

National Emergency Communications Working Group –
Australia and New Zealand (NECWG-A/NZ)

NATIONAL GUIDELINES
FOR
AUTONOMOUS CONTACT WITH
TRIPLE ZERO (000)



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1. Introduction

Since 1961, the Triple Zero (000) service has received voice calls from Australians in need of emergency assistance. These calls have been made via landline phones and since the mid-1980's mobile phones.

In recent years, the development of autonomous and sensor-based contact from simple alarming (e.g. fire alarms) to devices capable of intelligent analysis and alerting has increased significantly. This has resulted in the introduction of telemetry-based systems in motor-vehicles, personal health alerts, intelligent CCTV, and most recently the Smart-Watch and mobile applications.

Many of the systems and applications promote and offer autonomous contact with Triple Zero (000), often without the realisation of the person involved.

While some system development (e.g. in-vehicle telematics) has engaged with Triple Zero (000) to ensure the contact and data provided during the contact is appropriate for emergency response activation, there are many others (e.g. application developers) that provide direct contact to Triple Zero (000) without consideration of the associated data required to assist in responding to the request.

Due to the autonomous nature of the contact, and the lack of realisation from the affected person, there are many instances in which the autonomous contact has proven to be a false contact leading to unnecessary engagement of emergency service personnel including misuse of key resources and increased demand on the Emergency Call Person (ECP).

As the growth of smartphones and wearable devices continues to rise, there is a significant risk of an increase in demand for Triple Zero services for non-emergency related calls.

The impending introduction of fifth generation (5G) communications capabilities with significantly faster data transaction speeds is expected to realise a rapid expansion of services accessing Artificial Intelligence capabilities to perform routine activities autonomously, including identifying emergency situations and alerting authorities to these instances.

It is anticipated that with increased data and machine learning that the Artificial Intelligence behind these applications will more and more be able to discern false alarms from incidents that require response, however it is also expected that this will take some time to occur and will be reliant on the application developers to embed this capability.

For the Triple Zero (000) service and emergency services, the priority is to identify a person in need and initiate an appropriate response to protect life and property.

This national guideline is designed to ensure the process of autonomous contact with the Emergency Call Person is focussed on identifying genuine emergency situations prior to referring to the ECP for emergency services attendance.

2. Purpose

The purpose of this document is to provide guidelines for industry to ensure:

1. National consistency in the way in which applications, systems, sensors, and other autonomous notifications initiate contact with Triple Zero (000) through the Emergency Call Person;
2. National consistency in the data provided to the Emergency Call Person when emergency response is requested; and
3. Processes and procedures for the handling of false requests.

3. Scope

The scope of the guidelines is intended to accommodate all autonomous contact to Triple Zero (000) activated within or by applications, systems, or other forms of sensor or product.

Examples include:

- In-vehicle telematic systems that can generate an autonomous contact to emergency services on, for example, activation of air-bags;
- Smart devices (e.g. Watches, Medical Pendants) with native applications (e.g. hard fall detection) that can generate an autonomous contact to emergency services;
- Third party smart applications that can generate an autonomous to emergency services on, for example, fall detection, health monitoring triggers, personal threat, etc.
- Other sensors, devices, applications, or systems to can generate an autonomous contact to emergency services.

The scope of these guidelines does not include how the ECP will triage autonomous contact Triple Zero notifications to the Emergency Service Agencies.

The scope of these guidelines does not include the internal procedures and processes of third party of intermediary organisations supporting autonomous contact with Triple Zero (000).

The scope of these guidelines does not include the specific details relevant to the protocols of contact or response to autonomous contacts to Triple Zero (000). Individual documents as supplements to these guidelines will be produced against the specific services noted above.

4. Triple Zero (000) Requirements

To affect an emergency response, the ECP and emergency service organisations require some critical pieces of information considered mandatory to provide an effective response. These include the Agency required to respond (Police, Fire or Ambulance), the location of the emergency, and the nature of the emergency:

Emergency Service Required

Australia is supported by three primary emergency services, Police, Fire, and Ambulance. To ensure a caller to the ECP is connected with the correct emergency service organisation for their incident, the ECP needs to identify who the caller wishes to speak to.

This will determine the process and progression of the request through to the response

Location

Without location the emergency services will have great difficulty in responding in a timely manner.

Currently, the options for location identification include:

1. Fixed address – e.g. fixed line calls or in-situ alarms have a known location including street address. This is based on the billing address contained in a national database and as such, may be different to the physical address.
2. Mobile Location
 - a. Advanced Mobile Location (AML) via Android and Apple mobile phones allows the sending of device based geographic information for mobile callers in conjunction with a voice call to the ECP.
 - b. Push MoLI (Mobile Location Information) uses a triangulated location from a number of cell towers based on latitude and longitude coordinates and sends the information to the ECP.
3. App Location – the use of location identification Apps (such as Emergency+) can be used to provide the location of the mobile phone or device.
4. Verbal confirmation – a person verbally confirming their location generally by street location.

AML is an inbuilt function in the Operating System of both Android and Apple phones (subject to OS version). It is anticipated that this AML data or device based GPS data will be available to the intermediary or third-party monitoring facility for relay to the ECP.

The provision of accurate location information is the most critical piece of information to be provided to the ECP and/or Emergency Service Organisation to commence the initiation of an emergency response.

False Alarms

Each year many hours are wasted by emergency services personnel responding to false alarms. Critically, when responding to false alarms these resources cannot be made available for genuine responses. The other consequence of false alarms is the risk created to emergency service personnel who are responding to the emergency and potentially other road users.



Similarly, a significant impact on the performance and operation of the ECP is due to the process to deal with false calls into the ECP. Autonomous calls raise this risk as the person calling will often not be aware the contact is being made.

5. Guidelines for Autonomous Contact with Triple Zero (000)

To ensure the efficient receipt and treatment of real emergency incidents, the following are the guidelines for industry and developers to adopt when considering, planning, or implementing a capability that includes autonomous contact with Triple Zero (000).

Guideline 1 – Presentation of Contact

The autonomous contact must be presented in the first instance through an intermediary or third party monitoring facility that will vet the contact to remove false contact before progressing the contact to Triple Zero (000).

This intermediary service applies to voice and data contacts created autonomously by the end user device or application.

Guideline 2 – Emergency Service Required

The autonomous contact / intermediary must be able to identify and advise of the emergency service required to respond to the incident.

Guideline 3 – Location

The autonomous contact / intermediary must be able to provide the location of the incident for relay to the ECP and/or emergency service organisation.

Location information is preferred to be provided verbally by the intermediary or third party monitoring services, however a data exchange of location information may also be possible on agreement with the ECP.

The preferred format for location information is latitude and longitude against Geodetic Datum - WGS84 or GDA94

6. Supplementary Protocol Documents

The following documents detail the protocols associated with the receipt and interaction of autonomous contacts with the ECP and/or Emergency Service Organisations.

- A National Protocol for Vehicle Alert Escalation contact with Triple Zero (000) – Australian Security Industry Association Limited – May 2021
- National Police Alarm Activation Response Guidelines – National Emergency Communications Working Group – July 2018

7. Guideline Review

The guidelines are managed by Telstra as the contracted provider of the Emergency Call Person. The guidelines will be subject of review on an annual basis or as otherwise determined to align with development and implementation of Next Generation Triple Zero (NG000) capabilities.

The National Emergency Communications Working Group – Australia / New Zealand is the forum through which the guidelines are developed and validated.

Comments or queries in relation to the guidelines can be directed to:

NECWG-A/NZ Chair, Assistant Commissioner Ian Parrott - Email: info@necwg-anz.org

