Triple Zero

Stay focused, stay relevant, stay on the line

How to Call 000

Advanced Mobile Location

On 25 August 2021, the Australian Government announced the completion of the rollout of Advanced Mobile Location (AML) technology for the Triple Zero Emergency Call Service.

AML is a technology built into the operating system of Apple and Android telephones which will provide greater location accuracy to Triple Zero during an emergency call from a mobile telephone. It has the potential to save lives and improve outcomes for mobile callers in Australia, as it is doing in the countries in which it has already been deployed.

How AML works

- An AML-enabled smartphone recognises when an emergency call is made to Triple Zero (000 and 112), and if not already activated, activates the telephone's location service functions.
- The smartphone assesses the location information available, using device-based hybrid methods, which combine GPS, Wi-Fi, mobile network information, and other sensor inputs to calculate the caller's location.
- Once the device's location is calculated, the smartphone automatically sends an SMS with the estimated location to the Triple Zero Emergency Call Service. This SMS is sent in the background while the caller speaks with the Emergency Service Organisation, and the caller is not required to do anything to enable the location information to be sent.
- If the telephone's location services were switched off at the time the call was initiated, AML will temporarily activate the location service for the duration of the emergency call.
- It typically takes 25 seconds or less for the caller's location to be calculated and sent to Triple Zero.
- When the emergency call has finished AML will be de-activated.
- The telephone will not retain a record of the SMS sent, and a caller is not able to retrieve it.
- AML works with Android telephones (version 4.1 and higher, with Google Play Services installed).
- AML works with iPhones running iOS 14.3 or later and Apple Watch GPS + Cellular devices running watchOS 7.2 or later.
- AML is not an App - rather it is a technology built into the operating system.

With around 78 per cent of calls to Triple Zero originating from a mobile telephone, AML has the potential to assist a significant proportion of callers requiring emergency assistance. It is capable of providing a caller's location within a 5-metre radius outdoors and a 25-metre radius indoors. Based on deployments of AML in other countries, most calls (about 85 per cent) will provide location accuracy within 50 metres.

The AML service is a key collaboration between the Commonwealth Government, Telstra (as the Emergency Call Person for Triple Zero and 112), emergency service organisations in every state and territory (police, fire and ambulance), mobile carriers (Telstra, Optus and TPG Telecom) and mobile operating system providers (Google for Android devices and Apple for iOS and watchOS devices).

AML technology has now been deployed for the Australian Triple Zero (000) Emergency Call Service.

How to Call 000

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Advanced Mobile Location   ┌──────────────────┐
                                                │ See transcript ⌄ │
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In an emergency situation every second counts.
Advanced Mobile Location... or AML can estimate your location when you make a Triple
Zero call.
Calling triple zero from an AML enabled smartphone will provide the police, fire or
ambulance service with the coordinates of your location, while you're talking.
It usually takes 25 seconds or less for your location to be sent to emergency services.
Combined with the high precision accuracy of AML — to within 5 metres outdoors and 25
metres indoors — this technology will get help to you when you really need it.
In the event of an emergency, you still need to give the operator as much information as
you can about your location and the nature of the emergency.
AML works on Android and Apple smartphones.
You should check TripleZero.gov.au to see if your device is compliant and for instructions
on how to make AML work.
If you're worried about your privacy - don't be.
AML will only be activated by calling Triple Zero, and once the call is finished it will turn off.
This technology is currently being used in New Zealand, the UK and Europe — and it's
already saved lives.
Visit triplezero.gov.au to find out more about AML and how to make it work on your device.

Facts on using AML

Only Apple iOS (and WatchOS GPS + Cellular) and Android devices currently support AML (please
refer to "Can I check if my phone is AML ready?" for specific information about device
compatibility). Telephones using other operating systems will not provide AML data to the Triple
Zero Emergency Call Service.

Android and AML

Android users do not need to do anything to enable AML in their device. Once AML is made
available in Australia, it will work on Android devices running Android operating system 4.1 and
higher with Google Play Services installed.

Activating AML on iPhones

Users of iPhone and Apple Watch GPS + Cellular devices will need to update their operating
system to activate the AML capability. AML will work on iPhone running iOS 14.3 and Apple
Watch GPS+ Cellular running watchOS 7.2. iOS 14.3 is available on iPhone 6s or later and
watchOS 7.2 is available on Apple Watch Series 3 or later. Users can check their software version
in Settings > General > About.

We recommend that users ensure their devices are updated with the latest software build for their
device.

If AML information is not available

Every call to Triple Zero will continue to provide the following information to emergency services,
whether or not AML information is available:

- the service address as supplied by the caller to their provider;
- Standardised Mobile Service Area (SMSA) – a large geographic region showing indicative location (shows areas larger than Push Mobile Location Information (Push MoLI)); and
- Push MoLI – based on mobile cell tower coverage.

Checking if my telephone is AML ready

If your Android telephone is using Android operating system version 4.1 or later and Google Play Services is installed AML will operate when an emergency call is made to Triple Zero.

Note: Android version 4.1 was released in 2012, and 99 per cent of Android devices run version 4.1 and above. The latest release of Android is version 10.

iPhone and Apple Watch GPS+ Cellular users will need to check if their device and operating system can support AML. AML will work iPhone running iOS 14.3 and Apple Watch GPS+ Cellular running watchOS 7.2. iOS 14.3 is available on iPhone 6s or later and watchOS 7.2 is available on Apple Watch Series 3 or later. Users can check their software version in Settings > General > About.

We recommend that users ensure their devices are updated with the latest software build for their device.

AML messages are free

Just as calls to Triple Zero are free, the SMS messages containing the AML data that are automatically sent by your telephone are also free of charge. You don't need a data allowance either.

AML works across all of mainland Australia

All states, mainland territories and Christmas Island will have access to AML.

The Cocos (Keeling) Islands and Norfolk Island will not, as they have unique mobile networks and emergency calls go to the local emergency services rather than to the mainland Triple Zero Emergency Call Service.

AML will not work if you are emergency 'camped-on' on another provider's network

At this time, AML does not work in Australia when a caller is 'camped-on' to another mobile network. Emergency 'camp-on' may occur when a caller is outside their own mobile carrier's network coverage, but is within the coverage of another mobile carrier. This allows a caller to make a Triple Zero call whenever in the range of a mobile network.

Callers who are camped-on another mobile network can still provide their location to Triple Zero and the relevant state Emergency Service Organisation by using the Emergency + app *(https://emergencyapp.triplezero.gov.au/)*. This app is available for download.

Protecting callers' privacy and preventing unauthorised access to AML data

AML is dormant on the smartphone until an emergency number is dialled. Location functionality (GPS or Wi-Fi etc.) will respect the user's privacy settings until an emergency call is made and will revert back to the user's privacy choices afterwards. The operating system provider (Apple or Google) does not receive any AML data; the user's device simply passes it through the mobile network operator to Triple Zero. The SMS message containing the location information is not retained on the telephone after it is sent.

AML meets all the regulated requirements for privacy, and AML data will be handled with the same high level of security as any other data relating to a Triple Zero call. Access to location data is restricted to authorised officers at Triple Zero and the relevant Emergency Service Organisation. Data access will be audit trailed and logged.

See a copy of the Department of Infrastructure, Transport, Regional Development, and Communications' Privacy Impact Assessment for AML *(https://www.communications.gov.au/what-we-do/phone/emergency-call-services/emergency-calls)*.

AML cannot be used to track individuals. The AML process is designed to prevent this as the capability is only ever initiated when a call to Triple Zero is made from a mobile device. The AML process cannot be reverse engineered to track people or initiate the AML process.

Turning AML off

Android users are able to turn off the AML capability within their handset via their device settings. This means the most accurate device location will not be provided to the Triple Zero Emergency Call Service, and emergency services may have difficulty locating you. This could lead to adverse health outcomes, including in worst case scenarios an increased potential to suffer further harm or risk of death. We do not recommend that anybody turn off this functionality without understanding the potential consequences.

Android users can see instructions to turn off the Emergency Location Services functions in their device *(https://support.google.com/accounts/answer/3467281?hl=en).*

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