



Submission to the NSW
Independent Flood Inquiry

**Optus Response to the
Catastrophic NSW Flood
Events 2022**

Public Version

May 2022

INTRODUCTION

1. Optus welcomes the opportunity to provide a submission to the independent flood inquiry ('the Inquiry'). Optus is the owner and operator of significant national communications infrastructure and the supplier of important carriage and content services to a large portion of the Australian community (over 11 million services). These services are crucial in times of crisis and Optus takes its obligations to the community extremely seriously.
2. This submission outlines Optus's actions in relation to the catastrophic flood events of February 2022 ('the Floods'), including our preparation, early response and recovery support. While our initial effort focused on core infrastructure and restoring coverage, Optus also provided valuable assistance on the ground to recovery centres and our customers to help ease the burden of these catastrophic events.
3. Optus's response to the Floods fell into three key areas:
 - (a) **Preparatory work**, including our ongoing disaster response planning and network hardening upgrades.
 - (i) In the past two years, for example, Optus has installed an additional 126 fixed back-up generators and acquired nine satellite cells on trailers (SATCATs) to improve the resilience of our network infrastructure.
 - (b) **Restoration of the mobile network**
 - (i) 335 of our 361 sites (93%) in the affected area (including Queensland) were online by 10 March.
 - (ii) Three Optus SATCATs were deployed to Lismore, Ballina and Nimbin, providing temporary coverage while core infrastructure was offline.
 - (c) **Support for affected people**, including evacuation centres and billing relief for customers.
 - (i) We provided a range of support for affected communities, including:
 - (ii) Replacement devices, pre-paid SIM cards and recharge vouchers.
 - (iii) Deploying an Optus truck that provided a mobile charging station, a mobile screen displaying important information for residents and a support hub for locals to re-connect their services.
 - (iv) Support to evacuation centres and the Lifeline recovery centre.
4. In addition to informing the Inquiry with the information outlined above, Optus also has the following recommendations for the Inquiry's consideration:
 - (a) **That the NSW Government consider providing funding for the Mobile Network Hardening Programme (MNHP) and/or the Strengthening Telecommunications Against Natural Disasters (STAND) programme.**
 - (b) **That telecommunications carriers and their relevant sub-contractors be designated as critical services to ensure they can access fuel for generators in disaster and other emergency scenarios.**
5. Further detail on these elements is provided below. Optus would welcome the opportunity to discuss these issues further.

SUBMISSION

Disaster Preparedness Work

6. Optus has a strong history of preparing for natural disasters, including through productive collaboration with governments and government agencies.
7. Internally, Optus has been undertaking a business-wide resiliency program since 2020 that aims to remove single points of failure in the network, upgrade our back-up capabilities and improve network recovery times.
8. Over the past two years, for example, we have installed 126 new fixed generators at vulnerable sites across the country. We also have a fleet of 57 mobile generators that can be deployed as supplementary assets and funding has been secured for an additional 12 mobile generators. These newer generators will provide back-up power for significantly longer than previous capabilities (20-24 hours compared to 5-6). This will allow more time for the impacts of an incident to diminish before the network degrades or goes offline and corrective action is required.
9. In addition to this, we secured \$2 million in funding through the Commonwealth's Securing Telecommunications Against Natural Disasters (STAND) programme. This supported the purchase of seven new satellite communications on trailer (SATCAT) units and seven satellite communications on wheels (SATCOW) units. These are essentially mobile telecommunications towers that can be driven to a location and provide temporary mobile network coverage. Three SATCATs were deployed to Lismore, Ballina and Nimbin (further detail in next section).

Mobile Network Restoration

10. Optus knows how crucial a functioning telecommunications network is in an emergency. It is vital for affected residents to be able to make calls for assistance, confirm the safety of family and friends and for emergency services personnel to coordinate their response, just to name a few examples. Optus therefore invests considerable time and resources into its network performance, resilience and recovery.
11. Within 12 hours of the flood's impact, our first SATCAT arrived in Lismore from Sydney. This provided temporary mobile coverage to thousands of affected residents less than a day after the network was impacted (a SATCAT provides coverage over a 3-4km area). In the days following, two additional SATCATs were deployed to Ballina and Nimbin, expanding the temporary coverage area.
12. We also deployed technicians to restore the core network infrastructure, although there were significant accessibility challenges in the first few days. Once access to sites became possible, we were able to quickly work to restore many of our towers. On 4 March, for example, Optus had 26 NSW sites offline in the affected area. This was reduced to eight by 9 March and just 4 by 10 March. Overall, this meant 335 of our 361 sites (93%) in the affected area across NSW and Queensland were online by 10 March.

Support for Affected People

13. Our support for the flood response didn't just focus on the mobile network. We provided a range of support for residents, regardless of whether they were our customers.
14. An important example of this was our support for the evacuation centre in the first week of the response. Optus provided power packs for phone charging, pre-paid devices and SIM cards for those who had lost their phone, recharge vouchers and bottles of fresh drinking water. This enabled affected residents to stay connected and not have to incur

the costs of replacing phones/SIM cards and/or topping up their pre-paid credit whilst dealing with a natural disaster.

15. In addition, an Optus truck was deployed at Southern Cross University in Lismore to support over 1,000 displaced residents. The truck provided a mobile charging station, a support hub for locals to re-connect their services, a mobile screen displaying important evacuation centre updates and even movie nights for people in the evacuation centre. Our NSW and Queensland retail staff also worked together to provide assistance to the Lifeline recovery centre, sorting through tonnes of clothing and food that had been donated to provide to the community.
16. On top of this on-the-ground support, Optus also provided assistance through billing relief, which allowed our customers to save money and use it for essential purchases such as food and home repairs. One such story is highlighted in the example below.

Customer Story

"I've been through two floods, there was no internet, or 4G reception for nearly a couple of weeks. I received my usual bill today and was upset. I called prepared to have to battle for help. But I was answered by Daniel. He was amazing, incredibly helpful and supportive. He credited my NBN then spoke to someone about 4G as I was stuck in a unit with rising floodwater the second time with no reception. I am disabled. It has been credited. Now I will be able to replace the freezer full of food I lost during the second flood. Daniel was a superhero today, and Optus - I'm amazed and incredibly grateful, thank you!"*

* Name changed to protect privacy.

Recommendations

17. While Optus understands that providing recommendations is optional for the Inquiry, we wish to offer the following for consideration:
 - (a) **That the NSW Government consider establishing a grant programme modelled on the Commonwealth's Mobile Network Hardening Programme (established after the 2019 bushfires) and Strengthening Telecommunications Against Natural Disasters programme.**
18. The foremost challenge to a telecommunications network in any natural disaster is reliable power generation. Despite sites having backup generators, many can only operate for around 5-6 hours before needing to be refuelled. Recent technological developments have improved upon this (20-24 hours of run time) and the MNHP and STAND are supporting an accelerated rollout of advanced generators in vulnerable areas. As mentioned earlier in this submission, Optus has been able to purchase an additional nine generators in the past two years as a result of Government support under these programmes. A complementary initiative by the NSW Government could further accelerate the rollout of these and other capabilities and ensure they can be deployed in high risk areas within the state.
 - (a) **That telecommunications carriers and their relevant sub-contractors be designated as critical services to ensure they can access fuel for generators in disaster and other emergency scenarios.**

19. In disaster response scenarios, access to fuel for emergency generators is crucial. In recognition of this, police and other emergency services agencies have the power to direct service stations in a declared emergency/disaster zone to only supply fuel to critical services. At present, telecommunications carriers and their relevant sub-contractors are not on this list, despite telecommunications services being critical for disaster response and recovery.
20. While not being designated did not have a material impact in this instance, Optus is concerned by the potential consequences in future disaster responses. If a designation was made and telecommunications carriers were unable to access fuel to power their generators, the mobile network would be at risk. This in turn would jeopardise the response and recovery efforts, which rely on communication in just about every way.

CONCLUSION

Optus is proud of the efforts we and our industry colleagues made to support the response and recovery from these once in a century floods. Telecommunications services are vital for both affected residents to ask for assistance and communicate with family and friends as well as for emergency services responders to coordinate their vital work.

Optus thanks the Inquiry for the opportunity to provide a submission and would welcome the chance to discuss these issues and our proposed recommendations in further detail.

[END OF SUBMISSION]