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

Submission by the Australian Communications Consumer Action Network to the Senate Finance and Public Administration References Committee

22 May 2020

About ACCAN

The Australian Communications Consumer Action Network (ACCAN) is the peak body that represents all consumers on communications issues including telecommunications, broadband and emerging new services. ACCAN provides a strong unified voice to industry and government as consumers work towards communications services that are trusted, inclusive and available for all.

Consumers need ACCAN to promote better consumer protection outcomes ensuring speedy responses to complaints and issues. ACCAN aims to empower consumers so that they are well informed and can make good choices about products and services. As a peak body, ACCAN will represent the views of its broad and diverse membership base to policy makers, government and industry to get better outcomes for all communications consumers.

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1.   Executive Summary

ACCAN thanks the Senate Finance and Public Administration References Committee (the Committee) for the opportunity to provide this submission.

While acknowledging the devastating impact that the 2019-20 bushfires had on communities, ACCAN's submission relates to the impact of bushfires on communications infrastructure and reliability, and in turn how this affected communications consumers. We are interested in how all communications consumers were affected by bushfires, and also consider the more specific impact of bushfires on regional, rural and remote consumers, seniors, and consumers with disability and any vulnerable members of the community. Public safety is paramount, particularly during national disasters, and the resilience of communications infrastructure can help to protect members of the community.

1.1.   List of recommendations

Recommendation 1: The telecommunications industry must work collaboratively with fire services, emergency services personnel, the energy industry and local, state, territory and federal governments to prevent damage to telecommunications towers, mobile base stations, remote exchanges and power substations.

Recommendation 2: Specific training should be developed and delivered to relevant fire services and emergency services personnel to ensure appropriate damage prevention measures can be put in place to protect communications infrastructure.

Recommendation 3: Retail service providers, NBN Co and state and territory governments must ensure communications consumers are appropriately informed about the reliability of communications services during emergencies and the possible back up options available to them.

Recommendation 4: Consumers must be provided with clear information in a range of accessible formats regarding preparing for an emergency or disaster situation in which communications access may be affected. This information must also be provided in a range of community and Indigenous languages.

Recommendation 5: The ABC must be adequately funded to continue providing tailored, local information across a range of platforms.

Recommendation 6: Alternative methods for providing information or alerts to members of the public must be explored in order to improve the resiliency of information transmission in emergency situations.

Recommendation 7: All consumers, including NRS users, must be ensured equal access to the emergency call service through the establishment of next generation Triple Zero services.

Recommendation 8: Any existing bushfire preparation or emergency management plans must be reviewed to ensure that telecommunications providers and NBN Co are sufficiently involved in emergency preparation and response.

Recommendation 9: Additional funding must be provided to ensure that all fire services and evacuation centres are appropriately equipped with Sky Muster technology that can be activated as needed to reduce potential connection delays for communications consumers affected by natural disasters. Trials should also be established using Sky Muster for EFTPOS to improve the resiliency of these vital connections.

Recommendation 10: The ACMA should examine whether an industry standard is required to ensure all telecommunications providers provide free call diversion, bill waivers and data-free access to emergency services, government services and recovery-based websites for communications consumers impacted by natural disasters.

Recommendation 11: Accessible and NRS-specific information must be made available to support people to contact the National Bushfire Recovery Agency.

Recommendation 12: The industry should convene regularly to discuss the reliability of telecommunications infrastructure and measures to facilitate quick and easy restoration of services.

Recommendation 13: The Mobile Black Spots program should be expanded to include boosters, repeaters and other equipment that can be used to extend coverage and support connections in bushfire prone or affected areas.

Recommendation 14: The industry should review the use of satellite as a way to achieve greater communications redundancy and improve resiliency.

2. Responses

2.1. Prevention

It is ACCAN's position that all efforts must be made to prevent bushfire damage to mobile and NBN infrastructure. All relevant stakeholders from the telecommunications industry must work collaboratively with fire services, emergency services personnel, the energy industry and local, state, territory and federal governments to protect telecommunications towers, mobile base stations and remote exchanges, as well as power substations. Part of this work would likely include reducing leaf litter or debris, mechanically thinning vegetation or performing other hazard reduction activities in bushfire-prone areas near these important assets.

Recommendation 1: The telecommunications industry must work collaboratively with fire services, emergency services personnel, the energy industry and local, state, territory and federal governments to prevent damage to telecommunications towers, mobile base stations, remote exchanges and power substations.

Such collaboration is necessary so that governments and fire services alike have a clear understanding of where communications infrastructure is located, how it can be protected, and what the impact would be if such infrastructure were to be damaged in a bushfire. The roles and responsibilities of these actors must also be made clear in order to prevent damage to infrastructure, but also to ensure that any damaged infrastructure can be fixed in a timely manner. This could include training for fire fighters, volunteers and other emergency services personnel regarding the resilience of communications services.

Recommendation 2: Specific training should be developed and delivered to relevant fire services and emergency services personnel to ensure appropriate damage prevention measures can be put in place to protect communications infrastructure.

ACCAN also believes that consumer education and awareness raising has a role to play in preventing consumers from losing access to essential communications services. To prevent consumers from being caught without access to emergency services, consumers need to be informed about the reliability of communications services during emergencies, as well as what back up options are available to them. Clear and concise information about the potential limitations of communications services during power outages and emergency situations must be provided by retail service providers, NBN Co and state and territory governments. Such information should also be provided to consumers before any planned power outages, so that they can charge mobile devices and ensure they have measures in place to remain connected.

Recommendation 3: Retail service providers, NBN Co and state and territory governments must ensure communications consumers are appropriately informed about the reliability of communications services during emergencies and the possible back up options available to them.

2.2. Preparation

Communication consumers have raised concerns with ACCAN around the resiliency of mobile, fixed and NBN networks during emergencies. This is a particularly important issue for regional, rural and

remote consumers who often rely on landline connections in emergencies.[1] Other groups, such as the National Council for Fire and Emergency Services (AFAC), have been concerned about NBN failures in disaster situations for more than two years.[2]

While some communications consumers have expressed concerns about the reliability of communications infrastructure, others are unaware of the possible impacts that fire and other natural disasters can have on NBN networks, including voice-only NBN services. It is therefore essential that clear and concise information be provided to communication consumers in a range of accessible formats to ensure they have an appropriate understanding of what to do to prepare for an emergency or disaster situation.[3] This information should reflect the diversity of services and service locations across Australia, including location-specific information where possible.

ACCAN welcomes the recent federal government announcement of $37.1 million to improve the resiliency of telecommunications infrastructure[4] and is pleased to note that $2.1 million of this total amount is to be spent on improving access to information regarding telecommunications during emergencies. We understand that this public communication program will provide practical information and advice on staying connected during emergencies.[5] It is vitally important that this information and guidance is useful to and inclusive of consumers who are unable to afford or access multiple forms of communications technologies. For example, NBN Co currently recommends that consumers create an emergency communications kit in case of emergency.[6] They recommend that such a kit include a charged mobile phone, portable mobile battery pack and battery-powered radio. Not all consumers will have the ability to create an emergency communications kit. Some consumers may not be able to afford these devices, or these devices may not be accessible to them. For instance, ACCAN has received feedback that mobile battery packs available in Australia are not accessible for people who are blind or have vision impairment.[7] Similarly, battery-powered radios may not be accessible for people who are blind or have vision impairment; nor are they accessible for people who are Deaf or have hearing impairment.

Due to accessibility and affordability concerns there must be multiple sources of information available to the public regarding preparation for emergency situations. Written messaging around preparation must be clear and easy to understand and must be provided in a range of accessible formats, including Easy English, Auslan, plain English, braille and large print. Written information must also be provided in a range of community languages, including languages commonly used by Aboriginal and Torres Strait Islanders.

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[1] ACCAN, 2020. 'Digital Technology Hub – Consultation Paper: Submission by the Australian Communications Consumer Action Network to the Department of Infrastructure, Transport, Regional Development and Communications', p11. Available: https://accan.org.au/our-work/submissions/1698-digital-technology-hub. It is also worth noting that while battery backup is an option for some FTTP consumers, these batteries only last around 5 hours. In emergency situations towns can be left without power for days.

[2] As reported by the ABC, 2020. 'Telco, NBN failures during bushfire crisis reveals cracks in regional, rural crisis coverage.' 13 January 2020. Available: https://www.abc.net.au/news/rural/2020-01-13/are-australias-telecommunication-up-to-the-new-kind-of-megafire/11860238

[3] ACCAN, 2020 op cit., p11.

[4] Department of Infrastructure, Transport, Regional Development and Communications, 2020. 'Improving resilience of Australia's telco networks', available: https://www.communications.gov.au/phone/improving-resilience-australias-telco-networks

[5] Ibid.

[6] More information available: https://www.nbnco.com.au/blog/the-nbn-project/preparation-key-to-staying-connected-in-an-emergency

[7] A possible solution to this could be the subsidisation of accessible mobile battery packs or the provision of these through a peak disability advocacy body or service provider.

To appropriately support the community to prepare for emergency situations, video-based information on television, online or on social media must also include:

- The provision of high quality open captioning and Auslan interpreting of TV broadcasts about emergencies (with broadcasters ensuring that Auslan interpreters are included in broadcasts and not cropped out);
- The reading of any "tickertape" or written information on emergency broadcasts via voiceover to ensure this information is accessible for people who are blind or have vision impairment.[8]

Furthermore, any in-person community briefings must be held in fully accessible venues with features such as hearing loops, live captioning and Auslan interpreters freely available.[9]

Recommendation 4: Consumers must be provided with clear information in a range of accessible formats regarding preparing for an emergency or disaster situation in which communications access may be affected. This information must also be provided in a range of community and Indigenous languages.

ABC local broadcasting played an important role across Australia in providing up to date, accurate and relevant information throughout the 2019-20 bushfires. As such, it is vital that the ABC is adequately funded to continue to provide this information across a range of platforms. Such tailored, local information must be funded at all times, not just during natural disasters. This multi-channel, multi-platform provision of information is necessary to build in greater redundancy in the provision of information. Furthermore, information or alerts provided by SMS must also be provided over a range of technologies. Providing these messages over both the mobile and satellite networks, for instance, would increase built in redundancy and ensure that these vital messages are more likely to be received by those caught up in emergency situations regardless of the platforms they have access to at the time.

Recommendation 5: The ABC must be adequately funded to continue providing tailored, local information across a range of platforms.

Recommendation 6: Alternative methods for providing information or alerts to members of the public must be explored in order to improve the resiliency of information transmission in emergency situations.

ACCAN advises against an over-reliance on radio and other mainstream services or applications for the provision of emergency information for consumers. For example, apps showing maps of areas affected by fires or power outages are not always accessible, and media reporting that relies on or refers exclusively to these maps may leave people who are blind or have vision impairment with limited information about where bushfires are currently located or what actions they should take. Furthermore, some consumers have contacted ACCAN about their use of the 'Fires Near Me' app while bushfires raged on the north coast of NSW. These consumers came to realise that they could not rely exclusively on the app for up to date information about the active fires in their area. Given our understanding that the app, and others like it, are not able to be updated in real time, this is not

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[8] As discussed in ACCAN's 2011 report regarding the Queensland flood disaster, available: https://accan.org.au/our-work/research/297-the-queensland-flood-disaster-access-for-people-with-disability
[9] For more information about communications in emergency situations, see: Australian Government Attorney-General's Department, 2013. 'Communicating with People with Disability: National Guidelines for Emergency Managers – Handbook 5', available: https://knowledge.aidr.org.au/resources/handbook-5-communicating-with-people-with-a-disability/

surprising. Instead, these consumers turned to other sources of local information (including, for example, a local Rural Fire Service Facebook page and a satellite imagery website). As outlined above, it is vital that accurate and up to date information is provided via multiple accessible and affordable channels so that consumers are informed about what preparation activities they may need to take.

Another crucial aspect of preparation is ensuring that all consumers have equal access to the emergency call service (through either 000, 112 or 106). Currently people who are Deaf or have hearing or speech impairment do not have functionally equivalent access to the emergency call service. For instance, National Relay Service (NRS) users without access to the internet may have to rely on SMS relay to contact emergency services. This is not a real-time communications channel. To help address this, next generation Triple Zero services, including direct text to Triple Zero, must be introduced to ensure equal access for all. All NRS users must also be ensured guaranteed access to the emergency call service. Similarly, it is ACCAN's position that the emergency call service must remain contactable through SIMless devices. Maintaining the existing ways through which people can seek assistance, in addition to increasing the contact options available, will help to ensure that all consumers have consistent and appropriate access to Triple Zero and emergency services.[10] Finally, all efforts must be taken to ensure calls can be routed as quickly and easily as possible to local emergency service organisations.

Recommendation 7: All consumers, including NRS users, must be ensured equal access to the emergency call service through the establishment of next generation Triple Zero services.

Maintaining access to communications requires the protection and prevention of damage to power substations, as widespread mains power loss can cause communications network outages.[11] As such, preparation efforts must involve greater collaboration, information sharing and relationship building between telecommunications providers and energy companies.[12] This must include improved communications around when power substations are being powered up or down. For example, if a telecommunications provider is told by an energy provider that they are pre-emptively powering down their power substation for a period of time, the telecommunications provider will be able to make a more informed decision around the efficient use of their resources, such as whether to deploy a technician to an affected site. The need for greater collaboration between telecommunications and energy providers could be incorporated into federal, state and territory bushfire preparation plans or emergency management plans.

Recommendation 8: Any existing bushfire preparation or emergency management plans must be reviewed to ensure that telecommunications providers and NBN Co are sufficiently involved in emergency preparation and response.

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[10] ACCAN, 2019. 'Contacting Emergency Services via SIMless phones – policy position' available: http://accan.org.au/our-work/policy/1703-contacting-triple-zero-via-simless-phones
[11] As was demonstrated in the 2019-20 bushfires, in which 88% of outage incidents that lasted more than 4 hours were caused by power outages, and only 1% of outage incidents that lasted over 4 hours were caused by direct fire damage. As outlined in a recent report by the Australian Communications and Media Authority (ACMA): ACMA, 2020. 'Impacts of the 2019-20 bushfires on the telecommunications network: Report for the Minister for Communications, Cyber Safety and the Arts', April 2020, available: https://www.acma.gov.au/publications/2020-04/report/impacts-2019-20-bushfires-telecommunications-network
[12] We note that Communications Alliance and the Australian Mobile Telecommunications Association (AMTA) made similar comments in their Joint Submission to the Royal Commission into National Natural Disaster Arrangements; as did Telstra in their 17 April 2020 submission to this Committee's inquiry.

It must be acknowledged that even though mobile towers often have backup batteries and diesel generators, these will eventually run out during extended power outages. ACCAN is concerned that consumers whose NBN-based services will not work in a power outage are left particularly vulnerable in these extended power outage situations. This vulnerability is heightened if fixed voice and mobile services are unavailable, as people will not be able to call for help in emergencies.[13] We therefore welcome the federal government's recent announcement that $18 million (including $10 million from the Mobile Black Spots Program) will be spent on upgrades to mobile base stations, including longer lasting backup power sources.[14] We are hopeful that these upgrades will improve the resilience of regional and remote mobile base stations and will help keep consumers connected during emergency situations.

ACCAN supports recent calls for telecommunications providers to be recognised as 'essential users' of liquid fuel, and for them to receive priority access to diesel to run backup generators during national fuel emergencies.[15] We support the inclusion of communications providers in the relevant legislation.[16] ACCAN also supports the development of a national common operating model for telecommunications disaster management and look forward to providing feedback to Communications Alliance regarding their forthcoming draft protocol.

2.3.   Response

Carriers are largely responsible for their own networks and put individual measures in place to restore power or service. This may involve the pre-deployment of generators or solar panels.[17] ACCAN is not aware to what extent carriers pre-deployed generators or solar panels with the aim to maintain power to essential communications infrastructure during the recent bushfires. It would be good to know whether there was sufficient resourcing (both of technicians and materials) to pre-deploy this type of equipment in response to emerging bushfire risks. Nevertheless, we acknowledge that backup batteries and generators have a finite capacity that would not outlast extended power outages.[18] As such, ACCAN acknowledges that major telecommunication providers and the NBN mobilised quickly to fix damaged infrastructure where this was possible.

The Australian Communications and Media Authority (ACMA) recently released a report into the impacts of the 2019-20 bushfires on the telecommunications networks of Telstra, Optus, Vodafone and NBN Co. In this report, the ACMA states that 1390 facilities were impacted by the bushfires between 19 December 2019 and 31 January 2020.[19] Of the facilities that were (either directly or indirectly) impacted by the bushfires during this time period, 51% (or 708 facilities) experienced

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[13] Computer Weekly, 2020, 'Australian wildfires take toll on telco networks', available online: https://www.computerweekly.com/news/252476912/Australian-wildfires-take-toll-on-telco-networks
[14] Department of Infrastructure, Transport, Regional Development and Communications, 2020 op cit.
[15] As explained in: Communications Alliance and AMTA, 2020. 'Joint Submission to the Royal Commission into National Natural Disaster Arrangements, available: https://www.commsalliance.com.au/__data/assets/pdf_file/0009/69687/200417_CA-AMTA-submission_Royal-Comm.-National-Natural-Disaster-Arrangements_SUBMITTED.pdf
[16] The Essential Users Determination under the *Liquid Fuel Emergency Act 1984*.
[17] As outlined by Mr Kathage on 3 March 2020: Commonwealth of Australia, 2020. Proof Committee Hansard Senate: Environment and Communications Legislation Committee, Estimates. Tuesday 3 March 2020, Canberra, p49, available: https://parlinfo.aph.gov.au/parlInfo/download/committees/estimate/c9f0f8f9-a8bd-44cc-b138-91154a03fbb0/toc_pdf/Environment%20and%20Communications%20Legislation%20Committee_2020_03_03_7598.pdf;fileType=application%2Fpdf#search=%22committees/estimate/c9f0f8f9-a8bd-44cc-b138-91154a03fbb0/0000%22
[18] Although as outlined above, we support recently announced upgrades that would seek to increase backup operation from 3-8 hours to up to 12 hours.
[19] ACMA, 2020 op cit., p4.

outages of four hours or more.[20] The ACMA reports that the average length of outages was 3.5 days, however not all facilities had been permanently restored by the end of the ACMA's review period and consequently were not included in this average.[21]

At the end of the ACMA's review period (31 January 2020) there were still 39 ongoing outage incidents.[22] While temporary facilities were deployed to reduce the impact of ongoing outages, some consumers experienced extended service disruptions. For instance, Telstra customers in parts of South Australia experienced two months of limited to no mobile and internet connection[23] as a result of severe damage to Telstra's Mount Torrens site. Telstra explained that given the severity of the damage to infrastructure, they had to order new parts and equipment which contributed to the delays to restoring services.[24] In addition, some NSW-based Telstra sites, such as the towers at Surf Beach and Mount Wandera, were almost entirely 'destroyed' by the bushfires, and it was difficult to gain access to these locations to undertake repairs.[25] Telstra infrastructure at Jingellic (on the border of NSW and Victoria) had service restored, only for it to be knocked out again a few days later by further fires.[26] It ultimately took about a month to rebuild the tower and restore mobile service to the area.[27] Some communities in Victoria were told in mid-January that it may take another month to repair telephone lines.[28] Telstra prioritised restoring services to mobile sites before turning its attention to fixing landline phone services, as repairs to the latter involve trenching work and repairing or replacing fire-damaged cabling and copper.[29]

Optus estimated in early January that a few of their mobile towers located in NSW, Victoria and Western Australia required work to restore services.[30] Some of these towers sustained significant damage and required extensive repairs and rebuilds, leaving consumers with disruptions to mobile call, text and data services.[31] Optus connectivity in certain parts of NSW and Victoria was expected to normalise by the end of March 2020.[32] Similarly, some Vodafone network areas were impacted by

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[20] Ibid. It is worth noting however that a single facility can have multiple outages, the total number of outage incidents that lasted four or more hours (between 19 December 2019 and 31 January 2020) was 888.
[21] Ibid.
[22] Ibid p15.
[23] The Adelaide Hills News, 2020. 'Back online: Phone and internet reception to return to fire affected Hills homes by end of week', 20 February 2020. Available: https://www.adelaidenow.com.au/messenger/adelaide-hills/back-online-phone-and-internet-reception-to-return-to-fire-affected-hills-homes-by-end-of-week/news-story/3b8fbd65020fce7d65401032654792a9
[24] Ibid.
[25] Batemans Bay Post, 2020. 'South Coast bushfires: Mobile towers damaged, Telstra's recovery could take 'weeks and months'', 14 January 2020. Available: https://www.batemansbaypost.com.au/story/6578375/telstras-recovery-could-take-weeks-and-months-for-south-coast-bushfires-damage-17-towers/
[26] Telstra News, 2020. 'After a devastating fire season, we've made good progress keeping communities connected', 28 February 2020. Available: https://exchange.telstra.com.au/after-a-devastating-fire-season-weve-made-good-progress-keeping-communities-connected/
[27] The Border Mail, 2020. 'Jingellic Telstra mobile tower restored after fire destroyed the station', 7 February 2020. Available: https://www.bordermail.com.au/story/6620049/jingellic-mobile-tower-better-than-before/
[28] The Age, 2020. ''Painstaking' process of restoring telephone connection to bushfire-hit towns begins', 27 January 2020. Available: https://www.theage.com.au/politics/victoria/painstaking-process-of-restoring-telephone-connection-to-bushfire-hit-towns-begins-20200127-p53v47.html
[29] Ibid.
[30] The Sydney Morning Herald, 2020. 'Increasing fire threat to vulnerable telecommunications networks' 11 January 2020. Available: https://www.smh.com.au/politics/federal/increasing-fire-threat-to-vulnerable-telecommunications-networks-20200110-p53qcy.html
[31] Optus, 2020. 'Australian Bushfires Updates – Impacted Optus Towers', updated 18/03/2020 4pm. Available: https://yescrowd.optus.com.au/t5/Network-Coverage/Australian-Bushfires-Updates-Impacted-Optus-Towers/td-p/597014
[32] Ibid.

bushfires, with a few sites in NSW and one in Western Australia experiencing more extensive damage and consequently longer restoration times for consumers.[33]

Interim measures, including cells on wheels, were arranged by telecommunications providers to keep people connected while services were being restored.[34] Consumers in affected areas were also eligible to receive assistance packages from telecommunications providers.[35] ACCAN supports the recent allocation of $10 million to purchase portable communications facilities such as cells on wheels and NBN Road Muster trucks, as part of the $37.1 million package to improve telecommunications resilience and redundancy.[36] These additional cells on wheels, mobile exchanges on wheels and NBN Road Muster trucks will help to facilitate quick, temporary restoration of affected communications services in future emergencies.

On 1 January, NBN Co reported a peak of about 20,000 service outages.[37] NBN Co deployed technicians, generators and Road Muster trucks to keep consumers connected, and installed temporary satellite access at evacuation centres to provide internet services.[38] Reports differ around the length of time it took NBN Co to restore services – some state that normal service was restored within days,[39] with others stating it took around two weeks for these services to be fully restored.[40] We understand that the timing for repairs was affected by the ongoing nature of the bushfires, which hampered safe access to damaged base stations and infrastructure for technicians.[41] Telecommunications providers and NBN Co worked collaboratively with emergency service personnel, including the Australian Defence Force, to restore these essential services safely and securely.[42]

While recognising the huge impact that Road Muster trucks had in keeping people connected, ACCAN believes that more could be done to reduce potential connection delays. As we have suggested in previous submissions, to better prepare for and respond to future natural disasters, we believe evacuation centres should be equipped with Sky Muster technology that would be activated as needed.[43] This would ensure connection resiliency is maintained while preventing the need for Road Muster trucks to be deployed, as these may or may not be able to access disaster areas in a timely manner. We therefore support the federal government's announcement of $7 million for NBN Co to install approximately 2000 Sky Muster satellite connections to rural and country fire service depots and designated evacuation centres across Australia, in addition to the installation of batteries and solar panels at certain sites.[44] This will not only increase the resiliency of existing connections, but will add additional redundancy to these sites to facilitate ongoing access to communication in emergency situations.

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[33] Vodafone, 2020. 'Bushfire Support', updated 29/01/2020 4pm. Available: https://www.vodafone.com.au/about/company/bushfire-support
[34] The Islander, 2020. 'Telcos learn to keep connected under fire', 13 January 2020. Available: https://www.theislanderonline.com.au/story/6577169/telcos-learn-to-keep-connected-under-fire/
[35] As discussed in further detail below.
[36] Department of Infrastructure, Transport, Regional Development and Communications, 2020 op cit
[37] As outlined by Mr Atkinson on 3 March 2020: Commonwealth of Australia, 2020 op cit., p4.
[38] As outlined by Mr Williams on 3 March 2020: Commonwealth of Australia, 2020 op cit., p123.
[39] Computer Weekly, 2020 op cit.
[40] Mr Williams: Commonwealth of Australia, 2020 op cit.
[41] Ibid p49.
[42] The Islander, 2020 op cit.
[43] In a similar vein, in their joint submission Communications Alliance and AMTA note that having access to real time information about the location and occupancy of evacuation and recovery centres would allow service providers to monitor the network supporting these sites.
[44] Department of Infrastructure, Transport, Regional Development and Communications, 2020 op cit.

In addition, ACCAN would like NBN Co to consider how Sky Muster can be better used to support small businesses (and their consumers). For instance, could Sky Muster be used to service EFTPOS to keep small businesses connected and to support local communities through emergency situations?[45] Ensuring small business cash flow through more resilient EFTPOS connections would not only help support local areas but would also improve the ability of people to access services they need, such as food. ACCAN supports research and trials using Sky Muster for EFTPOS, and believe this is a priority for all outages, not just outages during natural disasters.

Recommendation 9: Additional funding must be provided to ensure that all fire services and evacuation centres are appropriately equipped with Sky Muster technology that can be activated as needed to reduce potential connection delays for communications consumers affected by natural disasters. Trials should also be established using Sky Muster for EFTPOS to improve the resiliency of these vital connections.

Like Road Muster, payphones have also played a vital role in keeping people connected during the 2019-20 bushfires. Telstra made payphones free for all to access for local, national and standard mobile calls.[46] They also allowed free use of the Telstra Air Wi-Fi network at locations where payphones were equipped to provide this. This service was proven to be essential during emergency situations, and therefore must be carefully considered in future discussions regarding payphone availability, cost and placement.

2.4. Recovery

ACCAN acknowledges and appreciates the assistance packages that are being provided by different telecommunications providers. These initiatives, such as providing free call diversion to any mobile or fixed phone number, extended timeframes for bill payments, or free prepaid credit,[47] will likely support a range of consumers to remain connected in the aftermath of the bushfires. However, we would like to see greater standardisation of assistance packages between retail service providers, to ensure that bushfire-affected communications consumers of smaller providers do not miss out on necessary assistance and support. ACCAN believes all providers should provide free call diversion and bill waivers for people who don't have a full service available due to bushfires or natural disasters. We also believe that providers should offer data-free access to emergency services and recovery-based websites, such as the National Bushfire Recovery Agency website and related pages. This is something that could be addressed through regulation, and as such ACCAN encourages the ACMA to consider whether an industry standard should be developed regarding call diversions, bill waivers and data-free access to emergency-related sites during natural disasters.

Recommendation 10: The ACMA should examine whether an industry standard is required to ensure all telecommunications providers provide free call diversion, bill waivers and data-free access to emergency services, government services and recovery-based websites for communications consumers impacted by natural disasters.

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[45] Minister Paul Fletcher has also questioned whether satellite can be used as a 'failover' service to support EFTPOS. See: Paul Fletcher, 2020. 'Key lessons from bushfire failures', The Australian, 4 May 2020. Available: https://www.theaustralian.com.au/business/technology/key-lessons-from-bushfire-failures/news-story/b8aab47a8e8e8f0621d6b0ab7616dbf5

[46] Telstra, 2020. 'Making payphones and Telstra Air free for all and mobile emergency websites free for our customers', available: https://exchange.telstra.com.au/free-payphones-and-hotspots/

[47] Information available: https://accan.org.au/hot-issues/1684-telco-bushfire-response

ACCAN welcomes the development of the National Bushfire Recovery Agency,[48] and the extensive information that is provided on the Agency's website. We would, however, like to see more information provided for people with disability, including information about how to contact the Agency and other essential recovery services via the NRS. People who are Deaf, deaf, or have hearing or speech impairment must be provided with clear and straightforward information about how to get recovery assistance, as well as about how to contact emergency services via the NRS.

Recommendation 11: Accessible and NRS-specific information must be made available to support people to contact the National Bushfire Recovery Agency.

In terms of recovery, some important discussions will need to happen regarding network redundancy and resiliency. Appropriate sources of redundancy must be identified and appropriately deployed to ensure that consumers remain connected in emergency situations. It is not appropriate to place the onus for redundancy onto consumers – as outlined above, there may be a range of reasons why consumers may not be able to afford or access a mobile service if their fixed line connection fails.

In relation to network resilience, some commentators have called for telecommunications infrastructure to be buried underground,[49] and our understanding is that some fire-damaged NBN infrastructure may be rebuilt underground.[50] As noted by the ACMA, 'while underground infrastructure is generally more resilient to bushfires, it is not immune to damage.'[51] The general reliability of underground infrastructure, as well as its reliability in natural disasters (not just bushfires, but also floods) should nonetheless be a topic for further industry discussion. Industry conversations about future network design and maintenance must similarly prioritise quick and easy restoration (particularly of backhaul) to ensure communications consumers stay connected.

Another point of industry discussion should be the resiliency of different providers' NBN services. It has been reported, for instance, that Vodafone's NBN service may be more resilient due to its 4G mobile backup, which allows the modem to use the mobile network, where this is available, in the event of a fixed line disruption.[52] Recovery efforts must include considering how to improve the physical resilience of the communications network and how to ensure greater redundancy to better protect and support communications consumers in emergency situations.

Recommendation 12: The industry should convene regularly to discuss the reliability of telecommunications infrastructure and measures to facilitate quick and easy restoration of services.

ACCAN believes that the Regional Connectivity Package and Mobile Black Spots program could help support areas ravaged by bushfires. Both initiatives need to address communications shortfalls in bushfire prone areas. ACCAN was pleased to see a number of bushfire affected areas covered by the recently announced Round 5 of the Mobile Black Spots program,[53] and the objective of Round 5A to improve mobile connectivity for communities in disaster-prone areas. As outlined above, we were also pleased with the recent announcement that $10 million from the Mobile Black Spots program will be used to fund longer lasting backup power sources for mobile base stations built under

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[48] Available: https://www.bushfirerecovery.gov.au/
[49] ABC News, 2020 op cit.
[50] For instance, in Mallacoota. As outlined by Ms Dyer on 3 March 2020: Commonwealth of Australia, 2020 op cit., p122.
[51] ACMA, 2020 op cit., p5.
[52] Computer Weekly, 2020 op cit.
[53] Including, for instance, Jingellic in NSW. The Land, 2020. 'Govt to fund 182 new mobile towers in regional blackspots', 21 April 2020. Available: https://www.theland.com.au/story/6729682/strong-signal-182-new-mobile-towers-for-regional-blackspots/?src=rss

Rounds 1 and 2 of the Mobile Black Spots program.[54] ACCAN would like funding for Mobile Black Spots in bushfire prone areas to be fast-tracked to help get these communities back on their feet. We would also like to see the Mobile Black Spots program expanded to include boosters, repeaters and other equipment that can be used to extend coverage.

Recommendation 13: The Mobile Black Spots program should be expanded to include boosters, repeaters and other equipment that can be used to extend coverage and support connections in bushfire prone or affected areas.

Finally, ACCAN would also like to see the industry review the use of satellite phones, mesh networks and other alternative forms of technology to keep emergency services workers connected during disasters. Satellite should be further explored as a means to achieve greater redundancy.

Recommendation 14: The industry should review the use of satellite as a way to achieve greater communications redundancy and improve resiliency.

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[54] Department of Infrastructure, Transport, Regional Development and Communications, 2020 op cit.

3.   Conclusion

The 2019-2020 bushfires had a devastating impact on communities. The impact that the fires had on communications consumers must be closely examined by the Committee in order to improve prevention, preparation, response and recovery efforts, and to mitigate against similar impacts in the future. ACCAN believes that our recommendations to the Committee would help improve the resiliency of communications for consumers generally, in addition to during emergency situations such as bushfires.

ACCAN would like to thank the Committee for the opportunity to make this submission. We look forward to following the progression of this important inquiry and make ourselves available to the Committee to discuss the issues raised in our submission in further detail as required.