cross-border/boundary EA Campaigns, potential issues and other community warning requirements.

Cross-border or boundary arrangements for both the IC and the SDCC Watch Desk should be followed and need to consider the following:

Plan before an event using agency to agency contacts. For known boundaries (local, district, regional or state) plans and/or existing arrangements (i.e. local memorandums of understanding) need to include processes around who is responsible for how an EA Campaign affecting the boundary/s will be managed.

Planning and/or existing arrangements between State agency counterparts in New South Wales, the Northern Territory or South Australia and international agency counterparts should cover how an EA Campaign affecting both sides of the borders and international jurisdictions, will be notified or managed.

 Act with the urgency the situation demands. This Manual reflects the primary objective of the EA system: if an emergency is life threatening - issue the EA warning.

Where practical, the IC or IC agency should advise the other jurisdiction/s or boundary/s during the EA Campaign process about the emergency, which is likely or is impacting on the jurisdiction and if the EA Campaign issued has cross-border or boundary coverage. If early notification is not possible, information about the EA Campaign should be passed on as soon as practical.

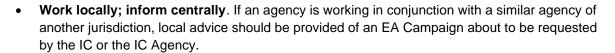
<sup>&</sup>lt;sup>5</sup> Australian Institute for Disaster Resilience Public Information and Warnings Handbook 2018



<sup>&</sup>lt;sup>4</sup> Royal Commission into National Natural Disaster Arrangements 2020 Chapter 13: Emergency information and warnings

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The SDCC Watch Desk is responsible for informing other State, Territory or international emergency operations centres when the use of an EA may be close to or cross jurisdictional national and international borders. The SDCC Watch Desk will need to inform the IC of any notifications provided to State, Territory or international jurisdictions.

Refer Consequence Management Considerations in Appendix 2.

# 4.2 STAGE 2: Situational Awareness and Analysis

The intent of a community warning is to ensure timely and accurate information is made available to the community in a disaster or emergency situation. The aim is to empower people to make informed decisions about preparedness and safety. Timely preparation is key to ensuring the best results are achieved by utilising EA as a community warning tool. Triggers and pre-prepared warning messages and polygons need to be considered when undertaking disaster or emergency situation risk-based planning.

A community survey of impacted communities was conducted by the Queensland Inspector General, Emergency Management following the 2019-2020 bushfire season. Of the three communities surveyed, at least 75% said they would expect a text message to their mobile device when the threat of a disaster is identified.

Ongoing situational awareness and analysis is required to ensure information about an event informs timely decision-making to use EA and the warning message. The outcome of situational awareness and analysis ensures the person making the decision to use EA (usually an IC) has the necessary and relevant information about an event.

Queensland agencies can obtain information about disaster or emergency situations through various methods, including but not limited to:

- situation briefings;
- monitoring systems;
- · forecasts and predictions;
- community;
- media;
- · social media; and
- · other agencies.

When analysing the situation and information being received, consideration needs to be given in the decision to use EA, about how those affected should be most effectively warned. Understanding who in the situation is being warned can also influence the state of preparedness of the community and the urgency of the community warning can dictate the decision to use EA.

Refer Consequence Management Considerations of this Stage in Appendix 2.



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# 4.3 STAGE 3: Decision to Warn

EA provides one avenue for community warnings, however may not be suited for all circumstances. As an example, a microburst, which can be a very destructive meteorological phenomenon, usually only has a life span of five to 15 minutes. Queensland's policy is to use EA as one element in a suite of existing methods for community warning and advice.

ICs considering the use of EA should also continue to use a range of other community warnings, alerts and/or information to inform the community, such as social media, local disaster dashboards, radio, etc. Those responsible for decisions on warning communities need to ensure they are aware of EA and its capabilities.

Specific criteria must be met for EA to be utilised in Queensland:

- there is a direct and likely threat to a community;
- there is a potential for loss of life and/or a major threat to a significant number of properties or the environment;
- the community needs to act in some way such as relocate to a safer area, prepare property and/or be aware of information;
- there is adequate time to process and approve the use of EA to disseminate the community warning; and
- the time of the emergency or disaster situation, such as, a community needing to be warned and/or act urgently in a short period or in the night.

Consideration must also be given to network coverage in remote and regional areas, tailored EA messages to community members, perceptions and consequence management activities, particularly the time and resources required for authorities to establish activities on which the community will rely after the EA Campaign has started. For example, if people are requested to self-evacuate, where should they go and what facilities and resources will be required when they arrive.

When considering an EA, other considerations can include:

- What is the severity of the EA message? Warning, Watch and Act or Advice?
- Is EA the most appropriate method to warn of the disaster or emergency situation?

The decision to request an EA should only be made after completing the checklist prompts for IC's outlined in Appendix 6.

The EA Request Form is provided in Figure 3 below and on the <u>Disaster Management Website</u>.

Refer Consequence Management Considerations of this Stage in Appendix 2.



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***************************************	EMERGENCY	ALERT	REQL	JEST	
Queensland	Location:			Date: / /	
Government				Time: : hrs	
Requesting C	:				
Agency/Positi	on:		Email:		
	☐ Cyclone ☐ Storm	n Tide 🔲 F	lash Flood	Flood	
Event	☐ Bushfire ☐ Fire I	☐ Bushfire ☐ Fire Incident ☐ Smoke or Toxic ☐ Chemical Spill			
Type	☐ Tsunami (NOTE Tsunami EA o	campaigns will be se	nt as Location	Based Text Message ONLY)	
	Other (please specify):				
Message Severity	Emergency Warning (NOTE ac SEWS)	ctivates the War	atch & Act	☐ Advice	
Campaign Mode	Voice	SMS – Location E	Based E	SMS – Service Address	
LDMG Advise	ed YES NO	DDMG A	dvised	☐ YES ☐ NO	
Threat Direction Required? (NOTE: Can only be used for Emergency Warnings.)  Threat location indicated on map?  Threat location indicated on map?				☐ YES ☐ NO	
STEP 1. EA F	Polygon Area:	STEP 2.	Filename:		
☐ KML       *.kı         ☐ KMZ       *.kı         ☐ GML       *.g	KMZ *.kmz Verbal				
	use capitals for clarity) or handwrite sthan 450 characters).	Voice message (max	kimum 4000 c	haracters Ideally message	
Type or handwrite SMS below (maximum of 612 characters including spaces)					
,,					
SEND TO sdcc@qfes.qld.gov.au and call 07 36352387 TO CONFIRM					
FOR USE BY	SDCC				
Requesting C		\$	Signature	☐ Manual Transmission ☐ EMS Transmission	
EA User Name: Signature EA Campaign No:					
/ /20 Authorising O / /20	fficer Name:	Si	gnature	EMS Report ID:	
EA Manual ai	nd the Emergency Alert Request Forr	EA Manual and the Emergency Alert Request Form Template are available at: www.disaster.qld.gov.au			

Figure 3: EA Request form. This form is completed for each EA campaign. The form captures the Requesting Officer, Authorising Officer, EA User, message severity and content. A completed and signed EA form is required to be sent to the EA User (SDCC Watch Desk) for each EA campaign and is retained for records management.



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The management of consequences for community warnings, particularly EA, needs to be specifically considered across the EA Stages (Figure 2).

When determining the most appropriate community warning to use, consideration must be given to the management of warning consequences. According to the Australian Institute for Disaster Resilience<sup>6</sup>, assessing risk can help determine when and how to issue a warning by evaluating:

- the hazard
- likely exposure to that hazard, and
- the vulnerability of the people who are exposed.

Refer summary of Consequence Management Considerations across all EA Stages in Appendix 2.

# 4.4 STAGE 4: Message Construction and Dissemination

EA messages are intended to achieve two distinct outcomes:

- to inform the community of a likely disaster or emergency situation; and
- to provide information and/or advise appropriate action.

Message content and the EA Request Form must:

- be simple, clear and brief;
- be relevant to the community;
- be worded in accordance with advice from the relevant agencies; and
- utilise EA template message guides, if required (Appendix 4).

Message content should cover:

- the type of threat;
- threat severity
- the issuing agency;
- the affected area;
- action required;
- information about where further information can be found; and
- where relevant, the timing of the threat impact.

EA messages should consider the principles outlined in the relevant Commonwealth AIDR publications including <u>Warning Message Construction</u>: <u>Choosing your Words</u>. Where possible, consult with your relevant agencies media unit or local Emergency Management Coordinator for the most appropriate wording and communication method guidance.



<sup>&</sup>lt;sup>6</sup> Public Information and Warnings Handbook, AIDR

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# 4.4.1 General Message Format

Queensland has pre-planned message templates (refer Appendix 4) which comply with the National Telephony Warning System Guidelines and the Common Alerting Protocol (CAP) to assist in the timely development and dissemination of EA messages to the community.

Please note the templates are examples only and provide guidance on EA messaging and identify where free text is required. All messages will indicate they originated from telephone number 0444 444 but it will not be possible to phone or SMS this number.

Care must be taken to ensure abbreviations are kept to a minimum to avoid confusion while ensuring the message informs individuals of a particular danger, states an action required to be done without delay and refers to appropriate sources for further information.

The order of message format shown below is not definitive and has been aligned with Emergency Warnings - Choosing Your Words. This is a reasonably natural order of information, but variations encompassing the same range of information may be equally effective.

EXAMPLE ONLY		
Header	SMS: - +61 444 444 444  Voice Message: Standard Emergency Warning Signal (SEWS) Siren "Emergency, Emergency"	
The Name/Title of Warning	Classification of Warning (Advice, Watch and Act, Warning) Capitalise the title of the warning to get attention eg "EMERGENCY FLOOD WARNING"	
Authority (Issuing Agency) Who is issuing the warning	Authorising Agency Only use Acronyms or Abbreviations if you are confident people will know what it means	
Event Type The type of threat	Emergency/Incident Type (fire, flood, cyclone)	
Severity  How likely it is to happen / How bad it is expected to be?	Advice on the Likely / Very Likely / Will of the Emergency / Disaster and severity Dangerous / Very Dangerous Use pronoun "You" instead of words like "people" or "residents"	
Location [Free Text] (Affected Area) Where the threat applies / who is affected	Township / District / Location (Can reference the number of kilometres)	
Event Description [Free Text] (Timing of the Threat Impact) When it is expected to happen / The type of threat	Impact / Threat Details	
Response Instruction [Free Text] (Action Required) What to do	Advice on what actions the community needs to undertake	
Information about where further information can be found A point of contact for more information or to report events	Advice on where further information can be sourced e.g. a telephone number, web site address.	
Serial/Date/Time	Automated - generated by system	

Figure 4: General Emergency Alert Message formatting considerations



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# 4.4.2 Voice Message

Messages should be structured as in Section 4.5.1 and ideally provided to the EA User as typed text and be no more than about 450 characters (including spaces). This equates to a 31 second length message, which allows for the four second SEWS tone at the start of a warning message.

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Messages should preferably be no longer than 35 seconds in total, as the delivery speed may be reduced. The EA system does allow for a maximum length of 4,000 characters; however this equates to a message length of over four minutes.

Message formatting and spelling may be modified by the Watch Desk/EA User to allow for phonetically accurate pronunciation by the EA system.

The text received for EA voice messages may be altered slightly by the SDCC Watch Desk to allow for the phonetic requirements of the system. The SDCC Watch Desk will notify the IC if the message content is changed from the EA Request Form.

# 4.4.3 SMS Message to Mobiles

SMS EA Campaign messages are limited to 612 characters including spaces. SMS can be sent based on the physical location of a mobile phone, this is known as Location Based Solution (LBS). It can also be sent based on the service (billing) address. Billing address information is maintained by respective telecommunications service providers and is only accurate if subscribers update their details when they change address.

#### 4.4.4 Message Severity

The EA system does not follow a strict policy of "first in first out" when processing EA Campaigns. As the EA system is used across all Australian jurisdictions, it is possible that multiple campaigns will be running simultaneously across Australia. EA Campaigns with a higher priority (severity) will take precedence over those with a lower priority to enable messages to be sent to those in greater danger.

The Priority 1: Emergency Warning is considered the highest-level warning.

The IC will select the message severity on the EA Request Form and the AO is responsible for confirming the EA message severity is appropriate.

The following table provides guidance on when the EA system may be used and the relationship with the three priority levels.

Message Severity	Priority	General Meaning
Emergency Warning	1	You are in danger and need to take life-saving action immediately.  Voice messages will be preceded by a four second sound of the SEWS, followed by the words "Emergency, Emergency".
Watch and Act	2	There is a heightened level of threat and conditions are changing.  Act now to protect yourself and your family.
Advice	3	There is no immediate danger but you need to stay informed in case the situation changes.



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The Standard Emergency Warning Signal (SEWS) is a distinctive audio signal that is used to alert the community to the broadcast of an urgent safety message relating to a major or significant emergency event. If a priority 1 – Warning level message is sent, the voice messages sent will be preceded by SEWS.

# 4.4.5 Polygon

A polygon is a closed two-dimensional shape and is used to define an area required to receive the EA message. Valid EA polygons must be completed 2D shapes. The warning area can be identified by importing a polygon shape file directly into the EA system or manually drawing the polygon, based on advice given by the IC. Polygons should be simple in design (square or rectangle is preferred) i.e. less points in the polygon results in a less complex boundary and will ensure messages are delivered quicker.

Valid polygons are typically with simple designs and no curves. Complex designs and curves in the polygon shape make processing an EA warning slower.

Polygons with curves, complex designs, or incomplete shapes will need to be modified prior to processing. This can be done by the Requesting Officer.

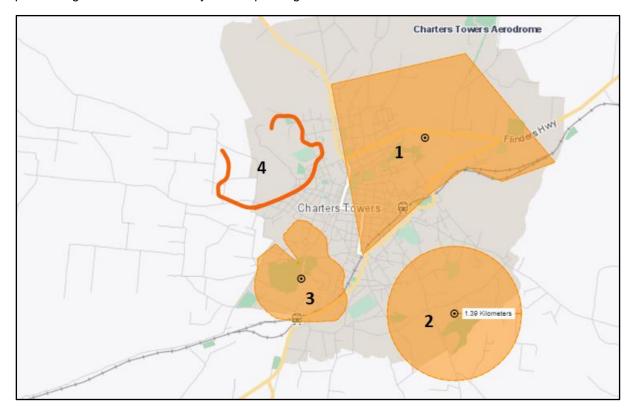


Figure 6: Valid and Invalid polygon types. Valid Polygons (Polygon 1, 2 and 3) are suitable shapes. Invalid polygons (Polygon 4) cannot be processed while incomplete.



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To ensure timely dissemination of an EA Campaign, polygon shape files and/or pre-prepared polygons shape files are preferred. However, should polygon shape files not be used, polygons can also be provided by:

- referencing maps such as topographic or street;
- coordinates; or
- maps which clearly shows the boundaries and direction of North.

#### 4.4.6 Pre-prepared Polygons

Circumstances exist where pre-prepared polygons and messaging for particular events may be required, such as known areas of risk and stored for easy access on a Queensland Government Platform.

The SDCC Watch Desk will test all pre-prepared polygons in the EA system and will advise their suitability. Should a pre-prepared polygon be rejected, the SDCC Watch Desk will provide reason/s for the rejection and notify the relevant agency.

For more information about Polygon Spatial Requirements, refer to Appendix 3.

#### 4.4.7 Threat Direction

Threat direction can be included in EA voice messages. This functionality allows communities closer to the threat and who may be at a higher risk, to be advised earlier than communities who are further away. Threat direction is applicable only for EA Campaigns with Priority 1 (Warning). Where threat direction is required, the IC must indicate the threat direction on the EA Request Form. A map or clear directions must be given to indicate where the threat is coming from.

For example, a threat direction would enhance an EA Campaign for a dam failure by issuing the message to the communities closest to the dam wall first, then moving to communities who are located downstream.

Refer Consequence Management Considerations in Appendix 2.

# 4.4.8 Who receives the Emergency Warning?

**SMS Location Based:** SMS message delivery for location-based campaigns is based on the last known location of a mobile handset. Several factors can affect the delivery of EA messages including, but not limited to:

- Weather
- Terrain
- Buildings/obstructions
- Power outages
- Movement of the mobile phone

SMS Service Address Based/ Voice to Landline Phones: The LBNS uses information from the IPND so that it can maintain a collection of telephone numbers and addresses that can be located on a map and be used for delivering alerts to a particular area. The LBNS never receives any names of individuals or businesses in the information it receives from the IPND. When operating Emergency Alert, the User in Queensland does not have access to customer name details for any telephone number. The emergency service organisations do not have access to telephone numbers when sending a warning message through the Emergency Alert system. In addition, information on telephone locations is not retained.



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This allows messages to be sent to residents, and in the case of the SMS, who may not be in the warning area at the time. These EA campaigns will not send messages to people travelling in the warning area if there billing address is outside the warning area. The accuracy of the LBNS is governed by correct details provided by the owner of the phone account and to their service provider.

Due to system limitations, it is possible for telephones outside the defined polygon area to receive warning messages. Due to this, it is imperative to ensure messages are clear, and all other avenues for community warnings are updated.

While a polygon defines a warning area, mobile phones outside the designated warning area may also receive the message. Figure 7 demonstrates how mobile phones connected to the same tower/s that service the warning area are likely to receive the warning message. Phones connected to mobile phone towers that do not service the warning area are not likely to receive the message.

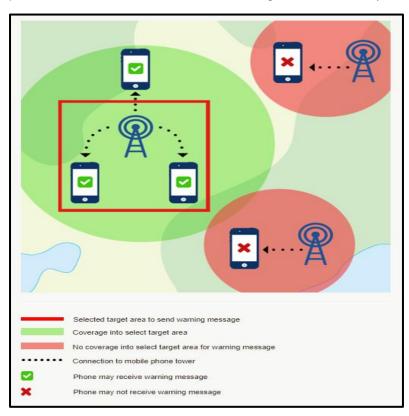


Figure 7: Location based delivery of EA warnings may result in some phones not in the defined warning area receiving the EA warning if they are connected to a mobile phone tower servicing the warning area.<sup>7</sup>

#### 4.4.9 Authorisation Process

For rapid onset events and to ensure timeliness and prevent the delay of EA messages, the SDCC Watch Desk can initiate pre-prepared and pre-approved polygons and messaging (refer to Section 3.5.5). During these situations, the SDCC Watch Desk will inform local government of the warning given. Refer to Figure 8 Emergency Alert Request Process Map and agency specific documentation for detailed guidance.

The AO may appoint a consequence management coordinator to allow the AO to concentrate on their primary authorising responsibilities and assist the IC with defining the target area and message construction.



<sup>&</sup>lt;sup>7</sup> Image reproduced with permission of Emergency Alert Australia.

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Refer Consequence Management Considerations in Appendix 2.

The SDCC Watch Desk can assist in determining the appropriate Authorising Officer for the warning type in a very timely manner. The Watch Desk has access to contact details for all current position holders across Queensland Government agencies.



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# 4.4.10 Emergency Alert Request Process Map

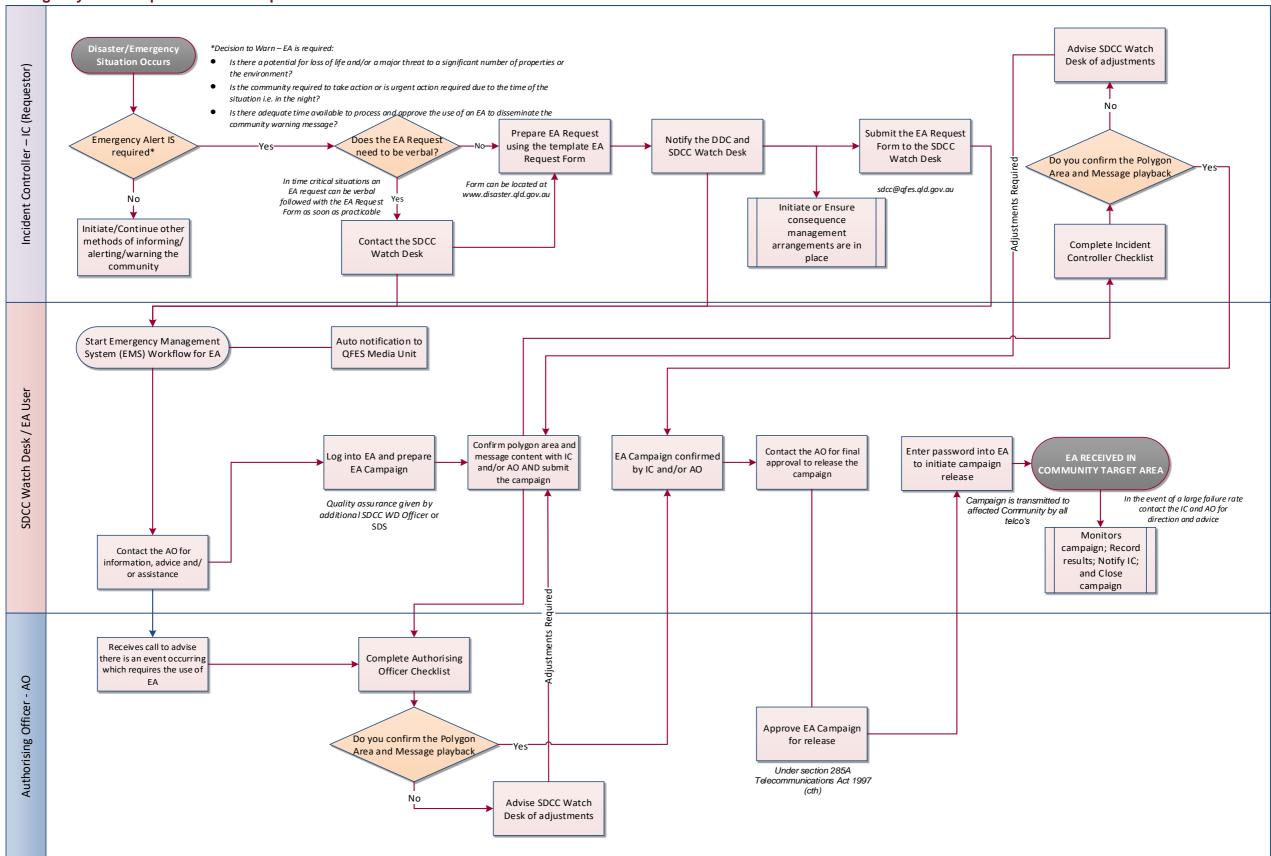


Figure 8: EA Process map. Steps for all involved stakeholders from decision to warn to completion of the EA Campaign.



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Upon the approval by the AO, the EA Campaign will be submitted by the SDCC Watch Desk for dissemination.

Notification of an EA Campaign should be communicated across multiple methods to maximise saturation and penetration, for example:

- notification from the official warning agency e.g. disaster management website;
- TV;
- Radio; and / or
- Social Media.

When an EA is issued, message recipients will be directed to sources of further information and advice to provide information on further action to be taken. Message recipients may be directed to listen to local radio, other information sources, or complementary warning mediums including official warning agencies, official media, social media, telephony based, radio-based, TV-based, internet-based, local sirens and person-to-person. People should also be directed to advise neighbours, family and other community members when an EA message is received.

Refer Consequence Management Considerations in Appendix 2.

# 4.5 STAGE 5: Monitoring, Closure and Review

# 4.5.1 Real-time Monitoring: EA Monitor and Review

The SDCC Watch Desk monitors the EA Campaign in real time and reports any campaign issues to the IC and AO.

The IC and AO may seek information from the SDCC Watch Desk regarding an EA Campaign to review success rates of the EA Campaign to identify any further needs for subsequent community warning, alert or information methods.

Refer Consequence Management Considerations in Appendix 2.

#### 4.5.2 Real-time Monitoring: EA Campaign Completion

The agency responsible for issuing the initial messages (IC's agency) may issue a final message through the most appropriate methods, balancing the advantages of telling people the same way verses the disadvantage if evacuation advice was given.

Agency Media units will issue information to media outlets when the threat situation has eased or ended.

Refer Consequence Management Considerations in Appendix 2.

# 4.6 STAGE 6: Review: Evidence Based Improvements

At the end of each emergency or disaster situation where EA was used, it is the responsibility of all agencies to conduct debriefs and capture feedback and improvements on their respective experiences of the EA process and the community response. These findings are to be shared with the relevant federal and state agencies, local and regional staff so lessons identified can be reported and implemented through the improvement of this Manual and relevant agency plans, process and training. Additionally, reviews and learnings from EA Users in other states can also provide opportunities to improve Queensland's use of EA and associated processes. Both interstate and national review may also inform reviews of relevant legislation.

The Manual, supporting documentation and training is to be reviewed when required.



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Data obtained during the real-time monitoring of an EA Campaign is stored in the EA System and available to the SDCC Watch Desk. This data is used to improve future SDCC Watch Desk processes, preparations and planning.

Undertaking regular review of appropriate community and EA message wording against a variety of scenarios and message severities assists the identification of preparation, planning and training program improvements.

Refer Consequence Management Considerations of this Stage in Appendix 2.



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# CHAPTER 5: REFERENCES

- Royal Commission into National Natural Disaster Arrangements, 28 October 20208
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- Emergency Management Victoria, 2014. National Review of Emergency Alert Consolidated Report of Findings. IPSOS Social Research Institute, pp.9, 16, 26,33, 59-60 11
- Mackie, B., 2014. Warning fatigue is not a myth: Understanding why people do or don't respond to warnings. Fire Note. [online] Bushfire Cooperative Research Centre & Australasian Fire and Emergency Service Authorities Council, pp.1-4<sup>12</sup>
- National Emergency Alert Website<sup>13</sup>
- Communicating with People with Disability; National Guidelines for Emergency Managers 201314
- Queensland's Prevention, Preparedness, Response and Recovery Disaster Management Guideline<sup>15</sup>
- Queensland Disaster Management Website<sup>16</sup>
- Full suite of AIDR publications for public information and warnings<sup>17</sup>
- Mapping Resources located at GeoScience Australia<sup>18</sup>



<sup>&</sup>lt;sup>8</sup> https://naturaldisaster.royalcommission.gov.au/

<sup>&</sup>lt;sup>9</sup> https://www.aidr.org.au/media/6504/public\_information\_and\_warnings\_handbook.pdf

<sup>10</sup> http://www.floodsreview.vic.gov.au/images/stories/documents/review\_20101011\_flood\_warnings\_and\_response.pdf

https://knowledge.aidr.org.au/media/5659/national-review-warnings-information-final-report-anzemc-endorsed.pdf

<sup>12</sup> https://www.bushfirecrc.com/sites/default/files/managed/resource/fire\_note\_122\_low\_res.pdf

http://www.emergencyalert.gov.au/

<sup>&</sup>lt;sup>14</sup> https://icrtourism.com.au/wp-content/uploads/2013/11/6\_Communicating-with-People-with-Disability-National-Guidelines-for-Emergency-Managers.pdf

15 http://www.disaster.qld.gov.au/dmg/Documents/QLD-Disaster-Management-Guideline.pdf

http://www.disaster.qld.gov.au/Pages/default.aspx

<sup>17</sup> https://knowledge.aidr.org.au/resources/public-information-and-warnings-handbook/

<sup>18</sup> https://www.ga.gov.au

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# **APPENDIX 1: LEGISLATIVE OBLIGATIONS**

Legal Obligation or Advice	The Manual Section where this is referred
The <i>Telecommunications Act 1997</i> (Cth) refers to the term "emergency" which is defined by a legislative instrument listing each jurisdiction's emergency and disaster legislation. In Queensland this is the <i>Disaster Management Act 2003</i> (DMA 2003) and <i>Public Safety Preservation Act 1986</i> (PSPA 1986). EA can be used for a likely "disaster" under the DMA 2003 or a likely "emergency situation" under the PSPA 1986.	Section 2.1
It is important to make the distinction between when a disaster or emergency situation is likely and when it is only potential. Potential is not sufficient for authorisation of an EA. When used for a likely event, the Emergency Management Person (EMP)/Authorising Officer (AO) must have an actual belief at the time of authorisation the disaster or emergency situation is likely AND it must be reasonable to hold the belief in the circumstances.	
An emergency situation under the PSPA 1986 is similar to a disaster event under the DMA 2003. The use of EA does not require any legislative declarations to be made.	
From receipt of a request to the release of an EA Campaign it can take less than 10 minutes providing the request is acceptable. It could take longer if information is not correct e.g. text message exceeds 612 characters including spaces and punctuation. Complex maps take longer for the SDCC Watch Desk to replicate in EA and due to the higher number of vertices in the polygon, it may have a detrimental effect on EA, particularly if multiple campaigns are running. There is also a risk the polygon may not exactly mirror the original map however pre-defined polygons and pre-saved message templates can be used.	
Close cooperation is required with QFES/QPS Media (or QFES Information and Warnings for a bushfire) as they update the disaster.qld.gov.au website and advise local media who play a vital role in getting messages to the community. The Queensland EA Manual must be followed when submitting messages for public broadcast.	Section 2.4.4
In cases where EA may be close to or cross jurisdictional borders (New South Wales, Northern Territory or South Australia), the SDCC Watch Desk will notify the relevant jurisdictions. AO need to ensure the warning message applies to Queensland only, for example, if schools will be closed, the message must say Queensland schools as they could still be open across the border.	Section 4.2
Responsibility and for Consequences Queensland accepts it is fully and solely responsible for:  • its use of the IPND and LBNS data, and the consequences of use;  • ensuring it is able to issue emergency warnings by such means (including non-telephony means), as it requires, notwithstanding any fault, error, defect or unavailability of the IPND or LBNS data; and  • all acts and omissions in relation to any emergency warning it issues, or should have issued.	Section 2.1 Section 2.4.1 Section 3.1 Appendix 2



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Legal Obligation or Advice	The Manual Section where this is referred
Use Queensland acknowledges it must only use the LBNS and only request use and disclose LBNS data:	Section 2.1 Section 2.3
<ul> <li>for a purpose connected with persons being alerted to an emergency or a likely emergency; and</li> <li>for the purpose of reasonable testing of whether, in the event of an emergency occurring, persons would be able to be alerted to the emergency.</li> </ul>	
Selling of Data  QFES and QPS must not sell or make available the LBNS and IPND data to any third party.	Section 2.1
Timeliness Agencies should be mindful of the criticality of a timely warning.	Described across the Manual, particularly Section 3.3
Identification of Responsible Individuals  Queensland must clearly define and articulate those individuals and/or positions responsible for the authorisation of the warning release.	Sections 2.4.1
<ul> <li>Security</li> <li>Queensland must take reasonable steps to:</li> <li>prevent and detect unauthorised access to and use of the LBNS;</li> <li>prevent the IPND and LBNS data being used for any purpose other than a permitted purpose; and</li> <li>ensure adequate security measures are in place to prevent any disclosure (inadvertently or otherwise) of any IPND or LBNS data in a manner which could result in the user jurisdiction breaching the Deed Poll Agreement or the Telecommunications Act 1997 (Cth).</li> </ul>	Section 2.2
Responsible Individuals to Sign  Before supplying or disclosing IPND or LBNS data to a third-party agent acting for Queensland on a commercial fee for service basis or contractor engaged by Queensland from time to time in relation to the operation of EA, Queensland must obtain a legally enforceable undertaking from the agent or contractor in favour of both the Commonwealth and Queensland:  • not to access or use the IPND or LBNS, or access, use or disclose the IPND or LBNS data for any purpose other than the permitted purposes;  • to destroy the IPND or LBNS data:  • when it is no longer required for the permitted purposes;  • when this agreement expires or is terminated; or  • when required to do so by the user jurisdiction.  (For example: This may occur occasionally when an investigation or inquiry is required).	Sections 2.2



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Legal Obligation or Advice	The Manual Section where this is referred
For Official Use Only Material Queensland must comply with relevant principles in the Australian Government Information Security Manual (ISM) which apply to the transfer of "For Official Use Only" data across UNCLASSIFIED networks.	Section 2.1
Engagement with Other Jurisdictions Queensland is responsible for engaging with other impacted jurisdiction/s to discuss cross-border issues and warning requirements for Queensland EA Campaigns impacting on other jurisdictions.	Section 4.2
Decision-making Jurisdictions must also have in place clear decision making processes to ensure accurate, timely and relevant warnings are issued.	Section 4.3
Each hazard has its own set of triggers and it is the responsibility of the relevant authorising/decision making agency to undertake a dynamic risk assessment process and make a decision on the requirement to disseminate a warning in the format of EA.	
The decision to utilise the telephony system will be the responsibility of the respective agencies and will be defined by the emergency and operational and warning requirements.	
Reliance It is essential agencies do not rely solely on telephony based warnings to inform the community of an emergency. Depending on the level of network congestion, it may take some time for the message to reach the intended target. EA is just one of a suite of methods to alert the community.	Section 4.2
Principles for Communication Warnings should reflect the principles outlined in the suite of Commonwealth AIDR publications relating to Public Information and Warnings.	Chapter 4 Section 4.4
Pre-planned Messages  Jurisdictions are encouraged to have pre-planned message templates to assist in the timely development and dissemination of warnings to the community.	Section 4.5.5 Appendix 3
Effects on the Telecommunications Network  Queensland must take reasonable steps to ensure the use of the LBNS and LBNS data does not adversely affect the operation of a telecommunications network.	Section 1.3 Section 4.2
Consequence Management Agencies responsible for issuing warnings must ensure consideration is given to the consequences of the warnings.	Chapter 4 Section 4.3.1 Appendix 2
Activities to manage the consequences of the warning should be performed prior to and/or concurrent to the message being disseminated to the community.	



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Legal Obligation or Advice	The Manual Section where this is referred
Monitoring Agencies should monitor, in real time, the effectiveness of the warnings. This involves monitoring the effectiveness of the warning medium utilised, as well as monitoring the community response to the warning.	Section 4.5
Records of Use Queensland will maintain accurate records of all decision-making activities and processes, messages disseminated and associated costs.	Section 2.4
Notification of Breaches Queensland must promptly notify the Commonwealth with full details if its obligations under legislation if there is a breach (or is suspected to have been breached) by any person.	Section 2.3 Section 2.4.1
Training and Awareness  Jurisdictional and agency protocols are to contain sufficient information and appropriate training to ensure agencies are aware of system capacity and capability.	Section 2.4



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# APPENDIX 2: EA CONSEQUENCE MANAGEMENT CONSIDERATIONS

Stage of EA	Considerations
Stage 1: Community and Jurisdiction	Do you have arrangements to ensure vulnerable groups in the community and/or transient people understand EA?
Preparedness	Have you developed pre-prepared EA messages and polygons in relation to likely hazards and services based on risk assessments?
	☐ Have pre-prepared EA Messages and Polygons been tested by the SDCC Watch Desk?
	Do documents describe community warnings and EA use processes and triggers?
	☐ Are agencies exercised in community warnings and EA processes?
	Is there effective and ongoing community engagement and preparedness programs on community warnings?
	Do arrangements and programs promote shared responsibility and resilience?
	Does the community understand risks in their environment?
	Do you have cross-border and/or cross boundary plans and/or existing arrangements?
	Are cross border and/or boundary plans and/or existing arrangements current?
	What notification processes exist if an EA campaign were to cross multiple borders and/or boundaries?
Stage 2: Situational	☐ What communities are at risk?
Awareness and Analysis	Have other delivery methods of community warning, alert or information been initiated?
	Has any critical infrastructure been affected by the disaster or emergency situation?
	☐ Is it likely community warnings will be required?
	☐ What is the most effective delivery method suited to the disaster or emergency situation?
	Are there any actions or directions for the community to follow, are there any language barriers?
	☐ Consider how will the community respond to the community warning?
	☐ Will the community warning cause flow on impacts, such as congestion to the traffic or telephone network?
	Can websites support an increase in their user load, will there be an impact upon emergency numbers such as triple zero?
	☐ Is there sufficient time to warn the community using EA?
	Are there known power or telecommunication blackout areas which will limit the effectiveness of an EA Campaign?
	☐ How effective is it to use EA for the situation requiring a community warning?



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Stage of EA	Considerations	
	Are there more effective delivery methods to warn the community?	
	What is the severity of the EA message? Warning, Watch and Act or Advice?	
	Are there neighbouring boundary/s also issuing EA and the potential the community within either jurisdiction receiving duplicated or conflicting community warnings?	
	Is EA the most appropriate community warning for the disaster or emergency situation?	
	Have checks been done with other warning agencies to avoid duplication?	
	☐ Have call centres been briefed?	
	Have other affected agencies local government, LDMGs, DDMGs, QPS, Ministers Office etc. been informed?	
	Have you considered the delivery of community warnings for operations which cross jurisdictional borders?	
	☐ Will the decision to use EA activate our evacuation plans or processes?	
Stage 3: Message construction and dissemination	Are the messages consistent across different sources available to the general public?	
disserimation	☐ Is the message simple, clear and brief?	
	Are messages disseminated using a variety of delivery mechanisms, and do they complement each other to produce a complete picture?	
	☐ Do the messages contain all relevant pertinent details?	
	Are the messages presented in a way which is easily and quickly understood?	
	Have relevant community message platforms and other sources of further information been updated? i.e. local government website, social media feeds?	
	☐ Are media outlets aware an EA Campaign is being issued?	
	<ul> <li>Are messages ONLY targeted to those communities at risk? (Avoid public complacency and over-warning)</li> </ul>	
	☐ Is the message relevant to the community receiving the EA?	
	Is the message worded in accordance with advice from the relevant agencies?	
	☐ Is a threat direction required? (Can only be used for EA Warnings)	
	☐ Have all pre-prepared EA messages and polygons been tested by the SDCC Watch Desk?	
	☐ Did you know that SMS messages can be received up to 7 days later i.e. when phone is turned back on or comes within range?	
	Are you aware to avoid garbled messages causing confusion weak signals will not receive an EA message?	
	Are messages compliant with relevant commonwealth and jurisdictional legislation and policy?	
	Has an authorised person approved the message for dissemination?	



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Stage of EA	Considerations	
	Have you maintained a record of the message approval and delivery process?	
Authorisation	Has the AO verified the IC has addressed any required consequence management actions? (Many of these measures will be required at the local level and should form a critical component of the IC's decision making process to use EA for a community warning message tool.)	
	Has QFES/QPS Media (or QFES Information and Warnings for bushfire) issued information to the media and start uploading data to websites and QFES social media pages?	
	☐ Have Smart Services Queensland, Policelink or other relevant and applicable call centres been warned of possible increase in calls?	
	Has verification been provided by the IC that any on-the-ground consequence management measures are in place or at least in the process of being established?	
	Is there a need for the AO to appoint a consequence management coordinator?	
Stage 4/5:	☐ If applicable, was the IC notified of any EA Campaign issues?	
Monitoring, Closure and Review	Does the community require subsequent warnings, alerts or information about the disaster or emergency situation?	
	☐ Is the disaster or emergency situation easing?	
	☐ Has <u>www.disaster.qld.gov.au</u> been updated by QFES/QPS Media (or QFES Information and Warnings for a bushfire)?	
	☐ Has the community been notified the disaster or emergency situation has eased or ended?	
	☐ What improvements can be made to the EA process?	



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# **APPENDIX 3: EA POLYGON SPATIAL REQUIREMENTS**

EA can import spatial data to define a particular geographic area, known as a polygon, to send EA notifications to. For agencies such as local governments seeking to send EA notifications, QFES would prefer spatial extents are defined by the agency to ensure notifications are sent to appropriate communities at risk and to reduce time in preparing polygons. Below outlines the format of spatial data to be provided to QFES for EA Campaigns.

Some local governments have prepared risk assessments and risk registers identifying potential known hazards such as a tsunami, riverine and flash flood or other critical events. Local governments are responsible for storing the spatial extents and maintaining its currency in readiness for any potential future event but it can be quickly and easily emailed to QFES when an EA is required.

The Manual is to be followed when requesting an EA Campaign. The EA Request Form is available on the Disaster Management Website.

#### **Spatial Format**

EA has strict limitations for importing spatial data of predefined extents. To ensure accurate and timely alerts, spatial data must be provided to QFES in one of the following formats with all the required file extensions:

GIS Format	Required File Extensions
KML (preferred option)	*.kml, *.kmz
GML	*.gml,
GeoJSON	*geoJSON

Polygons with many vertices can slow the EA system. QFES recommends keeping the polygon shape as simple as possible (preferably under 15 vertices).

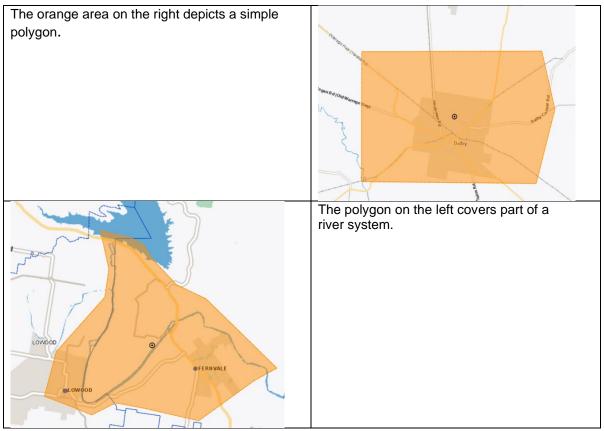
- KML (Keyhole Markup Language) files are the preferred format as they are stable and only have one file. KML files can easily be created by most GIS products (including Google Earth).
- Polygons are to be simple i.e. no donuts and no multipart shapes are to be provided.
- No spaces or special characters in the shape file name.
- No additional file extensions to those listed above, for examples SBN fire formats which contains the spatial index format.
- Circular shape files are able to be accepted in the GML file format.
- Polygon names should follow the file naming conventions detailed further in this appendix.

There may be cases such as when modelling a flooded river, more complex shapes are required. Generally, these polygons are usually acceptable unless it covers a substantial quantity of high density dwellings such as high-rise apartments.



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#### Example polygon shapes:



**Projection Definition** 

The EA system operates utilising the World Geodetic system 1984 (WGS84) projection.

#### **EA Campaign Considerations**

When agencies are predefining warning areas the following considerations should be followed to ensure the timely notification of alerts.

- Limit the number of notifications for each warning area to:
  - around 150,000 voice notifications (i.e. estimated number of land lines in the polygon). For large populated areas it is suggested to have a number of smaller EA Campaigns around 100,000 maximum notifications rather than one large EA Campaign (For example, the Emergency Alert platform should process three campaigns of 100,000 voice calls faster than one campaign of 300,000 voice calls)
  - SMS notifications should be limited to under 150,000 per warning area
- QFES will provide advice to the agencies if numbers are excessive
- When defining warning areas consider priority areas especially in highly populated areas.
   For example, agencies may wish to define separate extents for communities which will be first affected by the hazard and separate extents for ones which will be affected at a later time.
- Do not extend polygons a long way out into open water as this can slow the EA Campaign down as the EA system searches for phone numbers in the polygon.



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Pre-prepared shape files are to be checked with the SDCC Watch Desk to ensure it can be loaded into the EA system prior to a disaster or emergency. KML shape files are preferred due to their stability across systems and reduced likelihood of file corruption.

#### **File Naming Conventions**

For consistency, QFES recommends the polygons saved on the DM Portal or provided to the SDCC Watch desk, follow the file naming convention – **Hazard Name\_**Agency\_Extent Number

Where the Hazard Name reflects the type of event, such as Tsunami: For example: Tsunami\_BCC\_01, Stormtide\_MRC\_01, Flood\_GCCC\_01

For referable dams the following naming convention applies - Hazard Name\_Agency Name\_Dam Name\_Extent Number

Where the name of the dam is made clear. For example:

- Flood\_GCCC\_TallebudgeraCreekDam\_01
- Flood\_DEWS\_GlenNivenDam
- Flood\_LL\_SpringfieldLakesDam PMF\_01

Where the agency reflects, the requesting agency's name but it does not have to be fully spelt out.

#### **Data Integrity**

Agencies are responsible for maintaining the currency of their own data and must clearly specify the filenames on the EA Request Form.

File Size Limits

The maximum email size which can be received by QFES from an external agency is 5 megabytes.

Internal QFES personnel can share a file up to 30 megabytes from One Drive.

For further advice, contact the SDCC Watch Desk.

Coordinates to Create Polygons

Polygons can be created using a list of coordinates written as Well Known Text (WKT). The coordinates are in latitude/longitude decimal degrees up to six places and there must be a minimum of four coordinates (see Note 2). Coordinates must be in the following format only:

- 1. longitude;
- space;
- 3. minus sign;
- 4. latitude;
- 5. comma; and
- space;

For example: 152.0 -27.0, 152.546789 -27.0, 152.259 -26.5, 152.0 -27.0

**Note 1**. The longitude is entered before the latitude.

**Note 2**. The last coordinate must be the same as the first one but without the final comma and space, as this closes the shape. This results in a triangle having four coordinates instead of three.



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# **APPENDIX 4: SAMPLE MESSAGE GUIDES FOR VARIOUS HAZARDS**

The following messages are examples only and are currently default messages in the EA System. Tailored messages for your community need to be considered when using EA.

#### **Severe Weather Events**

Message Type	Severity	Voice Message	Text Message
Cyclone	Emergency Warning	Emergency. Emergency This is a Cyclone Emergency Warning from //Requesting AUTHORITY//. The area //DIRECTIONANDAREA// is likely to be affected by Tropical Cyclone //NAME//. Very destructive winds are likely in //NUMBER// hours OR from //TIME// You should warn neighbours secure belongings and seek safe shelter. For more information listen to local radio or visit [RELEVANT URL]. For cyclone damage assistance contact the State Emergency Service on 1 3 2 500	[Requesting Authority] Cyclone Emergency Warning for [DIRECTION AND AREA]. Destructive winds are likely in //xx// hours OR at //TIME//. Warn others and seek shelter. Listen to local radio or [RELEVANT URL] for more information.
Cyclone	Watch and Act	This is a Cyclone Watch and Act message from //Requesting AUTHORITY//. The area //DIRECTIONANDAREA// is likely to be affected by Tropical Cyclone //NAME//. Destructive winds are likely in //NUMBER// hours OR from //TIME//. You should warn neighbours, secure belongings and seek safe shelter. For more information listen to local radio, or visit [RELEVANT URL]. For cyclone damage assistance contact the State Emergency Service on 1 3 2 500	[Requesting Authority] Cyclone Watch & Act: Destructive winds are likely in //xx// hours OR at //TIME//. Warn others and seek shelter. Listen to local radio or [RELEVANT URL] for more information.
Cyclone	Advice	This is a Cyclone Advice from the //Requesting AUTHORITY//. The area //DIRECTIONANDAREA// may be affected by Tropical Cyclone //NAME//.  Destructive winds are likely in //NUMBER// hours OR from //TIME//. You should warn neighbours, secure belongings and seek safe shelter. For more information listen to local radio, or visit [RELEVANT URL]. For cyclone damage assistance contact the State Emergency Service on 1 3 2 500	[Requesting Authority] Cyclone Advice. Destructive winds are possible in//xx// hours OR at //TIME//-Warn others and seek shelter. Listen to local radio or [RELEVANT URL] for more information.
Storm Tide	Emergency Warning	Emergency. Emergency. This is a Storm Tide Emergency Warning from the //Requesting AUTHORITY//. The area //DIRECTIONANDAREA// is likely to be affected by a very dangerous Storm Tide caused by Cyclone //NAME// in //NUMBER// hours-OR at //TIMEandDAY//. You should warn neighbours, secure belongings and seek safe shelter. For more information listen to local radio, or visit [RELEVANT URL]	[Requesting Authority] Storm Tide Emergency Warning.  //DIRECTIONANDAREA//. Dangerous Storm Tide is likely in //xx// hours-OR at //TIME//. Seek shelter. For more information listen to local radio or [RELEVANT URL]
Storm Tide	Watch and Act	This is a Storm Tide Watch and Act message from the //Requesting AUTHORITY//. The area //DIRECTIONANDAREA// is likely to be affected by a very dangerous Storm Tide caused by Cyclone //NAME// in //NUMBER// hours-OR at //TIMEandDAY//. You should warn neighbours, secure belongings and seek safe shelter. For more information listen to local radio, or visit [RELEVANT URL]	[Requesting Authority] Storm Tide Watch & Act message.  //DIRECTIONANDAREA// Dangerous Storm Tide is likely in //xx// hours OR at //TIME// Seek shelter. Listen to local radio or [RELEVANT URL]



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Storm Tide	Advice	This is a Storm Tide Advice from the //Requesting AUTHORITY//. The area //DIRECTIONANDAREA// may be affected by a dangerous Storm Tide caused by Cyclone //NAME// in //NUMBER// hours-OR at //TIMEandDAY//. You should warn neighbours, secure belongings and seek safe shelter. For more information listen to local radio, or visit [RELEVANT URL]	[Requesting Authority] Storm Tide Advice for //DIRECTIONANDAREA//. Dangerous Storm Tide is possible in //xx// hours-OR at //TIME//-Seek shelter. For more information listen to local radio or [RELEVANT URL]
Flood	Emergency Warning	Emergency. Emergency. This is a Flood Emergency Warning from the //Requesting AUTHORITY//. The area //DIRECTIONANDAREA// is likely to be affected by very dangerous flooding in //NUMBER// hours-OR at //TIMEandDAY//. You should warn neighbours, secure belongings and seek safe shelter. For more information listen to local radio, or visit [RELEVANT URL]	[Requesting Authority] Flood Emergency Warning. //DIRECTIONANDAREA//. Dangerous flooding is likely in //xx// hours-OR at //TIME//. Seek shelter. For more information listen to local radio or [RELEVANT URL]
Flood	Watch and Act	This is a Flood Watch and Act message from the //Requesting AUTHORITY//. The area //DIRECTIONANDAREA// is likely to be affected by very dangerous flooding in //NUMBER// hours-OR at //TIMEandDAY//. You should warn neighbours, secure belongings and seek safe shelter. For more information listen to local radio, or visit [RELEVANT URL]	[Requesting Authority] Flood Watch & Act message. //DIRECTIONANDAREA// Dangerous flooding is likely in //xx// hours OR at //TIME// Seek shelter. Listen to local radio or [RELEVANT URL]
Flood	Advice	This is a Flood Advice from the //Requesting AUTHORITY//. The area //DIRECTIONANDAREA// may be affected by dangerous flooding in //NUMBER// hours-OR at //TIMEandDAY//. You should warn neighbours and secure belongings. For more information listen to local radio, or visit [RELEVANT URL]	[Requesting Authority] Flood Watch & Act message. //DIRECTIONANDAREA// Dangerous flooding is likely in //xx// hours OR at //TIME// Seek shelter. Listen to local radio or [RELEVANT URL]
Message Type	Severity	Voice Message	Text Message
Tsunami	Emergency Warning	Emergency Emergency. This is a Tsunami Emergency Warning from the //Requesting AUTHORITY//. Areas between //PLACE// are forecast to experience dangerous and destructive waves around //TIME//. You should warn neighbours, move to higher ground immediately, at least ten metres above sea level, or if possible move at least one kilometre away from all beaches and the waters edge of harbors and coastal estuaries. For more information listen to local radio, or visit [RELEVANT URL]	[Requesting Authority] Tsunami Emergency Warning for //PLACEPLACE//. Expect destructive waves at //TIME//. Warn others and seek higher ground now. For more information listen to local radio or [RELEVANT URL]
Tsunami		AUTHORITY//. Areas between //PLACE// are forecast to experience dangerous and destructive waves around //TIME//. You should warn neighbours, move to higher ground immediately, at least ten metres above sea level, or if possible move at least one kilometre away from all beaches and the waters edge of harbors and coastal estuaries. For more	Warning for //PLACEPLACE//. Expect destructive waves at //TIME//. Warn others and seek higher ground now. For more information listen to local radio or



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All Purpose	Emergency Warning	Emergency. Emergency. ***INSERT RELEVANT MESSAGE*** For more information listen to local radio, or visit [RELEVANT URL]	[Issuing Authority] ***INSERT RELEVANT MESSAGE***. For more information listen to local radio or [RELEVANT URL]
All Purpose	Watch and Act	***INSERT RELEVANT MESSAGE*** For more information listen to local radio, or visit [RELEVANT URL]	[Issuing Authority] ***INSERT RELEVANT MESSAGE***. For more information listen to local radio or [RELEVANT URL]
All Purpose	Advice	***INSERT RELEVANT MESSAGE*** For more information listen to local radio, or visit [RELEVANT URL]	[Issuing Authority] ***INSERT RELEVANT MESSAGE***. For more information listen to local radio or [RELEVANT URL]



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#### **Fire and Hazardous Material**

Message Type	Severity	Voice Message	Text Message
Bushfire	Emergency Warning	Emergency. Emergency. This is a bush fire Emergency Warning from Queensland Fire and Emergency Services. There is a significant fire occurring in //SUBURBS//. You need to stay updated and see what action is required by looking at the latest warning for the //SUBURBS// fire at q f e s dot q l d dot gov dot a u	Queensland Fire and Emergency Services Bushfire warning - fire in //SUBURBS//. Check what action to take & stay updated at [newsroom link]
Bushfire	Watch and Act	This is a bush fire warning from Queensland Fire and Emergency Services. There is a significant fire occurring in //SUBURBS//. You need to stay updated and see what action is required by looking at the latest warning for the //SUBURBS// fire at q f e s dot q I d dot gov dot a u	Queensland Fire and Emergency Services Bushfire warning from Qld Fire & Emergency - fire in //SUBURBS//. Check what action to take & stay updated at [newsroom link]
Chemical Spill	Emergency Warning	Emergency. Emergency. This is a Chemical Spill Emergency Warning from the Queensland Fire and Emergency Services. A Chemical Incident is located at //PLACE// and is expected to impact the areas of //SUBURBS// for the next //TIME//. Residents are strongly advised to shelter indoors, close windows and doors and turn off air conditioning. For further information listen to local radio or go to [RELEVANT URL]	Queensland Fire and Emergency Services Chemical Spill Emergency Warning for [PLACE] Avoid the area and shelter indoors. Close windows and doors. Shut off aircon- For more information listen to local radio or [RELEVANT URL]
Chemical Spill	Watch and Act	This is a Chemical Spill Watch and Act message from the Queensland Fire and Emergency Services. A chemical incident is located at //PLACE// and is expected to impact //SUBURBS// for the next //TIME// minutes. Residents are advised to stay informed and prepare to relocate to a safer area if instructed. For further information listen to your local radio or go to [RELEVANT URL]	Queensland Fire and Emergency Services Chemical Spill Watch & Act Message for //PLACE//-Stay informed and prepare for evacuation. For more information listen to local radio or [RELEVANT URL]
Chemical Spill	Advice	This is a Chemical Spill Advice message from the Queensland Fire and Emergency Services. A chemical incident is located at //PLACE// and is expected to impact //SUBURBS// for the next //TIME// minutes. Residents are advised to stay informed. For further information listen to your local radio or go to [RELEVANT URL]	Queensland Fire and Emergency Services Chemical Spill Advice for //PLACE//. Stay informed For more information listen to local radio or [RELEVANT URL]
Smoke or Toxic Chemical Plume	Emergency Warning	Emergency. Emergency. This is a Smoke Plume Emergency Warning from the Queensland Fire and Emergency Services. A chemical incident is located at //PLACE// and is expected to impact the areas of //SUBURBS// for the next //TIME//. Residents are strongly advised to shelter indoors, close windows and doors and turn off air-conditioning. For further information listen to local radio or go to [RELEVANT URL]	Queensland Fire and Emergency Services Smoke Plume Emergency Warning for //PLACE//. Shelter indoors and close windows and doors. Shut off air-conditioning. For more information listen to local radio or [RELEVANT URL]
Smoke or Toxic Chemical Plume	Watch and Act	This is a Smoke Plume Watch and Act message from the Queensland Fire and Emergency Services. A Chemical incident is located at //PLACE// and a smoke plume is expected to impact //SUBURBS// for the next //TIME// minutes. Residents are advised to stay informed and prepare for relocation to a safer area if instructed. For further information listen to your local radio or go to [RELEVANT URL]	Queensland Fire and Emergency Services Smoke Plume Watch & Act Message for //PLACE//. Stay informed and prepare for evacuation. For more information listen to local radio or [RELEVANT URL]



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Message Type	Severity	Voice Message	Text Message
Smoke or Toxic Chemical Plume	Advice	This is a Smoke Plume Advice message from the Queensland Fire and Emergency Services. A chemical incident is located at //PLACE// and a smoke plume is expected to impact //SUBURBS// for the next //TIME// minutes. Residents are advised to stay informed. For further information listen to your local radio or go to [RELEVANT URL]	Queensland Fire and Emergency Services Smoke Plume Advice for //PLACE//. Stay informed. For more information listen to local radio or [RELEVANT URL]
Fire Incident	Emergency Warning	Emergency. Emergency. This is a //FireIncident// Emergency Warning from the Queensland Fire and Emergency Services. A //FireIncident1// is located at //PLACE// and is expected to impact the areas of //SUBURBS// for the next //TIME//. Residents are strongly advised to shelter indoors, close windows and doors and turn off airconditioning. For further information listen to local radio or go to [RELEVANT URL]	Queensland Fire and Emergency Services Emergency Warning for //PLACE//. Shelter indoors and close windows and doors. Shut off airconditioning For more information listen to local radio or [RELEVANT URL]
Fire Incident	Watch and Act	This is a //FireIncident// Watch and Act message from the Queensland Fire and Emergency Services. A //FireIncident1// is located at //PLACE// and is expected to impact //SUBURBS// for the next //TIME// minutes. Residents are advised to stay informed and prepare for relocation to a safer area if instructed. For further information listen to your local radio or go to [RELEVANT URL]	Queensland Fire and Emergency Services Watch & Act Message for //PLACE//. Stay informed and prepare for evacuation. For more information listen to local radio or [RELEVANT URL]
Fire Incident	Advice	This is a //FireIncident// Advice message from the Queensland Fire and Emergency Services. A //FireIncident1// is located at //PLACE// is expected to impact //SUBURBS// for the next //TIME// minutes. Residents are advised to stay informed. For further information listen to your local radio or go to [RELEVANT URL]	Queensland Fire and Emergency Services Advice for //PLACE//.Stay informed- For more information listen to local radio or [RELEVANT URL]



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# **APPENDIX 5: IC CHECKLIST**

Stage of EA	Prompts	
Decision to Warn	Is there a potential for the loss of life or a major threat to a number of properties or the environment?	
	Does the community need to act in some way such as relocate to a safer area, prepare property or be aware of information?	
	Is the community required to take action or is urgent action required due to the time of the situation i.e. in the night?	
	<ul> <li>Are other means of communication also being engaged (eg social media, broadcast media, doorknocking, town sirens etc)</li> </ul>	
	Have you considered the delivery of messages for operations which cross jurisdictional borders?	
	☐ Have checks been done with other warning agencies to avoid duplication?	
	☐ Have relevant call centres been briefed?	
	☐ Have other consequence management issues been addressed?	
	Have other affected agencies local government, LDMGs, DDMGs, QPS, Ministers Office etc. been informed?	
Warning and Alert Message	Are the messages consistent across different sources available to the general public?	
Construction and Dissemination	☐ Is the message simple, clear and brief?	
	Are messages disseminated using a variety of delivery mechanisms, and do they complement each other to produce a complete picture?	
	☐ Do the messages contain all relevant pertinent details?	
	☐ Are the messages presented in a way which is easily and quickly understood?	
	Are messages ONLY targeted to those communities at risk? (Avoid public complacency and over-warning)	
	☐ Is the message relevant to the community receiving the EA?	
	☐ Is the message worded in accordance with advice from the relevant agencies?	
	☐ Is a threat direction required? (Can only be used for EA Warnings)	
	Are messages compliant with relevant commonwealth and jurisdictional legislation and policy?	
	☐ Has an authorised person approved the message for dissemination?	
Monitoring, Closure and	Are there any subsequent community messaging requirements needed (EA Follow up message)?	
Review	☐ Has the situation changed and the message requires changing/cancelling?	



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# **APPENDIX 6: AO CHECKLIST**

Stage of EA	Prompts
Decision to Warn	☐ Have checks been done with other warning agencies to avoid duplication?
	☐ Have relevant call centres been briefed?
	☐ Has the IC has addressed any required consequence management actions?
	Have other affected agencies local government, LDMGs, DDMGs, QPS, Ministers Office etc. been informed?
	Have you considered the delivery of messages for operations which cross jurisdictional borders?
	Have other consequence management issues been addressed? (e.g. Smart Services Queensland or other call centres been warned of possible increase in calls, evacuation centres have been opened)
	Are there neighbouring boundary/s also issuing EA and the potential the community within either jurisdictions receiving duplicated or conflicting EA messages?
Warning and Alert Message	Are the messages consistent across different sources available to the general public?
Construction and Dissemination	☐ Do the messages contain all relevant pertinent details?
Dissernination	☐ Are the messages presented in a way which is easily and quickly understood?
	Are media outlets aware an EA Campaign is being issued? Media outlets will only be advised that an EA has been issued once dissemination has occurred.
	Are messages ONLY targeted to those communities at risk? (Avoid public complacency and over-warning)
	Are you aware to avoid garbled messages causing confusion weak signals will not receive an EA message?
	Are messages compliant with relevant commonwealth and jurisdictional legislation and policy?
	Are messages compliant with relevant commonwealth and jurisdictional legislation and policy?
	☐ Has an authorised person approved the message for dissemination?
	☐ Has a record been of the message approval and delivery process maintained?
Monitoring, Closure and	Has www.disaster.qld.gov.au been updated by QFES/QPS Media (or the QFES Information and Warnings for bushfire)?
Review	☐ If applicable, has the IC been notified of any EA Campaign issues?



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### **APPENDIX 7: DEFINITIONS**

# From the Telecommunications (Data for Emergency Warning Systems) Instrument 2020 (Cth)

In this instrument:

Act means the Telecommunications Act 1997

Assistant Commissioner QFES means a person appointed as Assistant Commissioner QFES and employed under section 25 of the Fire and Emergency Services Act 1990 (Qld).

Chief Superintendent QFES means a person appointed as Chief Superintendent QFES for the Fire and Rescue Service or the Rural Fire Service and employed under section 25 of the *Fire and Emergency Services Act 1990* (Qld).

Chairperson, State Disaster Coordination Group means the position of Chair of the State Disaster Coordination Group mentioned in the Queensland State Disaster Management Plan (published 2018) made in accordance with section 49 of the *Disaster Management Act 2003* (Qld).

Commander, State Disaster Coordination Centre means the position of Commander of the State Disaster Coordination Centre mentioned in the Queensland State Disaster Management Plan (published May 2018) made in accordance with section 49 of the *Disaster Management Act* 2003 (Qld).

Commissioner, Queensland Fire and Emergency Services means the position of Commissioner mentioned in section 5 of the *Fire and Emergency Services Act 1990* (Qld).

Commissioner, Queensland Police Service means the position of Commissioner of the Police Service mentioned in section 4.2 of the *Police Service Administration Act 1990* (Qld).

Deputy Commissioner QFES means:

- a person appointed as Deputy Commissioner QFES under section 25 of the Fire and Emergency Services Act 1990 (Qld); or
- a person appointed as Deputy Commissioner QFES and appointed under section 110 of the Public Service Act 2008 (Qld).

Deputy Commander, State Disaster Coordination Centre means:

- a person appointed at Deputy Commander, State Disaster Coordination Centre and employed under section 25 of the Fire and Emergency Services Act 1990 (Qld); or
- a person appointed as Deputy Commander, State Disaster Coordination Centre, QFES and appointed under section 119 of the *Public Service Act 2008* (Qld)

Director, State Emergency Service means a person appointed as Director, State Emergency Service and appointed under section 119 of the *Public Service Act 2008* (Qld).

Director, State Coordination Command, QFES means:

- a person appointed as Director, State Coordination Command, QFES and employed under section 25 of the *Fire and Emergency Services Act 1990* (Qld); or
- a person appointed as Director, State Coordination Command, QFES and appointed under section 119 of the *Public Service Act 2008* (Qld).

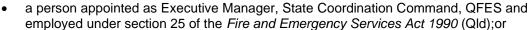
Emergency Commander means the emergency commander mentioned in subsection 5(1) of the *Public Safety Preservation Act 1986* (Qld).

Executive Manager, Emergency Management (Far Northern Region), QFES means a person appointed as Executive Manager, Emergency Management (Far Northern Region), QFES and appointed under section 119 of the *Public Service Act 2008* (Qld).

Executive Manager, State Coordination Command, QFES means:



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• a person appointed as Executive Manager, State Coordination Command, QFES and appointed under section 119 of the *Public Service Act 2008* (Qld).

Executive Officer, State Group means the position of executive officer of the State Group mentioned in section 21 of the *Disaster Management Act 2003* (Qld).

Regional Director, State Emergency Service (Far Northern Region) means a person appointed to the position of Regional Director, State Emergency Service (Far Northern Region), and employed under section 119 of the *Public Service Act 2008* (Qld).

Regional Manager, State Emergency Service means a person appointed as Regional Manager, State Emergency Service and appointed under section 119 of the *Public Service Act 2008* (Qld);

Superintendent QFES means a person appointed to the position of Superintendent QFES for the Fire and Rescue Service or the Rural Fire Service and employed under section 25 of the *Fire and Emergency Services Act 1990* (Qld).

State Disaster Coordinator means a position of State Disaster Coordinator appointed pursuant to section 21B of the *Disaster Management Act 2003* (Qld).

Terrorist Emergency Commander means the person appointed as terrorist emergency commander under subsection 8A(2) of the *Public Safety Preservation Act 1986* (Qld)

