



National Protocol for Autonomous Vehicle Alert Escalation contact with Triple Zero (000) Services

**A collaborative approach between the Private Security Industry
and Emergency Service Agencies**

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1. Introduction

Vehicle telematics are the use of mobile communications, usually in conjunction with location information, to provide a variety of motorist services, including safety and security.

Telematics solutions provide location and tracking data and, in many instances, vehicle speed and direction data, information critical in determining how best to recover property and apprehend offenders while minimising risk to the public and Police officers. Automatic accident alerts are another example of how telematic can improve emergency response times and, therefore, incident outcomes.

Autonomous Vehicle Monitoring Providers and emergency services in Australia have for the past two decades collaborated informally to benefit the community through the recovery of property and in the case of SOS calls and vehicle accidents, on occasion also saved lives.

The number of automotive manufacturers (Automotive Original Equipment Manufacturers – OEMs) using telematics is growing at a steady rate, as a result additional pressure is being placed on emergency services, in particular Police.

To manage the volume of autonomous vehicle alert notifications directed to emergency service providers, ASIAL has collaborated with the National Emergency Communications Working Group- Australia and New Zealand (NECWG-A/NZ)) to develop a protocol to provide a standardised procedure to report incident information to emergency services and set out a framework for the minimum criteria which should be observed by Autonomous Vehicle Monitoring Providers.

The protocol is a further collaboration between NECWG-A/NZ and ASIAL, building on the *National Alarm Response Protocol – “Partnerships in Policing.”*

Use of National Emergency Call Numbers

Emergency Triple Zero (000) Number

The National Emergency Triple Zero (000) number is sometimes used by Autonomous Vehicle Monitoring Providers companies to contact Emergency Services in the event of activation of a vehicle telematic system. In some instances, Autonomous Vehicle Monitoring Providers will use this number to notify Emergency Services of a vehicle alert situation such as an accident or security alert.

Autonomous Vehicle Monitoring Providers must familiarise themselves with the correct application of this number, which is for ***genuine emergency situations only***. The consequences of Autonomous Vehicle Monitoring Providers using the Emergency Triple Zero (000) number in circumstances other than a genuine emergency can include (but not be limited to) major disruptions to the effective operation of emergency services.

Moreover, under the Commonwealth of Australia *Criminal Code Act 1995* ('the Act'), Section 474.18: *Improper use of Emergency Call Service*:

1. A person is guilty of an offence if the person
 - a) makes a call to an Emergency Services number, and
 - b) does so with the intention of inducing a false belief that an emergency exists.
2. A person is guilty of an offence if the person
 - a) makes a call to an Emergency Services number, and
 - b) the person makes the call otherwise than for the purpose of reporting an emergency, and

- c) the call is a vexatious one.

Please note that the Act provides for penalties of up to 3 years imprisonment for convictions for breaches under the above.

2. Objectives

To provide emergency services and Autonomous Vehicle Monitoring Providers with an operational framework to:

- i. categorise alerts emanating from a vehicle that is escalated for attention;
- ii. agree upon the minimum measures used by Autonomous Vehicle Monitoring Providers to determine the validity of alerts prior to escalating to emergency services;
- iii. agree upon a standard procedure to report incident information to the emergency service communicators, and
- iv. provide emergency services with a framework to assess new Autonomous Vehicle Monitoring Providers wishing to engage with them as part of their operation.

3. Prerequisites for Autonomous contact with Triple Zero (000)

Autonomous Vehicle Monitoring Providers seeking access to Emergency Triple Zero (000) services must:

- i. be an organisation providing monitoring services on behalf of clients – not a private citizen monitoring their own vehicle;
- ii. comply with Emergency Services criteria to gain access to Emergency Triple Zero (000) contact.
- iii. provide an undertaking to qualify the validity of all alerts based upon the minimum criteria set out in Section 6 of this document; and
- iv. comply with the protocol for incident escalation as outlined in this document.

4. Vehicle Safety and Security Alerts – defined

The following services/functions are currently provided:

- a. **Vehicle Security Alert:** a vehicle's telematics device reports that the vehicle alarm has been triggered. Vehicle security alerts will only be escalated to Police if the vehicle is mobile and the occupant refuses to be validated, or if the vehicle is stationary and the call taker can hear sounds consistent with a break-in in progress.
- b. **Stolen Vehicle Tracking:** often vehicle keys are stolen prior to the theft of the vehicle, thereby bypassing the alarm system. When the vehicle is reported stolen, tracking and other services can assist in recovery and apprehension.
- c. **Vehicle accident alert:** when the vehicle has been involved in an accident, an alert identifying the vehicle together with location information is sent to the autonomous vehicle monitoring centre.
- d. **Personal Duress (SOS) Alert:** treated as a Triple Zero (000) service with voice contact; vehicle detail and location information is available
- e. **Police Requesting Assistance:** Police may contact autonomous vehicle monitoring providers for assistance to locate a vehicle or communicate with the vehicle occupant in special circumstances as outlined in the National Privacy Legislation and the Telecommunications Act. For example, circumstances where Police have reason to believe that an individual may cause harm to themselves or others.

5. Alert Validation Checklist

The following tables outline the minimum assessment (validation) criteria for each type of vehicle alert. Telematics Service Providers must commit to completing this assessment prior to escalating an incident to the Police.

VEHICLE SECURITY ALERT			
Actioned by	Functions to validate	Required/Optional	Comment
Monitoring Provider	Locate	Required *	
	Communicate with vehicle occupant	Required	Unless owner has been contacted and can verify vehicle as stolen.
	Vehicle stationary or mobile	Required	
	Talk to owner	Optional	
	Ignition sense on or off	Optional	
	Speed and available heading data	Optional	
	Notify Police	*Only if all "Required" validation steps (as above) have been completed and the incident is 'in progress'	
STOLEN VEHICLE TRACKING			
Actioned by	Functions to validate	Required/Optional	Comment
Monitoring Provider	Locate	Required *	
	Communicate with vehicle occupant	Optional	Under Police direction or connect Police directly to vehicle
	Vehicle stationary or mobile	Required *	
	Ignition sense on or off	Optional	
	Speed and Directional data available	Optional	
	Notify Police		
		*Only if all "Required" validation steps (above) have been successfully completed. Person reporting incident is connected to Police via the Telematics Service Provider. The service provider will only disclose the vehicle's location to Police.	
VEHICLE ACCIDENT ALERT			
Actioned by	Functions to validate	Required/Optional	Comment
Monitoring Provider	Locate	Required	
	Communicate with vehicle occupant	Optional	
	Vehicle stationary or mobile	Optional	
	Notify Police, Ambulance or Fire	SRS airbag deployment may in certain instances signify an accident requiring Emergency Services attendance. Notify relevant Emergency Services subject to validation.	

PERSONAL DURESS ALERT			
Actioned by	Functions to validate	Required/ Optional	Comment
Monitoring Provider	Location	Required	Validation required for police response
	Communicate with vehicle occupant	Required	Validation required for police response
	Vehicle stationary or mobile	Required	Validation required for police response

6. Incident Response – tools available to Police

Telematics systems offer access to a range of features that enable the provision of validated information to Emergency Services to assist them in their response to a vehicle alert. The range of features available will depend on the type of telematics system installed in the vehicle.

Note: not all tools are available on all systems. This protocol's incident handover procedure, in Section 7: "Incident Escalation Procedure", includes at Step 5 a provision to inform Emergency Services of the features available with the particular system installed in the vehicle. For full advantage to be taken of the capabilities of that system, the autonomous vehicle service provider must ensure that Police are provided with a complete and accurate summary of its features.

Item	Feature	Comment
1.	Talk to vehicle occupant/s	Many telematics systems provide for two-way communication with the vehicle occupants. This may also be available if the Autonomous Vehicle Service Provider has been or is in contact with the vehicle by mobile phone.
2.	Locate & track	Dynamic vehicle location information is available, usually with geo-coded street and locality information.
3.	Vehicle ignition status sensing	Many telematics systems can report on a vehicle's status.
4.	Vehicle speed & heading	Many telematics systems can provide data on vehicle speed and direction of travel.
5a.	Vehicle immobilisation	Many telematics systems offer one or more forms of vehicle immobilisation.
5b.	Immobilisation – ignition sense	The engine will immobilise when the ignition is next turned off.
5c.	Immobilisation – set speed threshold	The engine will immobilise when the vehicle reaches the specified speed threshold.
5d.	Immobilise immediately	The engine will immobilise immediately upon receipt of the command.
6.	Remote door unlock/lock	Many telematics systems provide door unlocking
7.	Emergency vehicle beacon	The service provider can sound a vehicle alarm and flash vehicle lights.
8.	Voice recording	Autonomous Vehicle Service Provider monitoring centre digitally will voice record all requests for service (all parties).

7. Incident Escalation Procedure

The following is a summary of the procedural steps to be followed by Autonomous Vehicle Service Providers when communicating a vehicle alert situation to Emergency Services.

Step	Performed by	Task	Comment
1.	Monitoring Provider	Identify Monitoring centre and operator	
2.	Monitoring Provider	Validate monitoring centre code if required by Emergency Services	
3.	Monitoring Provider	Announce Vehicle alert type	For example, vehicle entry alert or vehicle accident alert.
4.	Monitoring Provider	Provide vehicle and spatial data	Vehicle make, model, colour, registration; vehicle location – mobile or stationary.
5.	Monitoring Provider	Advise relevant capabilities	For example: track, speed, immobilise, talk to occupant/s.
6.	Monitoring Provider	Provide call back number	
7.	Monitoring Provider	Connect vehicle occupant to emergency communicator if applicable	For example: person reporting a stolen vehicle.
8.	Monitoring Provider	Take instruction from emergency communicator	

8. Contact with Emergency Communication Centres

Autonomous Vehicle Service Providers requiring contact to Emergency Services communication centres must adhere to the NECWG *National Guidelines for Autonomous Contact with Triple Zero (000)* requirements.