

REVIEW OF THE NATIONAL TRIPLE ZERO (000) OPERATOR DISCUSSION PAPER

SUBMISSION BY DEPARTMENT OF HEALTH, NORTHERN TERRITORY

PROFESSOR DINESH ARYA, CHIEF MEDICAL OFFICER

The Northern Territory (NT) Department of Health is pleased to provide the following submission to the Department of Communications in response to the review of the National Triple Zero Operator discussion paper.

It is recognised that delivering services across the NT is often challenging due to its unique characteristics. The NT has higher proportions of people in remote and very remote areas than any other state or territory. Innovative solutions are therefore needed to ensure services are accessible and reliable.

Sixty per cent of Triple Zero calls in Northern Territory are from mobile phones¹. The issue faced by the NT is that tracing the location of these calls accurately is difficult. Whilst it can be done, via the mobile phone provider, it is not an automatic process and therefore not timely and not effective. Also, many remote localities do not have a telecommunication service, which poses an issue for residents who need to access an emergency service.

Question 1: Community expectations

It is commonly accepted that community expects the Triple Zero service to be contactable anytime, anywhere, easily, quickly and free of charge.

Are these your expectations of the Triple Zero service now and into the future? Are your expectations currently being met? Why or why not?

The purpose of Triple Zero is to connect to an emergency service 'quickly' in an emergency situation to seek assistance. Therefore, the NT would expect that the system is accessible and reliable in emergency scenarios and free of charge for the end user.

As identified above, due to the NT's geographic spread (remoteness) and in many cases, isolation from a number of services available in major towns, access to telecommunications is a recognised issue. Therefore, for people living in remote and very remote areas accessing the Triple Zero service is not always possible.

¹ Computer Aided Dispatch system monthly report, August 2014.

Question 2: Challenges facing the Triple Zero service

Ongoing changes in the communications landscape, and certain expectations in the community regarding the nature of the service, present challenges for the Triple Zero service. These challenges include locating callers, the quality and prioritisation of VoIP calls, extreme call volumes during disasters and non-emergency calls.

What are your views on these challenges and what further steps could be taken to address them? What other challenges need to be considered?

It is recognised that the Triple Zero service faces a number of challenges. The NT faces many of the same issues that have been identified in the discussion paper but in particular, the issue of delivering a service to remote areas within the NT.

Other identified challenges for consideration include:

- Voice calls – issues with hoax calls to the service that prevent operators in dealing with ‘real’ emergency requests and issues with identifying exact locations. As identified, this is more prominent with mobile phone calls.
- VoIP calls – similar to voice calls, the service provider has difficulty in tracking locations.
- Video calls (Skype), SMS and Facebook mediums - there are identified issues with utilising such mediums in terms of bandwidth requirements, hoax calls (similar to voice calls) and the time it takes to gather and clarify information through text.
- Locations with difficult place names – it is difficult for emergency services to find some place names and/or if there are the same names in other jurisdictions. This could be confusing and creates delays as the exact location may not be pinpointed straight away.
- Technological advances – while technological advances have improved the ability to access services, there are limitations for instance, Smartphone capabilities/applications require network infrastructure to support them. When the mobile phone is out of service range, this becomes a redundant measure.
- Social Media – while these applications may raise alerts and concerns, they may also create unnecessary attention / interference for assistance. They may also lead to other media attention that is not always helpful in an emergency scenario.
- System overload – in cases of a big-scale emergency, the system can be overloaded by the volume of calls being made to the service. Calls not answered by the usual time, create delays and further frustrations for the end user. It would be beneficial for the system to be expanded to cater for such situations.
- Raising community awareness of the purpose and function of the Triple Zero service to reduce ‘hoax calls’ should be ongoing and marketed in a number of mediums/languages so that community members are clear. This may reduce calls that are not of an emergency status.

Question 3: Other ways of requesting emergency assistance

The only way of contacting Triple Zero is with a voice call and this is likely to remain the primary way of requesting emergency assistance. However, people use a range of other ways to communicate, including SMS, email, instant messaging, video calls and social media.

In addition to voice calls, is it desirable to have other ways of requesting emergency assistance? If so, what ways and what challenges do you foresee?

Other mediums of requesting emergency assistance should consider availability, reliability and efficiency issues. That is, will other formats be more expedient, quicker and useful from the current primary method of making a voice call.

With the majority of emergency service request calls in the NT being made by mobile phones, there is the continued issue with tracing locations to dispatch emergency assistance. It is recommended that a location system is investigated for mobile phones that is automatic, similar to the landline where the location can be identified quickly.

Question 4: Improving Information

It is important that emergency service organisations, as well as callers, have the information they need in an emergency. Changes in technology offer opportunities to improve the information available, however, these changes also present some challenges.

What information is essential to emergency service organisations and callers in an emergency and what information is desirable?

Essential: Type of emergency, its location, caller name, any pre-existing medical condition (if caller able to provide), other persons involved and their state/condition (gives emergency services an indication of emergency spread/impact).

Desirable: Information to the person in need about dispatch/time of arrival by the emergency service would be helpful and video/pictures to provide additional information about the scene of an emergency prior to arrival. This allows the emergency service to prepare for the emergency impact or request further assistance to be dispatched prior to arrival.

Question 5: The role of the national Triple Zero operator

A tender for the national Triple Zero operator is required to be issued by June 2016. The aim of this review is to ensure that the arrangements for the national Triple Zero operator continue to support a world class Triple Zero service into the future.

What criteria should be used to determine the functions of the national operator?

It is highly recommended that the national operator has access to all mobile towers if mobile phones become more utilised by persons in an emergency. Currently the national operator is limited in accessing towers where they are not the mobile carriers.

It would also be beneficial that mobile phones have the service coverage available regardless of where they are located in Australia. It is recognised that rural and remote areas do not have the same provision of services as other major centres and that addressing this needs to be balanced with the level of expenditure required to expand such services.

Question 6: The role of the telecommunications providers

Telecommunications providers have regulatory obligations in relation to Triple Zero, recognising their importance in the delivery of the service. However, it is important to consider whether the regulatory framework remains appropriate given changes in technology and the telecommunications industry, the likely direction of the Triple Zero service, and the Government's commitment to reduce the regulatory burden on industry.

Is the current regulatory and funding framework for the Triple Zero service appropriate now and for the future? If not, what changes should be made and why?

From the NT's perspective, the role of the telecommunications provider is to ensure that:

- a national emergency service is available and accessible 24/7 to all Australians;
- the emergency number is known by all and that the community understands the purpose of this number (for example, the universally known American number 911 can be confused); and
- the system operates efficiently and is updated to reflect the changing needs of the community but also technological advances.

Question 7: The role of innovators

Innovative ideas to improve emergency assistance may come from a range of parties such as app developers, device and car manufacturers, research organisations, community service providers and individuals.

What sorts of innovations would most improve the Triple Zero service? How can innovation and third party innovators be supported while ensuring the reliability and integrity of service?

Australian Government funding would assist innovators to investigate and develop the service to expand its functions across Australia and possibly investigate the issue of telecommunication services to remote and rural areas that don't have this access. The Department of Health acknowledges that such innovation and investment would be long-term and require support from all jurisdictions.

The following are suggestions regarding innovations:

- The establishment of GPS coordinates to automatically identify the location (State/Street etc.) from a mobile phone. This would be beneficial in scenarios where:
 - callers who, during emergency situations, may be too distressed or unfamiliar with their environment to report their location;

- it may assist in terms of determining accurately the distance to the emergency site as the caller may just be guesstimating; and
- it may identify if air support is required to reach the emergency site or evacuation.

The challenge with mobile phone applications occurs when the mobile phone is out of service range it becomes a redundant measure.

- A mobile application that provides the Triple Zero number on the mobile phone screen for easy access. This would take up a small portion of the screen display area or an application that allows the caller to select the emergency service they require instead of waiting to be directed. This could have the potential to reduce call volume to the Triple Zero but would require the right infrastructure to support this.
- The ability for the end user to monitor their call including dispatch service location and time of arrival, including the ability to provide updates to the emergency service assistants while they are making their way to the scene.
- Investigate the ability to expand the Triple Zero service to direct non-emergency calls to another 'directory provider' for the appropriate 'non-emergency' services. This would require the service provider to expand the service or link to another directory.
- The "Triple Zero Kids Challenge" online game appears to be a useful tool to raise childrens' awareness from a young age about the purpose of the service, its importance and when and how to use it. Expanding awareness through school curriculum may also assist with the use of the service.

Question 8: Cooperation and decision-making

There are a range of parties with interests and responsibilities in relation to Triple Zero. It is important that there are effective cooperation and decision-making arrangements in place amongst these parties so that the service can continue to adapt and respond to issues as they arise in the future.

What things do the current cooperation and decision-making arrangements for Triple Zero do well? What things do they not do well? What changes are needed so the service can better adapt and respond to issues in the future?

It is recommended that consideration is given to expanding the system to accommodate extra capacity where the system becomes overwhelmed by the increased volume of calls to the service.

