COMMUNICATIONS ALLIANCE LTD

Draft for Public Comment

INDUSTRY CODE

DR C536:2020

EMERGENCY CALL SERVICE REQUIREMENTS

Incorporating Variation No.1/2025

Public comment starts – 9th April 2025

Public comment closes – 11th May 2025

DR C536:2020 Emergency Call Service Requirements Incorporating Variation No.1/2025 Industry Code

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INTRODUCTORY STATEMENT

This is the introductory Statement for the **Emergency Call Services Requirements** Industry Code (C536:2020) (the Code).

The Code is designed to:

- ensure all End Users of an Emergency Telephone Service (ETS) have access to the Emergency Call Service (ECS) in case of emergencies or where a response is required from an Emergency Service Organisation (ESO);

- ensure the operational effectiveness of the *Telecommunications (Emergency Call Service) Determination 2019 (*the Determination*)*;

- ensure that the obligations of Carriers and Carriage Service Providers (CSPs), in relation to the ECS, are clearly documented and understood;

- promote public understanding and appropriate use of the ECS (e.g. via www.triplezero.gov.au); and

- ensure effective communications of information between relevant parties where technical issues affect the operation of the ECS.

In 2011 changes were made to:

- reflect obligations in the Telecommunications (Emergency Call Service) Determination 2009 ;

- add obligations, including in relation to:

  - o promoting awareness of a number of matters related to Calling Card Services;

  - o the communication by Carriers of operational difficulties;

  - o the employment of network strategies to ensure protection of calls to 000 and 112; and

  - o the inclusion of 000 and 112 in the Emergency Calling Code (ECC) field of Identity Modules;

- include a new section providing background and education on the manner in which the ECS operates; and

- enhance obligations on providers to provide updated ECS contact details to Communications Alliance.

In 2015 the following amendments were made:

- removal of Customer information clauses relating to emergency services obligations for prepaid calling cards, with these clauses being moved to *Prepaid Calling Card* Industry Guideline (G640:2015); and

- ECS reporting requirements amended to remove the mandatory reporting obligation.

In 2020 changes were made to:

- reflect obligations in the Determination;

- align definitions with the Determination;

- align processes with Emergency Call Service Protections Requirements Guideline (G644:2020) and the Triple Zero Disruption Protocol;

- the title of section 3 to allow for easier readability;

- change arrangements in cases of significant network outage;

- update the obligations for contact points to ensure consistency across stakeholders;

- the information provided in the Appendices to ensure it is up to date and relevant;

- include reference to the ECPs Test Call Procedures; and

- remove clause 1.6 which dealt with TIO referral powers.

Variation No.1 2025

This 2025 variation of the Code has been made to:

- address an issue related to overseas call monitoring centres that seek to initiate an Emergency Call for assistance from outside Australia, and identify the necessary requirements to facilitate delivery of that call and enable provision of assistance;

- update the Customer information guidance under section 4.5 relating to scenarios where services may be suspended or disconnected;

- include new requirements in Section 4 regarding network management tools and redundancy capabilities to be utilised during a core network outage (these requirements address recommendation 16 of the 2024 Bean Review); and

- remove the obligation on Carriers to provide information to the ACMA during a Significant Network Outage (to avoid duplication). This and other requirements are included in the *Telecommunications (Customer Communications for Outages) Industry Standard 2024*.

Alexander R Osborne
Chair
Emergency Call Service Requirements Working Committee.

TABLE OF CONTENTS

1   INTRODUCTION AND REGISTRATION WITH THE ACMA

1.1   Introduction

1.1.1   Section 112 of the *Telecommunications Act 1997* (Cth) (the Act) sets out the intention of the Commonwealth Parliament that bodies and associations representing sections of the telecommunications industry develop industry codes relating to the telecommunications activities of participants in those sections of the industry.

1.1.2   The development of the Code has been facilitated by Communications Alliance through a Working Committee comprised of representatives from the telecommunications industry, a consumer organisation and the ECPs.

1.1.3   The Code should be read in conjunction with related legislation, including:

(a)   the Act;

(b)   the *Telecommunications (Consumer Protection and Service Standards) Act 1999* (Cth) (the TCPSS Act);

(c)   the *Telecommunications (Emergency Call Service) Determination 2019* (the Determination);

(d)   the *Telecommunications (Relay Service Provision for the National Relay Service - Section of the Telecommunications Industry) Determination 2025;* and

(e)   the *Telecommunications Numbering Plan 2025*.

1.1.4   The Code should be read in the context of other relevant codes, guidelines and documents, including:

(a)   the Requirements for connection to an air interface of a Telecommunications Network (Standard) – Part 1: General (AS/CA S042.1:2022);

(b)   the Integrated Public Number Database (IPND) Industry Code (C555);

(c)   the Number Management – Use of Numbers By Customers Industry Code (C566);

(d)   the International Emergency Assistance Call Monitoring Centres Industry Guideline (G557.7);

(e)   the Prepaid Calling Card Industry Guideline (G640);

(f)   the Emergency Call Service Protection Requirements Industry Guideline (G644);

(g)   the Network Management for Emergency Calls Industry Guideline (G675); and

(h)   the Triple Zero Test Call Procedures Industry Guidance Note (IGN020);

1.1.5   If there is a conflict between the requirements of the Code and any requirements imposed on a Carrier or CSPs by legislation, the Carrier or CSP will not be in breach of the Code by complying with the requirements of the legislation.

1.1.6   Compliance with this Code does not guarantee compliance with any legislation. The Code is not a substitute for legal advice.

1.1.7   Statements in boxed text are a guide to interpretation only and not binding as Code rules.

1.2   Registration by ACMA

The Code is to be submitted to the Australian Communications and Media Authority (the ACMA) for registration pursuant to section 117 of the Act.

1.3   Scope

1.3.1   The Code applies to the following sections of the telecommunications industry under section 110 of the Act and section 147 of the TCPSS Act:

(a)   Carriers;

(b)   Carriage Service Providers (CSPs); and.

(c)   Emergency Call Persons (ECPs).

1.3.2   The Code deals with the following telecommunications activities as defined in section 109 of the Act:

(a)   carrying on business as a Carrier; or

(b)   carrying on business as a CSP; or

(c)   supplying goods or service(s) for use in connection with the supply of an ETS.

1.3.3   This Code applies in particular to the following activities of Carriers, CSPs and ECPs to ensure:

(a)   Customers have access to make Emergency Calls and access to information about the ECS;

(b)   ESOs are provided with information and assistance as required;

(c)   ECPs are supported with respect to carriage of Emergency Calls to an ECP, or where appropriate, from an ECP to ESOs; and

(d)   certain information is provided to the ACMA.

1.3.4   The Code does not apply to private payphone operators.

1.4   Objectives

The objectives of the Code are to ensure:

(a)   all End Users of an ETS have access to the ECS in case of emergencies or where a response is required from an ESO;

(b)   the operational effectiveness of the Determination and ECS;

(c)   that significant obligations of Carriers and CSPs, in relation to the ECS, are clearly documented and understood;

(d)   effective communications of information between relevant parties where technical issues affect the operation of the ECS; and

(e)   public understanding and appropriate use of the ECS (e.g. via www.triplezero.gov.au) are promoted.

1.5   Code review

The Code will be reviewed after 5 years of the Code being registered by the ACMA and every 5 years subsequently, or earlier in the event of significant developments that impact on the Code or a chapter within the Code.

2 ACRONYMS, DEFINITIONS AND INTERPRETATIONS

2.1 Acronyms

For the purposes of the Code:

3GPP

means 3rd Generation Partnership Project

ACMA

means Australian Communications and Media Authority

AS

means Australian Standard

CA

means Communications Alliance

CLI

means Calling Line Identification

CSP

means Carriage Service Provider

DoS

means Denial of Service

ECC

means Emergency Calling Code

ECP

means Emergency Call Person

ECS

means Emergency Call Service

ESN

means Emergency Service Number

ESO

means Emergency Service Organisation

ETS

means Emergency Telephone Service

GSM

means Global System for Mobile Communications

IOEACT

means International Originated Emergency Assistance Call Transit

IPND

means Integrated Public Number Database

MoLI

means Mobile Location Information

NRS

means National Relay Service

NRSP

means National Relay Service Provider

PMTS

means Public Mobile Telecommunications Service

PNCD

means Public Number Customer Data

SMSA

means Standardised Mobile Service Area

STS

means Standard Telephone Service

TTY

means Teletypewriter

VoIP

means Voice over IP.

2.2 Definitions

For the purposes of the Code:

Access

has the meaning given by section 18 of the Act.

Act

means the *Telecommunications Act 1997 (Cth)*.

A-Party

means the individual or entity initiating the communications.

Australia

has the meaning given by section 7 of the Act.

Australian Number

means a Number allocated by the Australian Communications and Media Authority e.g., numbers for use with a digital mobile service, geographic numbers, etc.

Business Day

means any day from Monday to Friday (inclusive) excluding any day that is gazetted as a public holiday, for the relevant jurisdiction, in a Commonwealth, State or Territory gazette.

Calling Line Identification

means the data generated by a Telecommunications Network which relates to the Public Number of the A-Party.

Carriage Service

has the meaning given by section 7 of the Act.

Carriage Service Provider

has the meaning given by section 87 of the Act.

Carrier

has the meaning given by section 7 of the Act.

Customer

means the person who is contracted to a CSP for the supply of a Carriage Service in association with a Public Number.

Denial of Service

means an action that makes access to the ECP unavailable to its intended users.

Denial of Service Attack

has the meaning given by the Determination.

Determination

means the *Telecommunications (Emergency Call Service) Determination 2019*.

ECP Network

means the network utilised by the Emergency Call Person for 000 and 112 and the Emergency Call Person for 106.

ECP Network Provider

means the Carrier or CSP that provides the ECP Network.

> *NOTE: At the time of registration of this Code, the current ECP Network Provider is Telstra.*

Emergency Call

has the meaning given by the Determination.

Emergency Call Person

has the meaning given by section 7 of the Act.

Emergency Call Person for 000 and 112

means the ECP who is the recognised person who operates an ECS for the Emergency Service Numbers 000 and 112.

> *NOTE: At the time of registration of this Code, the ECP for 000 and 112 was Telstra.*

Emergency Call Person for 106

means the ECP who is the recognised person who operates an ECS for the Emergency Service Number 106.

> *NOTE: At the time of registration of this Code, the ECP for 106 was Concentrix Services Pty Ltd (ACN 166 171 991).*

Emergency Call Service

has the meaning given by section 7 of the Act.

Emergency Service Number

has the meaning given by section 30 of the *Telecommunications Numbering Plan 2025*.

> *NOTE: The Numbering Plan specifies that 000 is the primary ESN and 106 and 112 are secondary ESNs.*

Emergency Service Organisation

has the meaning given by section 147 of the *Telecommunications (Consumer Protection and Service Standards) Act 1999*.

Emergency Telephone Service

has the meaning given by the Determination.

End User

means a person that is enabled by the Customer to use the Carriage Service.

Fixed Local Service

has the meaning given by the Determination.

> NOTE: The definition of a Fixed Local Service in the Determination may include some VoIP services.

Held

has the meaning given by Hold in the C566 Number Management – Use of Numbers by Customers industry code.

Identity Module

has the meaning given by AS/CA S042.1:2020.

Integrated Public Number Database

has the meaning given by subsection 285(2) of the Act.

International Emergency Assistance Call Monitoring Centre

means a call centre outside of Australia that provides an International Originated Emergency Assistance Call service - to initiate a request for emergency assistance on behalf of a person in Australia via an International Originated Emergency Assistance Call Transit CSP.

> NOTES: For example, an international call centre operating on behalf of a multinational company (e.g. a vehicle manufacturer) that initiates a request for emergency assistance following a vehicle emergency, or a mobile phone user out of terrestrial coverage sending an SOS message via satellite.
> 2. An International Emergency Assistance Call Monitoring Centre is an example of the more general term "third party service provider" used by the European Emergency Network Association.

International Gateway

means a facility that provides an interface to send and receive telecommunications traffic between Australian domestic network facilities and an International Operator.

International Operator

means an entity based outside of Australia which connects with and passes telecommunications traffic to a Carrier or CSP within Australia.

International Originated Emergency Assistance Call

means an emergency request for assistance originating from outside of Australia.

International Originated Emergency Assistance Call Transit CSP

means a CSP that provides an Australian communications entry point for an International Emergency Assistance Call Monitoring Centre to receive an International Originated Emergency Assistance Call and transfers that call to the Relevant Termination Point as an Emergency Call after performing appropriate number translation(s).

IPND Manager

has the meaning given in Industry Code C555 Integrated Public Number Database (IPND).

Most Precise Location Information Available

has the meaning given by section 6 of the Determination.

National Relay Service

has the meaning given by section 5 of the *Telecommunications (Consumer Protection and Service Standards) Act 1999*.

> *NOTE: The NRS is designed to provide access to a Standard Telephone Service (STS) to people who are deaf or have a hearing or speech impairment. Further information is available on the Accesshub website – www.communications.gov.au/what-we-do/phone/services-people-disability/accesshub or by contacting the NRS Helpdesk.*

Non-Genuine Call

has the meaning given by section 6 of the Determination.

NRS Provider

has the meaning given by section 4 of the *Telecommunications (Emergency Call Persons) Determination 2019*

> *NOTE: The NRS Provider is responsible for providing the service which answers calls with a text (TTY) component to the text (TTY) ESN and relays calls, with relevant associated information, to the requested ESO.*

Public Mobile Telecommunications Service

has the meaning given by section 32 of the Act.

Public Number

has the meaning given by schedule 2, part 4, clause 10(3) of the Act.

Public Number Customer Data

has the meaning given in the Industry Code C555 Integrated Public Number Database (IPND).

Public Payphone

means a payphone managed by a Carrier or CSP located in a Public Place. It excludes payphones leased from a Carrier or CSP.

Public Place

has the meaning given by section 6 of the Determination.

Relevant Termination Point

has the same meaning as given by section 6 of the *Determination*.

Satellite Service

has the meaning given by section 6 of the Determination.

Standard Telephone Service

has the meaning given by section 6 of the *Telecommunications (Consumer Protection and Service Standards) Act 1999 (Cth)*.

Telecommunications Network

has the meaning given by section 7 of the Act**.**

Teletypewriter (TTY)

means a special piece of phone equipment which allows users to type or speak their side of the conversation, with a small display screen where the other person's response can be read.

Transit CSP

means a CSP that connects with the ECP for 000 and 112 and IOAECT CSPs to pass call traffic between them.

Triple Zero

means the ECS for calls to 000 and 112.

2.3   Interpretations

In the Code, unless the contrary appears:

(a)   headings are for convenience only and do not affect interpretation;

(b)   a reference to a statute, ordinance, code or other law includes regulations and other instruments under it and consolidations, amendments, re-enactments or replacements of any of them;

(c)   words in the singular includes the plural and vice versa;

(d)   words importing persons include a body whether corporate, politic or otherwise;

(e)   where a word or phrase is defined, its other grammatical forms have a corresponding meaning;

(f)   mentioning anything after include, includes or including does not limit what else might be included;

(g)   words and expressions which are not defined have the meanings given to them in the Act; and

(h)   a reference to a person includes a reference to the person's executors, administrators, successors, agents, assignees and novatees.

3   GENERAL PRINCIPLES

In emergency situations, human behaviour is not always as logical and controlled as at normal times. Therefore, ESOs need to be able to confirm details about the emergency and the emergency caller.

There are some occasions when emergency callers hang up on the ESO or get disconnected before all details have been acquired including their exact location and nature of the emergency. This information is required to ensure the most appropriate response team is tasked. The CLI (sourced from the Carrier or CSP), service address information (derived from the IPND) and standardised location information (sourced from the Carrier or CSP as per CA G557 requirements) may be used by the ESO call taker to call back in order to re-establish contact with the emergency caller.

In emergencies, time is of the essence. Accurate timely data is essential in order to task ESO response teams as rapidly as possible and with all relevant detail.

The key to this process is obtaining accurate and up to date information from the emergency caller. Any difficulties with accessing relevant information can quickly extend response times, resulting in delays in help being sent. This can be life and property threatening.

3.1   How the Emergency Call Service Operates

Emergency Service Numbers (ESNs) in Australia are specified in the *Telecommunications Numbering Plan 2025*.

3.1.1   Australia's primary ESN is 000, which can be accessed from an ETS anywhere in Australia.

3.1.2   CSPs and Carriers operating an Australian International Gateway must ensure that their International Gateway blocks calls to Australian ESNs that originate from outside Australia.

3.1.3   There are also two secondary ESNs:

(a)   106, which is an ESN for the delivery of Emergency Calls to the NRS Provider; and

(b)   112, which is an international ESN available on a range of mobile devices.

3.1.4   When a caller makes an Emergency Call for assistance, the Emergency Call is first answered by the ECP. For Emergency Calls from a Fixed Local Service, the ECP operator receives on their screen the Calling Line Identification (CLI), standardised location information from the Carriers and CSPs as per CA G557 requirements and, sourced from the Integrated Public Number Database (IPND), the service address, which may be the location or address of the service from which the Emergency Call is being made. The service or Customer address information is then passed to the relevant ESO (Police, Fire or Ambulance) by the ECP via a data link along with the Emergency Call.

3.2 Caller Location for calls to Emergency Service Numbers

3.2.1 For Emergency Calls from an ETS where the address may not reflect the location of the caller (i.e. mobile or VoIP services) the ECP operator receives on their screen the CLI associated with the Emergency Call and standardised location information from the Carriers and CSPs as per CA G557 requirements. The service or Customer address information is then passed to the relevant ESO (Police, Fire or Ambulance) by the ECP via a data link along with the Emergency Call.

3.2.2 For services other than a Fixed Local Service, the ECP operator and ESOs are dependent upon the caller providing details of their location for accurate connection of the Emergency Call as well as standardised location information from the Carriers and CSPs as per CA G557 requirements. For these Emergency Calls, the ECP operator will ask two questions of the caller:

(a) Do you require Police, Fire or Ambulance? and

(b) In which State/Territory and Town is the emergency?

Verification of State/Territory is necessary as there are many instances of multiple localities with the same name in different States and Territories within Australia. Due to this, the ECP must verify the State/Territory to ensure connection to the correct ESO. The service or Customer address information is then passed to the relevant ESO (Police, Fire or Ambulance) by the ECP via a data link along with the Emergency Call.

3.2.3 CLI and address details are very important to the ESO call-taker when managing the Emergency Call. The address details received are displayed on the operating screen in front of the ESO operator taking the Emergency Call. In many cases all the location details available to the ESO of the caller are superimposed on the ESO location mapping and tasking screens.

> NOTE: Further Location Information for Emergency Calls can be found in CA G557.

3.3 International Emergency Assistance Call Monitoring Centres

An International Emergency Assistance Call Monitoring Centre that initiates requests for emergency assistance on behalf of a third party in Australia is expected to have a commercial arrangement with an International Emergency Assistance Call Transit CSP to provide the routing for the International Emergency Assistance Call service and to ensure that the ECP and ESO's have the necessary information to provide assistance.

3.3.1 The International Emergency Assistance Call Transit CSP transiting the delivery of International Originated Emergency Assistance Calls to Triple Zero must ensure the A-Party CLI presented is that which the International Emergency Assistance Call Transit CSP has provided to the IPND Manager, in accordance with obligations in Industry Code C555 Integrated Public Number Database (IPND).

3.3.2   In order to provide assistance to the A-Party caller the International Emergency Assistance Call Transit CSP must ensure that the ECP and ESOs are provided with the necessary information in accordance with Industry Guideline G557 Location Information for Emergency Calls.

4   CODE RULES

4.1   General rules

4.1.1   Carriers and CSPs providing access to a Fixed Local Service must terminate Emergency Calls to 112 made on their networks on a recorded message advising the number is not available.

4.1.2   Carriers and CSPs must make every effort to identify potential calls associated with a cyber attack (e.g. Denial of Service Attack) and have processes in place to detect, investigate and eliminate (i.e. remove or block) Non-Genuine Calls to the ECP centres as soon as practicable.

4.1.3   Carriers and CSPs must employ network management strategies to ensure the protection of Emergency Calls to the ECP where mass calling of Non-Genuine Calls to the ECS is identified by the ECP.

4.1.4   Carriers must send the international CLI to the ECP for 000 and 112 for Emergency Calls from inbound international roamers.

NOTE: Refer to section 3, G644 for the Denial of Service management process.

4.2   Arrangements among Carriers and Carriage Service Providers

4.2.1   Carriers and CSPs must cooperate to resolve complaints or investigations relating to a matter or matters raised by an Emergency Call.

NOTE: In cooperating, it is expected that an acknowledgment of any email request is received within 24 hours and a response within 48 hours.

4.3   Data Fill of Identity Modules

4.3.1   Carriers and CSPs must ensure that new Identity Modules supplied by Carriers and CSPs to their Customers are correctly programmed with the ESN 000 in the ECC field of the Identity Module.

NOTE: This complements the handset requirements specified in section 5.2 of AS/CA S042.1:2022 Requirements for connection to an air interface of a Telecommunications Network (Standard)-Part 1: General.

4.4 Not Introducing Delays to Emergency Calls

4.4.1 In meeting its obligations under section 21 of the Determination, a CSP must not introduce delays during carriage of an Emergency Call under normal network conditions, including through the use of any:

(a) advertising;

(b) call answering;

(c) recorded messages; or

(d) interactive voice response systems.

4.5 Publicity and Customer Information

4.5.1 Carriers and CSPs providing an ETS must take reasonable and appropriate steps to inform and promote awareness to their Customers, and members of the public of the following matters:

(a) the ESN(s);

(b) the availability and coverage of the ESN(s);

(c) that Emergency Calls can be made without charge to the caller, including where out of credit for a prepaid service;

(d) Emergency Calls can only be made where the service is active or where the caller can hear dial tone when they listen through the earpiece of the handset unless it is a PMTS where calls can be made irrespective of whether the service is active, suspended; or disconnected, when the device is in the coverage area of any available mobile network and is not from a device that has been blocked due to not meeting Triple Zero access technical specifications;

(e) the ESOs to which the ESN(s) provide Access;

(f) that the ECS should only be used when seeking a response from an ESO in a life threatening and/or time critical event; and

> NOTES: 1. To be considered as active the service must meet the connectivity test in the Telecommunications (Consumer Protections and Service Standards) Act 1999, Section 6.
> 2. The soft dial-tone requirement is set out in section 14 of the Determination.
> 3. Mobile calls may be dependent on whether the mobile network to which the call is connected is technically capable of delivering an Emergency Call to the Emergency Call Person at that time.
> 4. Carriers and CSPs are encouraged to refer Customers to www.triplezero.gov.au for more information on the circumstances under which a person should make a call to 000 and 106.
> 5. Further information for people who are hearing or speech impaired

is also available on the Accesshub website -–
www.communications.gov.au/what-we-do/phone/services-people-disability/accesshub
6. Carriers and CSPs can meet this obligation by providing information on their public websites.
7. The ESOs have appointed a Triple Zero Awareness Working Group to be responsible for Emergency Call awareness initiatives as a means for consistent messaging across all States and Territories.

(g) the disclosure of information to ESOs and ECPs regardless of calling number display blocking, including CLI, name of Customer and, where available, service location; and

(h) CSPs are required by law to cease supplying services to any mobile phone device that they have identified as not being able to connect to Triple Zero.

NOTE: Carriers and CSPs are encouraged to use the logos in Appendix B to promote the ESNs in appropriate circumstances. Permission to use the emergency service logos (000 and 106) must be obtained from Emergency Management Australia. Appendix A contains an outline of the functionality of ESNs.

4.5.2 Carriers and CSPs providing Public Payphones generally accessible to the public must ensure that information is prominently displayed adjacent to or on the Payphone or on the Payphone display, which covers the following matters:

(a) the ESN(s) to which the Payphone gives access;

(b) that Emergency Calls can be made without charge to the caller;

(c) the ESOs to which the ESN(s) provide Access; and

(d) the disclosure of information to ESOs including Public Payphone identification number and service location.

4.5.3 Where information referred to in clause 4.5.2 is removed or obscured, the Carrier or CSP must replace it as soon as reasonably practicable after becoming aware that it has been removed or obscured.

NOTE: Carriers and CSPs are encouraged to use the logos featured in Appendix B to promote the ESNs in appropriate circumstances. Permission to use the emergency service logos (000 and 106) must be obtained from National Emergency Management Australia.

4.6   Testing and Monitoring Expectations

4.6.1 When a Carrier introduces changes to its network that may have potential impacts on the delivery of Emergency Calls, the Carrier must undertake testing to ensure the changes do not affect the ongoing ability to deliver Emergency Calls to the ECP.

> *NOTE: Network changes may include, but are not limited to changes in software, firmware or hardware related to an access network, core network or transmission paths to the ECP.*

4.6.2   If the introduction of a change to a Carrier's network would result in an inability to deliver Emergency Calls the change must not be implemented until the ability to deliver Emergency Calls is available.

4.6.3   Carriers must have and deploy network management tools, and an ongoing ability to access and manage core network elements involved in the delivery of Emergency Calls.

4.6.4   Where a Carrier uses remote access tools to comply with clause 4.6.3, the remote access tools must be technology redundant or diverse from the element being managed to ensure access remains available during an outage involving that element.

> *NOTE: For avoidance of doubt, to meet 4.6.3 and where technically possible, Carriers may need to utilise alternate technology solutions. Any such remote access is required to meet appropriate security controls such that it does not breach obligations relating to the protection of critical infrastructure. Refer to Security of Critical Infrastructure Act 2018 https://www.cisc.gov.au/legislation-regulation-and-compliance/soci-act-2018).*

4.6.5   A Carrier must be able to provide evidence of the arrangements it has in place for the operational processes used for dealing with network issues that affect the ability to deliver Emergency Calls. This may include:

(a)   any network management tools it may use; and

(b)   any applicable redundancy capabilities it has in place

that are utilised during a core network outage.

> *NOTE: Network management refers to information in support of that referred to in clause 4.6.3. This may be by way of documented arrangements such as policies, procedures or reference to other material such as Artificial Intelligence tools used to manage the network.*

4.7   Contact Points

4.7.1   Each Carrier, CSP, ECP for 000 and 112 and the ECP for 106 must appoint one organisational element, to be the single point of contact for assistance requested by ESOs.

4.7.2   The nominated contact point provided under clause 4.7.1 must:

(a)   be available 24 hours a day, 7 days per week;

(b)   be supplied to Communications Alliance and kept up to date; and

(c)   be answered without unreasonable delay.

4.7.3   Each Carrier, CSP, ECP for 000 and 112 and the ECP for 106 must supply to Communications Alliance and keep up to date details of an escalation contact that is available 24 hours a day, 7 days a week.

> *NOTE: Communications Alliance will maintain an industry list with the contact information for emergency call service communications and will periodically engage those nominated contact points to ensure that the list is accurate.*

4.7.4   Each Carrier, CSP, ECP for 000 and 112 and the ECP for 106 must notify Communications Alliance, in writing, within 24 hours of changes to the information previously provided under clauses 4.7.1 and 4.7.3.

> *NOTE: On receiving the notification Communications Alliance will endeavour to confirm receipt in writing of the notification within 2 Business Days.*

5   REFERENCES

Publication	Title
Australian/CA Standards	
AS/CA S042.1:2020	Requirements for connection to an air interface of a Telecommunications Network (Standard) – Part 1: General
Industry Codes and Guidelines	
C555	Integrated Public Number Database (IPND)
C566	Number Management – Use of Numbers by Customers
G557	Location Information for Emergency Calls
G675	Network Management for Emergency Calls
G640	Prepaid Calling Card
G644	Emergency Call Service Protections Requirements
IGN018	Emergency Call Service Requirements -Escalated Welfare Check Contacts
IGN020	Triple Zero Test Call Procedures
3GPP Specifications / ETSI Technical Reports	
3GPP TS 22.101	Service aspects; Service principles http://www.3gpp.org/ftp/specs/html-info/22101.htm
ETSI TR 121 905	Universal Mobile Telecommunications System (UMTS);Vocabulary for 3GPP Specification http://www.3gpp.org/ftp/Specs/html-info/21905.htm
Legislation and Determinations	
Telecommunications Act 1997 (Cth)	
Telecommunications (Consumer Protection and Service Standards) Act 1999	
Telecommunications (Emergency Call Service) Determination 2019	
Telecommunications (Emergency Call Persons) Determination 2019	
Telecommunications Integrated Public Number Database Scheme 2017	
Telecommunications Numbering Plan 2025	
Telecommunications (Relay Service Provision for the National Relay Service - Section of the Telecommunications Industry) Determination 2025	

APPENDIX

A CALLING EMERGENCY SERVICES

A1 - 000 and 112

000 is Australia's primary ESN and should be used in urgent life-threatening or time critical situations to contact Police, Fire or Ambulance services. 000 can be accessed from a phone at a fixed location, as well as from a mobile phone.

All mobile phones sold in Australia are required to meet the Australian Standard AS/CA S042.1:2020. This means that you will be able to call 000 as long as your mobile phone has sufficient battery power to make a call and is within the coverage area of any Australian mobile network (provided that the mobile network is operational and has not been disrupted by a natural disaster, outage, congestion or cyber attack).

Compliance with AS/CA S042.1:2020 also means that mobile phones sold in Australia will allow you to make an Emergency Call to 000 without having to unlock the keypad or enter a personal identification number (PIN).

You will be able to call 000 regardless of whether your mobile service is prepaid or postpaid. If your mobile service is prepaid, you do not require credit to call 000. Even if the mobile account is inactive, disconnected, blocked, suspended or if there is no Identity Module in the mobile phone, you will still be able to call 000.

> *NOTE: It is a criminal offence to make Non- Genuine calls (excluding accidental or misdials) to 000 / 112 or 106 from any type of phone service in Australia.*

There are special arrangements in place under the global 3GPP mobile Standards to ensure that even when you are out of your home mobile network coverage but in another mobile network coverage area, your Emergency Call will be carried on that other mobile network.

Calling 112 from a mobile phone

112 is a globally recognised ESN for mobile phones and Australia's secondary ESN that can also be dialled from mobile phones in Australia and around the world– with all the same functionality and arrangements as 000. Mobile phones sold in Australia since 2002 recognise 000 as the ESN in Australia. If you are using a mobile phone purchased overseas or if you are an international mobile roamer visiting Australia, you can call either 000 or 112.

It is important to remember that your phone will always need sufficient battery power and will need to be within the coverage area of a Carrier's mobile network to make an Emergency Call. If you are going to be in a remote location with limited mobile network coverage, you may not be able to call 000 or 112 and should consider alternatives such as a mobile Satellite Service or emergency position indicating radio beacon (EPIRB).

Be aware that in some cases mobile network coverage may be disrupted by local disasters, such as fire, flood, loss of power or the mobile network may be suffering from congestion or cyber attack.

If there is no coverage available from any mobile network, you will not be able to reach the ECS via a mobile phone, regardless of whether you dial 112 or 000, unless you have a mobile satellite phone and associated mobile Satellite Service.

For satellite phones (GMPCS - Global Mobile Personal Communications by Satellite) you must confirm the access codes with your CSP as sometimes emergency access is only available by the use of special codes or features.

If you have any doubt about your mobile phone, it is recommended that you contact your CSP for information regarding the use (making of an Emergency Call) of your specific mobile phone.

A2 -106

106 is a text-based emergency number for people who are deaf, or who have a hearing or speech impairment and provides access to contact Police, Fire or Ambulance services 24 hours a day, 7 days a week. You can only use 106 from a teletypewriter (TTY). You can find out more about accessing emergency services via the National Relay Service here.

How 106 Works

The NRS user calls 106. This is a free call.

The NRS user will be asked to advise which emergency service they wish to be connected to – Police, Fire or Ambulance.

The NRS user will respond by typing PPP for Police, FFF for Fire and AAA for Ambulance. Under normal operating circumstances a user of the 'speak and read' service via 106 can verbally request Police, Fire or Ambulance.

The NRS relay officer will call the requested service and stay on the line to relay the NRS user's conversation with the emergency service.

A3 – Location information is important

For Emergency Calls from a phone at a fixed location, the ECS automatically uses the calling phone number (CLI) to find the service address of the phone service and the Most Precise Location Information Available for the service. This is then used to select the correct ESO based on the caller's location. The ECP then automatically forwards the information to the ESO for use in circumstances where the caller is either unable to provide the location or is unsure of the location or where verification of location is required.

A similar process applies to Emergency Calls that originate from mobile phones, however mobile networks provide additional standardised location information as per CA G557 requirements to identify the emergency caller's location based upon network and mobile phone's Global Positioning System (GPS) data (where available). The technology is unable to always provide the caller's exact location to a sufficient degree of accuracy to avoid all ambiguity. Therefore, the caller should be very clear when providing the ECP operator with location details and include both the State and Town / Suburb information. This reduces the possibility of confusion as there are many locations (i.e. suburbs, towns, etc.) that either have the same name or sound very similar; e.g. Burwood (Brisbane, Sydney and Melbourne), Coolangatta (QLD and NSW). This advice must also be followed when

providing verbal details to the ESO operator as the ESOs themselves cannot rely solely on the electronic information sent to them by the ECPs as its accuracy is not always sufficient to allow despatch of assistance based on the network provided standardised location information as per CA G557 requirements.

> *NOTE: Calls to the ECS from outside Australia (e.g. calls from offshore call centres, calls trunked via switching centres outside Australia) may or may not be allowed to progress to the ECP as they might be out of jurisdiction. While mobile calls to 000 do provide some network provided standardised location information as per CA G557requirements to the ECP operator automatically, this does not always provide a precise location so it helps if the caller can provide those details.*

If the callers have a smartphone, the Emergency + App can help the callers determine their location which they can provide to the ESO.

The Emergency + App is available from the Windows, Google Play and Apple App stores for free. The App uses a smartphone's GPS capability to provide the caller with their location information which they can then give to the ESO if needed. The App also provides information about when to call 000, the contact numbers for the State Emergency Service (SES) and Police Assistance Line (PAL). It is important to note, the Emergency+ App still requires the callers to be in mobile network coverage, and have location services activated on their mobile phone, in order to use GPS details.

A4 EMERGENCY SERVICE NUMBERS

Many countries have a single ESN that allows an emergency caller to contact the local ESOs for assistance in life threatening and time critical situations. The ESN may differ from country to country. It is typically a three digit number so that it can be easily remembered and accessed quickly. Some countries have a different ESN for each of the different emergency services. These emergency numbers often differ only by the last digit. Inside the European Union, 112 is the common ESN. Other ESNs used around the world today include 911, 999, 110, 08, 118 and 119 (these numbers may terminate on a Recorded Voice Announcement (RVA) if used in Australia).

Most mobile phones sold in Australia have the ESNs 112, 000, 110, 118, 119, 999 and 911 pre-programmed into the mobile phone's firmware (refer to 3GPP TS 22.101).

The mobile phone's firmware can contain additional country specific ESNs such as 110, 118, 119, 999 and 911 that can be used even when roaming abroad.

B   EMERGENCY SERVICE LOGOS (000 AND 106)

B1   Logos

The following logos have been reproduced with permission from National Emergency Management Australia.

FIGURE 1
Emergency Service Logos (000 and 106)

B2   Permission to use logos

Permission to use the logos must be obtained from:
National Emergency Management Agency
GPO Box 133
Canberra City ACT 2601

Telephone 0434 987 726
Email: contact@nema.gov.au
mailto:TripleZero@fire.nsw.gov.au
https://www.triplezero.gov.au

PARTICIPANTS

The Working Committee responsible for the revisions made to this Code consisted of the following organisations and their representatives:

Organisation	Membership	Representative
TPG Telecom	Chair (Non-voting)	Alexander R. Osborne
Aussie Broadband	Voting	Eric Erickson
nbn	Voting	Peter Bull
Optus	Voting	Monical Liem
Symbio	Voting	Fionola O'Keefe
Telstra (ECP for 000)	Voting	Jane Elkington
Telstra	Voting	David Fabbian
TPG Telecom	Voting	Annie Leahy
Vocus	Voting	John Sexton

The Working Committee was chaired by Alexander Osborne of TPG Telecom. Craig Purdon of Communications Alliance provided project management support.

Communications Alliance was formed in 1997 to provide a unified voice for the Australian communications industry and to lead it into the next generation of converging networks, technologies and services.

In pursuing its goals, Communications Alliance offers a forum for the industry to make coherent and constructive contributions to policy development and debate.

Communications Alliance seeks to facilitate open, effective and ethical competition between service providers while ensuring efficient, safe operation of networks, the provision of innovative services and the enhancement of consumer outcomes.

It is committed to the achievement of the policy objective of the *Telecommunications Act 1997* - the greatest practicable use of industry self-regulation without imposing undue financial and administrative burdens on industry.