

NSW Telco Authority – Submission to Triple Zero service outage inquiry

Introduction

NSW Telco Authority (NSWTA) welcomes the opportunity provided by the Senate Environment and Communications References Committee (the Committee) to make a submission to the Triple Zero service outage inquiry (the Inquiry).

At the outset, NSWTA extends its sincere condolences to the families of those who lost their lives while unable to contact emergency services during the 18 September 2025 Optus Triple Zero service outage (18 September Optus Triple Zero Outage).

Triple Zero provides an essential emergency call service that is relied upon by the community to access life-saving assistance in critical situation. It is therefore imperative that this Inquiry identifies practical policy and regulatory changes to mitigate the risk of further tragic outcomes resulting from network failures affecting Triple Zero services.

The impacts of the 18 September Optus Triple Zero Outage in NSW were relatively minor; two attempted calls to Triple Zero were affected by network infrastructure located in South Australia close to the border with NSW. However, NSWTA reiterates earlier advice in relation to the 2023 Optus Outage, aimed at improving national regulation and governance around network outages and control of Triple Zero services. The issue of the time taken for network operators to notify regulators and emergency management authorities of outages, and the granularity of the information provided, remain key concerns.

Organisational context

NSWTA is a statutory authority established under the NSW [Government Telecommunications Act 2018](#). NSWTA operates the Public Safety Network (PSN), a mission-critical land mobile radio (LMR) network exclusively used for public safety and emergency management purposes in NSW. NSWTA also leads a range of programs and initiatives aimed at improving telecommunications and digital connectivity for communities and Emergency Services Organisations (ESOs), including through the [NSW Connectivity Strategy](#) and the [NSW Digital Inclusion Strategy](#).

NSWTA's functions include responsibility under the [State Emergency and Rescue Management Act 1989](#) (SERM Act) and [State Emergency Management Plan](#) (EMPLAN) for coordinating the Telecommunications Services Functional Area (TELCOFA) and enacting the [Telecommunications Services Functional Area Supporting Plan](#).

NSWTA's TELCOFA role is to engage with telecommunications providers, including the three mobile network operators (MNOs), and ESOs to coordinate emergency management activities to protect, enhance and restore telecommunications infrastructure, particularly relating to disaster and major public safety events.

While NSWTA has no direct role in the delivery of Triple Zero services, our extensive experience in responding to commercial telecommunications network outage events over recent years is material to the Inquiry to inform its recommendations for improving Triple Zero systems and public safety outcomes.

Terms-of-reference - NSWTA functions

The Inquiry's terms-of-reference are comprehensive, with a central focus on the actions of Optus and the existing Commonwealth regulatory frameworks. As various elements are beyond NSWTA's functional scope, our submission will focus those terms relevant to NSWTA's role, functions and experience, including:

- b. other recent outages affecting access to triple zero and the adequacy of the responses by the relevant entity, the minister, the Australian Government and ACMA*
- c. 'the frequency and management of triple zero outages',*
 - c.iii. the adequacy of regulatory, legislative and policy frameworks governing Australian's access to emergency telecommunications assistance including whole-of-government responsibilities and co-ordination and the protection of vulnerable Australians; and*
- e. the limitations on domestic mobile telecommunications customers accessing services offered by alternate carriers, known as mobile phone 'roaming', which is particularly an issue in times of emergency in regional communities where mobile coverage can be less reliable*

As they relate to the Terms of Inquiry, NSWTA's submission addresses four key areas:

- The need for enhanced and formalised real-time carrier operational data access
- NSWTA participation in Triple Zero Coordination Committee (TZCC) and in development of Triple Zero Custodian functional implementation
- Ensuring roaming and redundancy across commercial networks
- Community empowerment and education.

Regulatory reform

The telecommunications sector, including Triple Zero services, is regulated by the Commonwealth. NSWTA acknowledges the progress of reforms that commenced following recent inquiries into disaster and major outage events, including the 2023 Optus outage, and aimed at improving the resilience/availability of access to telecommunications networks, including for Triple Zero services.

NSWTA continues to advocate for the availability and resilience of telecommunications infrastructure and operational communications for emergency services. Our position has been consistently reflected in a range of NSW Government and NSWTA submissions to state and Commonwealth inquiries and reviews including:

- [NSW Bushfire Inquiry Report](#)
- [Royal Commission into National Natural Disaster Arrangements](#)
- [2022 NSW Flood Inquiry](#)
- [Select Committee on the Response to Major Flooding across New South Wales in 2022](#)
- [Review into the Optus Outage of 8 November 2023](#)
- [Regional Mobile Infrastructure Inquiry 2023](#)
- [2024 Regional Telecommunications Review](#)

While positive steps have been taken towards increasing transparency and data sharing around network outages, NSWTA maintains that further action is required from the Commonwealth to drive MNO actions to deliver improved outcomes for the community.

This will ensure that NSWTA and ESOs are able to more efficiently and effectively perform their telecommunications and/or emergency management functions, and to enhance the ability of NSW communities to communicate during and following disaster events and other network outages. It is critical therefore, that the Inquiry address implications for state-level emergency responses.

Enhanced and formalised real-time carrier operational data access

NSWTA seeks real-time access to live commercial carrier network outage data and dynamic coverage maps to support operational emergency management decision-making for NSWTA, ESOs and the community. Currently, NSW Government agencies have limited visibility of carrier network infrastructure status, despite their jurisdictional lead emergency management role.

During emergencies and disaster events, immediate access to the right information enables emergency management authorities to make informed decisions. The way information is shared, how, what, when and with whom, is critical to improving situational awareness and coordinating an effective emergency response. In these circumstances, timely and reliable information saves lives.

While static information is valuable, real-time operational information about the availability and performance of carrier networks underpins the coordination of emergency management actions.

The Communications Alliance's [Industry Guideline G665-2022 Telecommunications – Facilities Information Sharing](#) (the Guideline), includes a 'Minimum Facility Data Sharing Information Set', which includes the sharing of basic, static information about site locations and types.

The Guideline also references 'Additional Information', which 'may or may not be made available' by carriers, that includes data that NSWTA considers is critical to support emergency coordination functions, such as site criticality (based on outage impact), asset fire treatment, asset fire protection, access details, primary and on-site back-up power source, estimated service availability following loss of main power, etc.

The Guidelines are not mandatory and while carrier provision of the minimum information set has been inconsistent, especially regarding the frequency of updates, there is an opportunity for the regulator to require the provision of both data sets for all existing carrier sites and for any new sites, within a strict timeframe, to approved government recipients in the interest of public safety.

In telecommunications emergency management scenarios, real-time operational network data should be used alongside agreed escalation pathways and static data to support effective decision making. Digital access to 'live' site and network availability data enables community awareness and emergency management authorities to make informed decisions regarding their operational response.

While past inquiries have acknowledged the critical importance of real time or near to real time communication from carriers to emergency management authorities and the public, the events of 18 September 2025 demonstrate that unacceptable delays that still occur.

The Department of Infrastructure, Transport, Regional Development, Communications, Sport and the Arts (DITRDCA) has recently been consulting on two proposed instruments:

- Consultation draft - Telecommunications Service Provider (Network Outages Register) Determination; and
- Consultation draft - Telecommunications (Mobile Network Coverage Maps) Direction.

These instruments are a positive step towards improving carrier information sharing with both emergency management authorities and the public. However, their value would be enhanced if these instruments were aligned with the 'real time' outage information requirements under the *Telecommunications (Emergency Call Service) Determination 2025* (ECS).

Key issues from NSWTA's consultation feedback already provided to DITRDCA on the draft instruments are also relevant to this inquiry.

Network Outages Register

The Network Outages Register will hold public-facing, historic data that details outages from the previous two years. If approved, each mobile network operator (MNO) will be required to establish and maintain its own individual register with 'up-to-date and accurate information about outages'.

This outage information is of the most value to the community, ESOs and NSWTA if it is reported in real-time or near real-time. The requirement for 'up-to-date' information is subjective and there is a risk of delay in the availability of this important information. Ensuring real time or near to real time access to information to the community is critical; particularly in circumstances where personal safety decisions rely on the availability of those networks and knowing whether those networks are operational (e.g. wait for help or leave to seek help). The register could include an additional section on 'active outages', and include information on the location of current outages, in addition to post-emergency/event data following service restoration.

Mobile Network Coverage Maps

Developing the Standard for Mobile Network Coverage Maps will make these maps meaningful and comparable. They will not only be useful to the public in choosing a carrier network but also support emergency management responses. However, consideration should be given to a more granulated approach including dynamic maps that display current network outages across all carriers. Such an enhancement would be highly valuable for emergency management authorities and the community. This should include the coverage areas of individual sites, which could then be used in conjunction with 'real-time' outage data from the ECS processes to provide a live visualisation (common operating picture) of affected areas. This contrasts with current publicly available information on outages which provides little detail and requires inputting details of a suburb or address to search for information.

NSWTA also welcomes changes to the ECS, which now see NSWTA included on the list of entities on the ACMA website that are contacted by carriers to receive 'real-time network information' about outages ([Access to the emergency call service during network outages: FAQs for industry](#)). NSWTA appreciates this inclusion in recognition and support of our telecommunications emergency

management function. However, NSWTA should also be declared as an entity to receive information under the Determination. While this may be considered in a future review of the effectiveness of the ECS, it is critical for this to occur to ensure that NSWTA formally retains access to relevant outage data.

Involvement in the development of Triple Zero Custodian functional implementation

NSWTA seeks involvement in the design for implementation of the Triple Zero Custodian's functions and its decision-making processes.

NSWTA supported and engaged with the Commonwealth in the establishment of the Triple Zero Custodian (the Custodian), a role designed to oversee the Triple Zero ecosystem and ensure it operates effectively, and is coordinated, connected and responsive.

In November 2025, legislation was passed empowering the Custodian's functions including the ability to request the Australian Communications and Media Authority to require information, or direct action, from carriers, carriage service providers and emergency call persons in relation to matters which affect the Emergency Call Service. NSWTA welcomes this development and seeks ongoing involvement in shaping the Custodian's decision-making processes, particularly regarding outage protocols and ESO coordination. During outages impacting Triple Zero services, the Custodian could play a critical oversight role by coordinating information exchange, ensuring near real-time outage updates for relevant parties, conducting post-outage reviews, and driving the implementation of recommendations.

Roaming and redundancy

NSWTA supports progress of emergency inter-carrier roaming capabilities, including 'always-on roaming' for ESOs and temporary disaster roaming (TDR) for affected communities.

NSWTA supports the establishment of temporary mobile roaming (emergency roaming) for affected communities during natural disasters and emergencies, which was recommended by the NSW Bushfire Inquiry and the 2022 NSW Flood Inquiry. Emergency roaming was subsequently recommended by the 2021 Regional Telecommunications Review for feasibility consideration by the ACCC's Regional Mobile Infrastructure Inquiry, which found that further work was required to design and develop the capability.

DITRDCA engaged with MNOs to develop an industry-led design for TDR, and testing was conducted in late 2023 early 2024. In April 2024, DITRDCA prepared a paper entitled, Temporary Disaster Roaming: Preferred Scope. NSW raised several concerns with the Commonwealth's preferred TDR scope both the Ministerial and agency level, which included the proposed:

- Limitation of TDR to natural or human made disasters, which may exclude events such as the 2023 Optus outage
- Exclusion of metropolitan areas
- Limitation to voice and SMS (no data for apps such as Hazards Near Me, BOM, etc.)
- Decision-making for coverage area, activation (or not) and de-activation being entirely left to MNOs, who could refuse a request from emergency management authorities.

NSWTA understands that DITRDCSA and the MNOs were developing a Memorandum of Understanding (MOU) for TDR; however, the current status or scope has not been provided to NSWTA. NSWTA remains committed to further advocacy/consultation with DITRDCSA on developing a functional TDR capability as an emergency management tool.

The National Emergency Management Agency (NEMA), in collaboration with NSW and other jurisdictions, is leading the development of a Public Safety Mobile Broadband (PSMB) capability for ESOs. The identification, development and implementation of a PSMB solution will take time.

In the interim, the provision of ‘always-on’ roaming for ESOs would establish a ‘minimum-viable-product’ on which future PSMB can build. Currently, including during disaster events, ESOs performing emergency operations are required to compete with public users for access to commercial networks. This puts lives at risk. Regulation requiring MNOs to provide an always on roaming capability that prioritises the access of ESO users when bandwidth is limited is both critical and in the public interest.

Community empowerment

NSWTA supports improved public education and proactive messaging from carriers during outages, including clear guidance on what to do if Triple Zero is unavailable.

In order to access Triple Zero services, communities need to access telecommunications networks. If carrier networks are unavailable due to site or network outages, communities may not be aware that their calls to Triple Zero may not be effective.

NSWTA supports a Commonwealth-led education campaign to empower communities with knowledge to inform their options and plans should networks suffer an outage and Triple Zero services are not available.

Conclusion

Although improvements have been made to in improving the timeliness of carrier outage reporting, significant opportunities remain to strengthen regulatory frameworks and deliver enhancements that support emergency management and public safety.

The type and timeliness of information provided by carriers to regulators and emergency management authorities is critical for the protection of lives and property. Any delays or inadequacies may have tragic consequences. Providing complete and accurate real-time network operational status information to emergency management services is critical to improving positive public safety outcomes when outages occur.

There are several regulatory activities currently underway, including establishing the processes and protocols for delivering the Coordinator’s functions, and designing the Telecommunications Service Provider (Network Outages Register) Determination and the Telecommunications (Mobile Network Coverage Maps) Direction, that provide the opportunity for regulators to implement further positive change. Key to this is ensuring the full and transparent access to the real-time network

information that state and territory governments require to manage public safety, emergency and disaster events effectively.

Appendix A: NSW Telco Authority – TELCOFA actions log summary

- NSWTA was not made aware of the Optus outage impacting Triple Zero calls until reports in the media.
- In between NSWTA's first attempt to contact Optus on the evening of Friday 19 September and the Optus disclosure of two callers from NSW being impacted on Sunday 21 September, there were ongoing efforts to confirm any impact to NSW in parallel with enquiries related to a separate Optus outage (later confirmed to not be linked).
- Until the email was sent to NSWTA on Saturday 20 September, Optus was not able to provide comment on this issue to NSWTA.
- Once NSWTA was in communication with the Optus Head of Government relations, and the Senior Director, Local Community Engagement, the level of engagement improved, although critical information was provided moments before an Optus media conference.

Timeline summary extract

Date/Time (AEST)	Event / Notification
Thu 18 Sep 12:30 am	Outage begins during firewall upgrade.
Fri 19 Sep (evening)	TELCOFA is made aware of outage from media reports and statements from ACMA.
Fri 19 Sep 6:15pm	TELCOFA receives enquiries from NSW emergency management stakeholders.
Fri 19 Sep 7:41pm	TELCOFA Duty Officer (DO) attempts to contact Optus via Emergency Management pathway. TELCOFA DO directed to Optus Media team to provide information on the situation.
Fri 19 Sep 9:09pm	TELCOFA email Optus Media contact for further advice on the situation, impacts to TZ, impacts to NSW and safeguards against recurrence.
Fri 19 Sep 11:43pm	NSWTA receives email from Optus Head of Government providing high level information that this was a technical failure impacting the ability of some customers in South Australia, the Northern Territory, and in Western Australia to connect to Triple Zero (000).
Sat 20 Sept 1:15pm	TELCOFA DO receives a call from Optus Media, "we have received your email and are working on Optus response".

Sat 20 Sept 1:26pm	Acknowledgement from Head of Government confirming receipt and prioritisation of enquiry.
Sun 21 Sep ~3:10pm	Optus notifies TELCOFA DO by phone that two Triple Zero (000) calls originating from NSW but affiliated with SA mobile sites were impacted minutes before Optus CEO press conference.
Sun 21 Sep 3:37pm	TELCOFA DO received email from Optus Director of Local Community Engagement confirming that there were two callers from NSW who were unable to connect to emergency services. This is because they are based near the South Australian border, and their calls were connected to South Australian towers. Welfare checks on these callers have been progressed by Optus and the NSW Police, and Optus were not aware of any further issues.