



Our Ref: 21007 – 14/30051
Your Ref:

Triple Zero Review
Department of Communications
GPO Box 2154
CANBERRA ACT 2601

RE: REVIEW OF THE NATIONAL TRIPLE ZERO (000) OPERATOR

Thank you for the opportunity for the the Department of Fire and Emergency Services (DFES) to make a submission to the Review of the national Triple Zero (000) operator.

I can confirm DFES has read and understands the publication, confidentiality and privacy notice. Please find attached the DFES responses to the review questions which have been considered in the context of changes to the national operator arrangements in the medium to long term.

DFES looks forward to the review recommendations and participating in a new national Triple Zero (operator) service delivery model. Should the Department of Communications require any further assistance on Triple Zero policy matters, please contact Chief Superintendent Paul Ryan on 08 9395 9677 or email paul.ryan@dfes.wa.gov.au.

Yours sincerely

GARY GIFFORD
ASSISTANT COMMISSIONER HAZARD PLANNING & RESPONSE

22 August 2014



THE DEPARTMENT OF FIRE AND EMERGENCY SERVICES (DFES) OF WESTERN AUSTRALIA REVIEW OF THE NATIONAL TRIPLE ZERO (000) OPERATOR SUBMISSION

Question 1: Community expectations

The Department of Fire and Emergency Services (DFES) concur with current community expectation that the Triple Zero service is a nationwide single contact number that anyone can call from anytime, anywhere, easily, quickly and free of charge. The concept of a free national Triple Zero free call service is synonymous with community expectations for timely and effective emergency services.

The current Triple Zero service appears to be meeting community needs during business as usual periods. However, during peak times there is scope for an improved service delivery model through the ability for community and Emergency Service Organisations (ESO) to have visibility of current national call centre workloads. This capability will provide stakeholders with an appreciation on Triple Zero demands and can be an effective tool to manage service delivery expectations.

DFES also expects indigenous and multi-cultural communities and people with disabilities to continue accessing a free Triple Zero service. In the future, these people should have the same opportunities as other people to access the same level and quality of service.

The Triple Zero service must be robust, well understood and respected by all community members. Any changes to the current Triple Zero service will require targeted and robust marketing and the introduction of continuous improvement mechanisms to ensure the service remains relevant and trusted by both ESOs and the communities we serve. The current level of marketing may not be currently reaching into all levels of society, particularly isolated, vulnerable and at risk communities.

Question 2: Challenges facing the Triple Zero service

The transient nature of tourism and immigration requires the Triple Zero service to be well marketed in order to capture all audiences. As Triple Zero is not a frequently used number there is a risk that the influence of media from origins outside of Australia will reinforce other countries' emergency numbers (UK - 999, USA - 911, EU - 112 etc.). The prevalence of United Kingdom and United States television content will be matched by the continued support for multi-cultural media services like the Special Broadcasting Service (SBS). Critical for any new Triple Zero operator is the delivery of Triple Zero marketing to ensure that any emergency can be reported as quickly as possible without the cognitive effects of international media influences.

The communications environment is a rapidly evolving industry; therefore it is imperative that systems can be readily acceptable of upgrades and includes operators training packages. User acceptance training is paramount for success and if change is not managed well systems may introduce risk for ESOs and the community alike.

DFES actively participates in the National Emergency Communications Working Group (NECWG). Increased financial support by the Commonwealth will ensure all ESO member agencies collective consider the future direction of Triple Zero. NECWG performance outcomes should be focused towards the development of continuous improvements strategies that embrace new technologies.



There is a growing trend towards the preference to using new emerging technologies by younger generations. Over recent years, there has been a strong trend towards the use of social media, which the ESOs are only starting to embrace to assist with managing emergency operations. These new technologies and community desire to utilise this form of communications presents a challenge now and in the near future in order for the service to remain relevant and reliable.

Question 3: Other ways of requesting emergency assistance

It is well understood that voice type calls can take longer to process than faster electronic based systems i.e. Short Message Service (SMS). However this type of communication still remains relevant to many demographic groups. These more vulnerable people and those with disabilities should continue to access this type of service into the foreseeable future.

There is a wide variety of commercially available communication systems that have the potential to enhance ESOs situational awareness. SMS, Video Calls and other Applications (Apps) are able to capture and deliver high quality images. This information can provide ESOs with initial first caller data that provides first responders with enhanced levels of situational awareness. The ability to share this information with other ESOs provides multiple agencies with a more comprehensive, and in many instances, a higher degree of information reliability.

Technology driven communication should be viewed as an enhancement not a hindrance as it has the potential to provide to ESOs with improved emergency management information and the development of a common operating picture. The introduction of multi-faceted emergency notifications is an inevitable evolution of the National Triple Zero system.

There will be some governance issues to be resolved around the receiving and storing of this new data. Current ESO ComCen's capture and store voice data in relatively simple, reliable and easily replay-able systems. Future ESO systems will require the ability to receive, transfer and store large files quickly. The quality of these images or video streaming will need to be managed into small data packets.

Triple Zero operators may also be exposed to unforeseen levels of traumatic stress from video notifications. ComCen's should therefore have the ability to cease video streaming and revert to audio feed only. For systems that only receive video streaming, resolution settings could be manipulated on a case by case basis and would be advantageous to the ESO in high trauma instances.

The capturing, storage and governance processes surrounding new multiple media sources and information technology sharing and updates will require careful and considered review. Any future technology introduction will require a national governance framework and funding to support the agreed operating model and training of ESO personnel.

Question 4: Improving information

It is important that emergency service organisations, as well as callers, have the information they need in an emergency. The essential information required by a ESO is the location of the emergency (primary street, locale and nearest cross street), the nature of the emergency and a contact telephone number (not recorded by CLI). Other desirable information includes any life involvement, further observation descriptors, potential exposure threats and pertinent safety information.



Currently, DFES is only able to utilise Caller Line Identification (CLI), Global Positioning System (GPS) and the Emergency + App coordinates as useful tools to gain additional location information and/or the cross referencing of landline or mobile billing addresses against the current call details. DFES also has a structured caller interrogation process to provide for an effective initial level of emergency response. This process is limited and is heavily reliant upon the cognitive state of the caller and their ability to provide clear and concise information.

The ability for the caller to stream real-time vision directly from the incident scene could provide ESOs with an immediate appreciation of an emergency. Using this information, the ESO can assess and where necessary escalate the initial response force resulting in enhanced intervention times and recovery outcomes.

During a single incident, such as a vehicle fire on a freeway, an ESO can receive numerous triple zero calls. Particularly during busy periods, this can create significant communication centre congestion and increased workloads that may result in other more urgent caller notification delays. DFES is desirous for a technology solution where recorded voice announcements or messages are sent directly to devices alerting potential callers the ESO is already aware of the situation and is currently responding to the incident. While recorded voice announcements have been developed for large scale emergencies, a smaller scale application would be highly beneficial.

Implementation will improve Triple Zero caller awareness and reduce ESO ComCen congestion and workloads during unplanned peak demand periods.

The use of smart devices provides ESO organisations with an opportunity to collect useful information/data outside of the Triple Zero call centre process. Within Western Australia DFES is planning to utilize social media feeds during emergencies through a digital media strategy. Nationally, the Australasian Fire and Emergency Service Authorities Council (AFAC) are facilitating the role of social media in emergency management with member agencies. DFES supports any Commonwealth Government participation in using social media for Triple Zero call taking.

Question 5: The role of the national Triple Zero operator

The criterion outlined below recommends the functional basis of the national operator model:

- How effective is the current Service Level Agreement with the existing provider. This needs to be measurable against a national standard – where are we now against a desired future vision.
- What systems are working well and what systems are requiring an innovative assessment for future proofing.
- Will any additional service type meet the current Triple Zero service provision of anytime, anywhere, easily, quickly and free of charge.

A sustainable funding model for a national emergency service call taker needs to be determined. Australian communities expect the same level of service regardless of geographic location. Underpinning the level of service is a plan to ensure any revised Triple Zero adequately supports a community centred operating model. Whilst the landline and mobile service providers are not directly able to improve their level of network coverage,



there should be some commitment to improving services that will enable all customers to have equity in accessing Triple Zero.

There are many areas in Western Australia that do not have mobile telephone coverage or have weak telephone reception. This poses a problem when trying to contact Triple Zero from low to no service locations. Recommend that the telecommunications service delivery coverage is a key performance measure for all communities. Reporting against key performance outcomes is critical across all government business areas. Triple Zero outcomes should be measurable against agreed community expectations.

The ability for the Triple Zero call centres to scale up their level of support to Triple Zero calls in peak or expected peak periods of community need is a critical pre-emptive activity. This should be matched with an ESO's pre-emptive actions during these periods. Many emergencies are no notice events and therefore the timing of any Triple Zero escalation support should also form part of the service delivery model performance measures.

Innovation is the key to success of any long term commitment to system design and improvements. Selecting a team of subject matter experts with no connection or pecuniary interest, now and into the future, is essential for overseeing the research and development on a continuous basis. It is recommended that this forms part of a research and development governance framework model for the future.

Question 6: The role of telecommunications providers

Any future regulation of the Emergency Call Service needs to ensure that the Triple Zero service is compliant against community expectations. There is adequate regulation at present. Future regulation will need to address the changing needs of the telecommunication industry, National Triple Zero service provider, ESOs and the capacity of systems to provide reporting of outcomes.

Question 7: The role of innovators

The US National Emergency Number Association (NENA) has established an innovation council. NENA's mission is to foster the technological advancement, availability and implementation of a universal emergency telephone number system (911). There are synergies for NENA lessons learnt and application within the Australian context. Australia could leverage Triple Zero business needs to the research and development undertaken at the global level.

The establishment of an innovation council concept inviting ESO's as members is recommended for further consideration. This type of forum would support our emergency service responders and community's needs into the future. Universities and government scientific organisations also present significant research and development opportunities to drive innovation in support of communication trends around the world. As an example, the CSIRO has already achieved impressive results in similar areas such as Twitter within the 'clouds' concept.

The ability to align ESO Computer Aided Dispatch systems across Australia could provide some opportunities with the Emergency Call Services in terms of redundancy and interoperability across State and Territory boundaries. Collaboration across Australian ESOs may redirect a single system's savings into innovation of new national systems.

One single 'endorsed' Triple Zero smart device application could form part of a standard feature installed onto all new devices marketed within Australia. This application could



incorporate common agreed capabilities for use throughout Australia. There is potential for notifications to ESO directly in lieu of the National Triple Zero system. Additionally, the new application can still provide basic functionality such as GIS coordinates when device battery power and/or signal strength is low.

This type of strategy will be dependent upon community support for an emergency automated call centre application. Dependent on the level of acceptance and uptake, there could be consideration to routing triple zero calls directly to the responsible ESO. A business process change of this magnitude could likely result in a comprehensive review of the national Triple Zero service relevance.

Question 8: Cooperation and decision-making

DFES is a member of NECWG which represents all ESO across Australia. In this working group, national issues are discussed with government agencies and the communications industry. This working group provides ESOs with a forum for the operation and development of communication centres.

In the Western Australian context, DFES is desirous for effective cooperation and decision making arrangements progressed through NECWG. Seeking ESO feedback and commitment to improving the Triple Zero system will provide the Department of Communications and ESO with a contemporary, reliable and relevant service into the future. This will also improve community safety and responding agencies outcomes.

