

OPTUS

Submission to the Senate
Standing Committee on
Finance and Public
Administration

**Lessons to be learned in
relation to the
Australian bushfire
season 2019-20**

Public Version

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INTRODUCTION

1. Optus welcomes the opportunity to provide information to the Senate's Finance and Public Administration References Committee, in response to their inquiry into lessons learnt from the 2019-2020 bushfire season.
2. The start of 2020 came with tragic circumstances for many Australian communities that were horrifically impacted by devastating bushfires. The extended bushfire season took place throughout the period of November 2019 to January 2020.
3. Optus promptly undertook a number of measures to maintain our network as effectively as we could in the circumstances to keep communities connected. This involved carefully managing our own teams and resources effectively, but also working collaboratively with external stakeholders, such as Governments at the Commonwealth, State and Local levels in maintaining public safety.
4. Optus also acted quickly to provide customer and community support, both through our locally engaged staff, and through changes in customer policy to help those in financial hardship.
5. Optus believes that responses by all levels of Government were effective, responsive and considered. We believe the Optus network proved to be resilient in the face of some extreme localised conditions. This is particularly true given the scale of the challenges faced.
6. However, Optus is pleased to assist the Committee in identifying where there may be scope for improving preparedness and resiliency to mitigate some of the risks posed by bushfires in future summer seasons.

BUSHFIRE IMPACT AND RESPONSE

7. Optus acted quickly to establish a Rapid Response Team to coordinate efforts across Optus and work with key external points of contact.
8. Between November 2019 and January 2020, a total of 149 sites in Optus' mobile network in five states (Western Australia, South Australia, Queensland, New South Wales and Victoria) were impacted by bushfire; this occurred through being temporarily taken offline, diminished service, or damage.
9. The scale of the impact was as follows:

(a) NSW/QLD Bushfires – Nov/Dec 2019:	44 sites impacted
(b) WA Bushfires – Dec 2019:	20 sites impacted
(c) NSW Bushfires – Jan 2020:	61 sites impacted
(d) VIC Bushfires – Jan 2020:	17 sites impacted
(e) SA Bushfires – Jan 2020	7 sites impacted
10. Our top priority was to restore services which have been lost in the quickest possible timeframe. Our Networks team took the lead in these efforts.
11. Optus lost seven sites in total across New South Wales, Victoria and Western Australia that required some rebuilding. However, this is out of approximately 8,000 sites

nationally. Despite the considerable geographical scale of the bushfires, the number of Optus mobile network sites damaged in this way was relatively low.

12. With the exception of just one tower, all Optus sites that were destroyed by bushfire have now been rebuilt and brought back online. The final site is due for completion by the middle of 2020.
13. During the height of the danger period, we had to close a number of our stores, in the interest of keeping our employees safe. When affected staff were able to return to work, they were invaluable in providing frontline care and support to those customers who were impacted by bushfires.

Remediation efforts

14. During the height of the emergency, a number of factors – including safe access to impacted sites and loss of mains power – hindered our efforts.
15. All our sites have battery backup of at least four hours, and may have more, depending on location, to ensure continuity during a power outage. The extent of battery life is defined by a number of factors including the services supported from the site and accessibility of the site. Battery capacity is necessarily limited and cannot provide support for extended periods of outage.
16. To further address loss of power issues, Optus deploys diesel generators where it is safe to do so. However, these require refuelling, and it is obviously not safe to carry too much fuel on site in the middle of a bushfire zone. Our staff can only access sites where it is safe to do so.
17. All Optus sites have a generator port to allow for the connection of a generator.
18. An integral part of our effort included the provision of SatCats. A SatCat is a Satellite Cell on a Trailer, or a portable cell solution which is connected to our network via satellite, to provide temporary coverage where sites were damaged.
19. Optus deployed SatCats when they were available, and where it was safe to deploy them, in the impacted areas. Optus deployed these temporary solutions, where the local tower was damaged, in order to provide local coverage in the following locations:
 - a) Tumbarumba, NSW
 - b) Malua Bay, NSW
 - c) Corryong, VIC
 - d) Two Rocks, WA
 - e) Optus also deployed a satellite small cell to the La Trobe Valley Regional Hospital, in order to assist with coverage.
20. Optus also worked closely with state emergency management authorities to protect sites (water bomb or deploy fire retardant), as well as in coordinating the deployment of our temporary coverage facilities to remote staging areas or damaged sites.

Communications with Government and the media

21. Optus was in regular contact with the Department of Communications and the Arts (as it was then known) and the Department of Home Affairs to provide updates on our network status.
22. Optus would like to acknowledge the very positive interactions our employees had with Commonwealth agencies during this time, particularly the Department of

Communications and the Arts. Optus felt the Critical Infrastructure Alerts process worked well during what was a very stressful time.

23. Optus also worked closely with key state agencies (particularly in New South Wales and Victoria), providing updates direct to situation/control rooms. Optus had networks staff embedded in the departmental response teams in some states, to provide a dedicated conduit into Optus' network situation.
24. Key state ministerial offices at the Commonwealth and State level were also provided with regular updates, including updates on our impacted sites.
25. Throughout the bushfire crisis, Optus delivered regular media alerts to ensure key press outlets could keep their audiences updated on Optus developments.

Customer and community support measures

26. Optus' locally engaged staff and regional teams worked with media outlets in fire affected areas to provide updates regarding network availability and local support we provided through evacuation centres.
27. Locally provided customer support included satellite and mobile phone access, charging stations, and free pre-paid SIMs.
28. Optus announced that we would waive the mobile bills for volunteer firefighters and the SES for the months of December and January.
29. Optus also established a priority customer hotline to support bushfire affected customers. Some of the ways we supported customers included:
 - a) Bill waivers
 - b) Fee waivers
 - c) Free pre-paid credit
 - d) Providing charging stations at evacuation centres
 - e) Offering free access to mobile phones at evacuation centres
 - f) Providing Pre-paid phones to replace lost/destroyed devices
 - g) Unmetered access to emergency services websites
30. Optus did not take a prescriptive approach and simply asked customers to contact us to discuss their circumstances if they were impacted by the bushfires.
31. We also provided unmetered access to a range of emergency services websites for customers, to ensure customers in bushfire-impacted zones could access the information they need without exceeding their plan data caps. Optus also provided other support to assist local communities impacted by the bushfires.

RECOMMENDATIONS

Power to mobile network sites

32. The biggest challenge we faced to our efforts to restore services at the height of the crisis was that of power. Optus recommends that simple and accurate information on the status of power supply in individual states should be provided in a timely manner.
33. Optus often had no further information on the status of power supply than was available on public websites.
34. It is difficult to plan restoration efforts or to plan for temporary solutions if timeframes for the restoration of power are not available. If we receive inaccurate information, our temporary arrangements may become unnecessary when mains power is unexpectedly restored. Uncertainty can also understate our own timeframe for restoring sites.
35. Optus recommends that in times of major bushfire incidents, power networks representatives are embedded in the control centres of state/territory agencies coordinating the response.
36. This could assist in providing a direct conduit between power networks and the telecommunications representatives, relative to the bushfire response, to ensure timely information on the restoration of power, when required.
37. Optus would also draw the Committee's attention to the long, drawn-out nature of some lease arrangements with landowners, when it comes to the siting of larger, fixed generators. Government could have a role to play in facilitating a fast-tracking of lease agreements where a site has been declared a critical site. Fixed generators with larger fuel tanks will keep power on for longer before needing to be topped up.
38. Optus also believes a single generator could be used to fuel the site storage cabinets of telecommunications providers who have co-located on the same tower. The lead carrier could have responsibility for providing – and arranging the refuelling of – a generator that powers all carriers' assets, where a connection has been installed on each cabinet.

Data and information sharing

39. Optus received numerous requests from the Commonwealth and States during the crisis. We were happy to assist in any way possible, particularly where information we held could assist in frontline emergency responses.
40. We do note however, that on occasion some requests for data or information were asked by different levels of Government in parallel. Each request usually had to be handled separately.
41. We appreciate different Departments at the various layers of Government may have differing requirements, particularly when briefing critical stakeholders, including Ministers.
42. However, there may be an opportunity for the Commonwealth to assume some responsibility for maintaining an information portal that could include information available to state, territory and local governments, including localised information for impacted zones such as:
 - a) Outages of telecommunications services
 - b) Power outages

- c) Infrastructure matters
- d) Relevant localised weather information

- 43. This portal could include regularly updated information from telecommunications providers, power networks, and the Bureau of Meteorology.
- 44. It could provide a useful tool for the States in coordinating their response, as well as the various industry sectors seeking updates on factors that may influence their response.
- 45. Optus also believes that in times of bushfire, it would be beneficial for local authorities (including fire and emergency services) to have access to such a centralised information portal. This could also help identify key infrastructure so that it can be prioritised for protection.
- 46. We would encourage the Commonwealth to consider ways it might assist the different agencies in different governments seeking data or advice in parallel.

Telecommunications industry response

- 47. A telecommunications industry response to a request from the Australian Communications and Media Authority is being coordinated by the industry association Communications Alliance.
- 48. The telecommunications participants agreed on the merits of sharing information about critical infrastructure in the context of an agreed national approach for telecommunications disaster management.
- 49. Optus will work constructively with Communications Alliance and the Australian Mobile Telecommunications Association, which have been tasked by the Minister for Communications, Cyber Safety and the Arts to work with Commonwealth and State agencies in developing a common operating model and framework that addresses the needs of the agencies and telecommunications carriers.
- 50. This will involve a consistent approach to the sharing of network information.
- 51. Optus believes the telecommunications sector should continue to work collaboratively on this important initiative.

ADF assistance

- 52. Optus received invaluable assistance from the Australian Defence Force during the bushfire crisis. For example, support from the ADF was used to fly in a generator to Mallacoota in Victoria, where there was no road access. This allowed for a restoration of services.
- 53. We also relied on their advice from information acquired through flyovers of impacted zones.
- 54. Our experience is that the interface into the ADF efforts was managed effectively by the state-based agencies, and the states were well placed to ascertain where ADF resources could best be leveraged.

Priority status and refuelling considerations

- 55. Optus believes telecommunications companies should be assigned a greater level of 'critical Infrastructure' status given our role in delivering important public safety messaging and providing essential connectivity to people who might be physically

isolated. This would qualify telecommunications infrastructure and networks for priority treatment in our engagement with emergency management authorities.

- 56. Our industry could share defined information about network facilities to assist in improved prioritisation for fuel, assistance, power and access.
- 57. In the interests of safety in a bushfire incident, Optus will not dispatch a technician to repair or otherwise access a site unless we have clearance from the local authorities.
- 58. Optus is open to considering options for the industry to coordinate refuelling efforts with state authorities, such as requesting the Rural Fire Service (or local equivalent) to refuel generators, where access to areas is restricted. Noting, of course, that fire response will always need to be their first priority.

Vegetation

- 59. Clearing vegetation around critical sites can play a key role in fire resilience – protecting equipment on the ground and reducing the risk of towers being affected by radiated heat.
- 60. There are sometimes differing rules in each state dictating the clearing of vegetation and this is further complicated where Crown Land is involved.
- 61. It would be helpful if the states provided simple outlines of what they allow, so industry can work with them in clearing sites.
- 62. It might also be helpful to consider whether the states and territories could work towards a uniform model to assist with consistency in this regard.
- 63. Optus believes the Commonwealth and states should consider whether landowners – including applicable agencies overseeing Crown Land – allow a minimum vegetation clearance zone around critical sites to better protect equipment on the ground and reduce the risk of towers being affected by radiated heat.

CONCLUSION

- 64. Optus would like to reiterate that aside from some challenges related to reconnected power, we only lost approximately seven sites as a result of the bushfires, and virtually all those sites have now been restored.
- 65. We believe we managed to minimise disruption to our customers – and have put in place a comprehensive list of support measures to assist those impacted by the crisis.
- 66. Optus will continue to work with Government and other industry partners, where appropriate, to look at opportunities to improve resiliency, especially in the area of improved information flows on power supply.

(ENDS)