Submission
to the
Royal Commission
into
National Natural Disaster Arrangements

17 April 2020

Joint submission by:

Communications Alliance
Australian Mobile Telecommunications Association (AMTA)

TABLE OF CONTENTS

ASSOCIATIONS

Communications Alliance is the primary telecommunications industry body in Australia. Its membership is drawn from a wide cross-section of the communications industry, including carriers, carriage and internet service providers, content providers, equipment vendors, IT companies, consultants and business groups.

Its vision is to provide a unified voice for the telecommunications industry and to lead it into the next generation of converging networks, technologies and services. The prime mission of Communications Alliance is to promote the growth of the Australian communications industry and the protection of consumer interests by fostering the highest standards of business ethics and behaviour through Industry self-governance.

For more details about Communications Alliance visit http://www.commsalliance.com.au.

The **Australian Mobile Telecommunications Association (AMTA)** is the peak industry body representing Australia's mobile telecommunications industry. Its mission is to promote an environmentally, socially and economically responsible, successful and sustainable mobile telecommunications industry in Australia, with members including the mobile network operators and carriage service providers, handset manufacturers, network equipment suppliers, retail outlets and other suppliers to the industry.

For more details about AMTA visit http://www.amta.org.au.

1. Introduction

Communications Alliance and the Australian Mobile Telecommunications Association (AMTA) welcome the opportunity to provide a submission to the Royal Commission into National Natural Disaster Arrangements.

In today's society, almost all aspects of modern life involve some form of digital communications. Consequently, the smooth operation of communications services is essential at any time.

It is, therefore, key that communications providers optimise their processes and procedures internally and across the industry, harden their infrastructure to the extent possible and cooperate effectively with all stakeholders on a National and State level, including with other infrastructure providers, particularly the energy providers.

The following are observations from Carrier and Carriage Service Provider members (service providers) of Communications Alliance and AMTA during the 2019/20 Black Summer bushfires. These observations have been complemented by input from the NSW Telco Authority.

The service providers wish to record their deep and sincere appreciation to professional and volunteer firefighters and to members of the Australian Defence Force (ADF) who have helped protect telecommunications infrastructure and personnel from the fires in many Australian States during late 2019 and early 2020.

The brave and determined interventions of firefighters and the ADF – often in very hazardous and changeable conditions – saved a large volume of vital telecommunications network infrastructure from damage or complete destruction and allowed services to be restored more quickly than otherwise would have been possible. Firefighters also played indispensable roles, in many cases, to help maintain back-up power to network sites that were cut off from mains electricity supply.

The observations contained in our submission to the Royal Commission are serving to inform the development of a new industry Disaster Management Protocol by the Communications Resilience Admin Industry Group (CRAIG) within Communications Alliance. This exercise is designed to create a common operating model for service providers during catastrophic events – including but not limited to bushfires – to provide greater operational consistency of actions and responses and assist multi-stakeholder communication. The CRAIG will report back to the Minister for Communications, Cyber Safety and the Arts on its progress in this matter. Member companies of the CRAIG are listed at Attachment 1.

2. Communication / Coordination

Many communications providers operate nationally or even globally, i.e. their processes and procedures are often centralised and work seamlessly across Australia's State borders. However, many of the Government stakeholders operate on a State-level and within State legislation. This introduces additional complexities for cooperation in crisis situations. Industry has identified room for further improvement in this area.

At both the State and National levels, access to an up-to-date and comprehensive list of key contacts within service providers and relevant agencies is a vital resource during catastrophic events. Industry players expressed some concern that contact lists were sub-optimal in some cases. We suggest that an agreed mechanism be put in place to provide for regular updating and enable appropriate, timely access by all relevant stakeholders.

Some service providers reported discrepancies between the information being provided by service providers to the Department of Infrastructure, Transport, Regional Development and Communications (Department) as inputs to Crisis Co-ordination Centre (CCC) Daily Incident Reports and the information being displayed in the Reports. However, it was noted that upon bringing this to the attention of the Department the matter was remedied by having updates sent direct to the CCC. It was noted that the Trusted Information Sharing Network (TISN) Communications Sector communications protocol should be updated to require major outage notification to go directly to CCC in addition to the requirement to send notices to the Department.

The CRAIG also agreed that State-based control centres should control the operational coordination between service providers and other entities such as the ADF. There appeared to have been some cases of misunderstanding in the communication chain. Provision of a better overall picture as to how the ADF were to be utilised would be useful. It is suggested that communications and coordination activities would be greatly improved if:

- A pre-scope of what ADF capabilities are (in each relevant State) was made available. There was, initially, a lack of clarity in discussions with the ADF on their capabilities in terms of assistance;

- The NSW Telco Authority was used as a single body to coordinate and engage with the ADF in NSW, to ensure there is a clarity on timelines and accountabilities;

- Standardised reporting templates were used for external stakeholder/government requests so telco companies can respond accordingly with minimal effort; and

- All major utilities were to work together in the State control centres (power, water, gas, service providers) – i.e. telecommunications service provider-to-service provider communications typically worked well, but urgent access to other utility providers concerning power, transport and fuel supplies was sometimes lacking.

In addition, we believe consideration should be given to issues of visibility of predicted fire movements. To the extent available, having access to longer range fire-movement forecasts (e.g. spanning periods greater than 24 hours) could allow service providers to better prepare for and manage resource movements, service restoration and recovery efforts, as well as messaging to staff and contractors. The format of this type of information would also be important to consider. For example, we believe it should be provided in geospatial vector data format identifying unambiguous locations, clearly indicate the status and nature of events, and be machine-readable.

Service Providers and NSW Government are also undertaking work to assess whether existing asset databases are being used optimally and whether further improvements to databases and shared use can be made while maintaining appropriate security around those databases and assets.

We also believe consideration should be given to developing guidelines for:

- Health and safety when entering hazard zones, e.g. if entering a zone under escort of emergency services, which entity is ultimately accountable for health and safety of the teams – is it emergency services or the service provider?

- Key contacts/processes for operational needs – service providers understand internally who is responsible for what, but they also need to have an understanding of which external stakeholders they need to go to within the various emergency services. There was, at times, some lack of clarity on roles and responsibilities within the control centres and which were the best channels to engage.

Some service providers are able to place personnel within the State control centres and are appreciative of this opportunity – a strategy that mostly worked effectively during recent events. However, other service providers are unable to be present in these centres and it was noted that being absent from a State control centre should not mean that those service providers needs are not considered.

It should be noted that data centre operators are increasingly becoming a significant part of Australia's communication and supply chain infrastructure and these facilities also need to be considered as part of disaster management arrangements, with more data centres locating in non-CBD areas.

Most service providers found that the model of interaction with NSW stakeholders was effective. The Telecommunication Emergency Management Unit (TEMU) is a section within the NSW Telco Authority. The TEMU maintains a professional relationship with all key stakeholders and provides operational updates to the carriers during emergency situations. The TEMU also facilitates and coordinates site access for carriers by way of RFS escorts.

The TEMU is the conduit between the telco carriers and NSW Government and its agencies, and forms one of nine Functional Areas for NSW (under the Emergency Management Plan) with a telecommunications liaison officer operating out of the State Operations Controller environment when requested.

ADF Joint Task Force requests pertaining to telecommunications sites (generator refuel and track clearing) were requested through and coordinated by the TEMU. This process worked well with no negative outcomes.

3. Power Supply

A significant number of emergency response issues related to the protection and restoration of the electrical power supply to impacted communications infrastructure e.g. remote exchanges and mobile base stations and towers. There was a strong consensus amongst CRAIG members about the need for improved flow of information from, and coordination between the energy sector and service providers on issues of power supply management particularly as to when power would be restored to specific locations/sites.

With better information in this regard, service providers can focus resources on providing ongoing energy back-up capabilities to sites that are not going to be imminently restored to mains power. Service providers have been developing their own recovery plans based on combinations of network alarms, battery capacity and availability, generator capacity and availability. In the absence of information on the restoration of mains power to specific locations/sites and focus of recovery to specific sites/locations, these plans may be inconsistent with a broader view and focus for recovery at a State or Commonwealth level.

It is also important for service providers to have information regarding the de-energisation of power networks, including to help identify and assess at-risk assets and manage the deployment of resources across the service provider's network.

Within NSW, this is coordinated between the Telecommunications Functional Area (TELCOFA) and the Energy and Utility Services Functional Area (EUSFA). These two NSW Government

functional areas both perform a liaison officer role within the Rural Fire Service State Operations Centre (RFS SOC) and are seated together.

4. Access to Infrastructure

CRAIG members stressed the criticality of service providers being able to gain access to infrastructure sites as quickly as possible (and potentially with assistance from firefighters) to provision back-up power and/or undertake recovery and restoration. It is recognised, of course, that personnel safety is paramount and that no two situations are identical in fireground environments.

Assistance with access may take the form of technicians riding in an emergency services vehicle, travel in convoy with emergency services, or having priority access to roads that have been declared safe.

In other cases, support to top up generators or preparation of vegetation clearance could usefully be provided by either State or commonwealth resources, such as ADF vehicles and helicopters.

We suggest consideration be given to measures to improve service providers' ability to access infrastructure sites during and after bushfires, including in relation to permit requirements to travel to affected sites, coordination and communication of road access issues (particularly when roads cross State/Territory boundaries), aerial escorts when roads are closed, and help assessing potentially hazardous material associated with damaged infrastructure.

Within NSW, safe access to communications sites is coordinated by the TEMU, which seeks advice/assistance from RFS and Transport NSW and coordinates generator refuelling for the NSW Government Radio Network (GRN) and the NSW Police Force.

5. Essential Services Definition and Access to Emergency Fuel

We urgently suggest development of a clear definition of essential services on a National level (or at least to harmonise any such efforts across the States) and to communicate this definition accordingly to ensure that the connection, operation and restoration of essential services can be maintained – across and within State borders –to the largest extent possible during a crisis.

For example, ready access to liquid fuel for vehicles and for back-up generators is a key enabler for service providers endeavouring to protect, repair or provide back-up power supply to mobile and network assets in emergency situations.

The telecommunications industry has sought – unsuccessfully to date – to have the members of the communications supply chain placed on the list of essential user activities under the Essential Users Determination under the *Liquid Fuel Emergency Act 1984*. A copy of our submission to the most recent review of that Determination, in September 2018, is at Attachment 2.

While industry acknowledges that service providers also need to plan and make provision for their own fuel requirements, we strongly suggest that the Commission inquire into this question of access to fuel under the Liquid Fuel Emergency (LFE) arrangements, in light of the recent tragic events.

6. Sustaining Back-Up Power

In many cases during the most recent fire events, Country Fire Authority (CFA)/RFS personnel provided additional assistance, in agreement with individual service providers, by refuelling generators that were providing back-up power to mobile base stations. This was particularly valuable in circumstances where site access was restricted, or it was difficult for service providers to undertake this task themselves. In some cases, however, firefighters reported that they had been directed not to offer this assistance. For future events it would be very helpful to have a consistent inter-agency position on this issue and consideration of using ADF resources to assist with refuelling generators.

In NSW, refuelling was carried out at first by agencies, and carriers and local councils and then by ADF JTF for a period for NSW GRN and NSWF Police Force sites.

7. Vegetation Clearing

Removing vegetation around asset sites can play a role in the fire-resilience of infrastructure. Service providers reported cases of sites which had an adequate fire break having survived blazes, whereas other sites lacking such protection were damaged. Firefighters and the ADF assisted service providers to improve firebreaks in many locations as fires approached, and this assistance is greatly appreciated by the telecommunications industry.

There was some uncertainly at times, as to how much vegetation could be cleared. Additional complexities arose where a network asset is located at the boundary of two properties triggering questions such as what clearance zones, if any, from boundaries are to be observed, which permissions would be required, who is responsible for liaising with property owners etc. A common approach to the creation and maintenance of fire breaks, and not necessarily just for telecommunications assets, at a State/National level may be of value. This might be achievable, for example, through its inclusion as an activity permissible under the *Telecommunications (Low-impact Facilities) Determination 2018*. This issue could be further examined by the Commission, Government and Industry.

For NSW, this information is contained within the NSW RFS Standards for Asset Protection Zones.

8. Temporary Infrastructure

Following a disaster event there may be a need to install temporary facilities, such as Cells on Wheels (COWS), Mobile Exchange On Wheels (MEOWs), satellite base stations and other temporary infrastructure.

Such resources may need to be in place from a few days to many months, depending upon the event, the suitability of temporary infrastructure to the terrain and the damage caused to the existing infrastructure. Recent changes to regulatory arrangements for such temporary facilities have improved flexibility, however in light of the severity of the 2020 bushfires, further refinements should be considered after service providers have had a chance to better assess current arrangements and any shortcomings. For example, current regulations impose time limits on the deployment of temporary infrastructure which can unnecessarily restrict service delivery post emergency. It may be that a mix of both swiftly-deployable and semi-permanent equipment needs to be provided for with more flexible deployment timeframes.

9. Resource Sharing

There has been a high level of cooperation and resource sharing among the service providers during the recent emergency situations, but typically on a case-by-case basis, rather than as part of an agreed inter-carrier policy.

Sharing of mains power for recovery at sites where there are multiple service providers is possible, but is subject to factors such as power requirements and how much 'overhead' capacity the generator on-site can offer. Other factors include the compatibility of power systems and whether there are also broadcasters co-located at a site.

Service providers have also, where feasible, made rack space available in their communications huts if the hut of another carrier at the site has been destroyed.

Sharing of COWS can prove more difficult as they are generally network-specific.

Further discussion could take place on what resources are able to be shared with a focus on providing communications restoration for the community, such as focussing on restoration of coverage to areas where evacuation centres are established.

Specifically in relation to evacuation centres, we also note that having access to real time information about the location and occupancy of evacuation and recovery centres is important, including to allow service providers to monitor the network supporting the operations at these sites. We suggest consideration be given to providing industry with access to a single online source for each State and Territory that provides information about the plans for and current status of evacuation and recovery centres. If this cannot be implemented, it would be helpful for this type of information to be incorporated into each State/Territory's written situation report to industry.

10. Community Preparation for Natural Disasters

Given the impact bushfires and other natural disasters may have on infrastructure assets, it is important for organisations, businesses and consumers to be aware of possible impacts to their telecommunications and other services during these events, and of possible steps they may be able to take to help improve their preparedness. For example, in relation to telecommunications services, organisations including those involved in responding to natural disasters (e.g. medical centres and community facilities) may be able to put in place in advance satellite phones or back-up satellite services where appropriate. We suggest consideration be given to raising community/public awareness of possible impacts to telecommunications and other services during natural disasters, and of possible measures organisations, businesses and consumers could put in place to help improve their preparedness where necessary and appropriate.

11. Access to Customer Information

Community organisations (those not part of the Emergency Call Services) who aid in emergencies such as the recent bushfires rely on Location Dependent Carriage Services (LDCS) to direct callers to the most appropriate State Emergency Services (SES) depot, police station, Country Fire Authority (CFA) or Fire Station. However, under section 291A of the *Telecommunications Act 1997*, callers who are unlisted in the Integrated Public Number Database (IPND) do not have the same access to LDCS such as those provided by the SES (132 500), Lifeline (131 114), non-urgent ambulance transport and police assistance line (131 444)) as do those callers whose records are listed in the IPND.

LDCS benefit listed callers by enabling the automatic routing of a call for assistance to the desired branch (local) or call centre of the service being requested. Community organisations

that use LDCS often require the service provided to be based on a full assessment of the caller's address (known as "full CLI routing") by the relevant service provider. Without full CLI routing, a call for assistance can only be routed based on its Exchange Service Area, which may be very large in the case of rural areas, and may often encompass a number of branch offices, depots or police or fire stations which are not physically close to the caller or terminate into the wrong group in the call centre. Full CLI routing is not available to callers with unlisted numbers in the IPND for the delivery of LDCS under the current regulation.

Unlisted callers are treated as second class end users under the current arrangements and may not be connected to the desired SES, Lifeline or Police or Fire station, in the same timeframe as listed callers. In times of emergencies, these community help organisations often opt to work around the problem by transferring the calls, which utilises additional staff, or recording the required information and passing it on later, thereby again, delaying the response for assistance.

Police, fire, ambulance and SES areas are not aligned with area codes or exchange service areas, with full CLI routing being the only option available to route calls efficiently to the correct stations and SES depots at times of heightened stress. Other community support groups who currently rely on full CLI routing include the State Department of Health Services, pandemic health support lines, mental health services, Royal Flying Doctor Service, and various district community health services.

LDCS also supports power and water utilities in providing emergency response lines. Mis-routed calls to some of these services may mean that the call goes to an unattended service office or depot where a message is left instead of being answered by the correct attended office. Some of the major emergency services (i.e. Emergency Services Telecommunications Authority (ESTA) in Victoria) route calls to centralised call centres under general calling but have the service pre-divided, to be able to break out specific areas to focused teams depending on the geographic location of the emergency. Without the full CLI data, this functionality is reduced or calls maybe routed into the general centre instead of the focused team.

For these reasons, we suggest that the regulatory arrangements be reviewed to consider the possibility of certain community services organisations being able to use full CLI routing for the redirection of calls from unlisted numbers to emergency services organisations.

12.   Conclusion

Communications Alliance and AMTA look forward to continued engagement with the Royal Commission into National Natural Disaster Arrangements and all other relevant stakeholders on the mutual objective to ensure that communications networks and infrastructure function as intended, to the largest extent possible, during natural disasters and other crises.

We will be happy to continue to engage with the Commission during its inquiry and any potential recommendations that the Commission may seek to make.

For any questions relating to this submission please contact Christiane Gillespie-Jones on 02 9959 9118 or at c.gillespiejones@commsalliance.com.au.

Attachment 1

Membership of the Communications Alliance Communications Resilience Admin Industry Group (CRAIG)

(as at February 2020)

- AARNet
- AMTA
- Aussie Broadband
- Cisco
- Enex TestLab
- NEXTDC
- NBN Co
- NSW Telco Authority
- Optus
- Telstra
- Vocus
- Vodafone Hutchison Australia

Attachment 2

Communications Alliance submission to the September 2018 review of the *Liquid Fuel Emergency Act 1984*

12 September 2018

James Hetherington
Chair, National Oil Supplies Emergency Committee
Emergency Management and Preparedness Section
Department of the Environment and Energy
GPO Box 787
Canberra ACT 2601

Dear James,

RE: Review of the Guidelines and Essential Users Determination under the *Liquid Fuel Emergency Act 1984*.

Communications Alliance and the Australian Mobile Telecommunications Association thank the Department of the Environment and Energy for the opportunity to comment on the *Liquid Fuel Emergency Act* review.

The Telecommunications Industry is critical to the delivery of essential services in times of natural and manmade disasters. The community and those tasked with delivering support and aid to the community rely on this critical infrastructure to provide assistance in time of critical and life-threatening situations. Telecommunications infrastructure has become more complex and as such relies on liquid fuels for emergency power sources such as generators to deliver these critical services in emergency situations.

The Telecommunications Industry is a critical part of delivering the capability of a functional community. This can be seen by the introduction of such legislation as the *Telecommunications (Interception and Access) Amendment (Data Retention) Act 2015* (Data Retention), the *Telecommunications and Other Legislation Amendment Act 2017* (Telecommunications Sector Security reforms) and the recently proposed *Assistance and Access Bill 2018* (Encryption Bill).

The communications sector consists of a very wide range of providers who own and/or manage infrastructure including, but not limited to; large and small exchanges, mobile base stations, satellite earth stations and data centres including international gateways that terminate submarine cables.

Without this broad range of communication services providers, the public would be unable to receive emergency alerts or make emergency calls. Communications are also vital to the operation of emergency services and the businesses that supply essential financial, food, and transport services to the community. Without communications capability, the liquid fuel sector would cease to operate.

The Telecommunications Industry would highly recommend you consider including those entities that make up the communications supply chain on the list of essential user activities included in the Determination.

Yours sincerely,

John Stanton
Communications Alliance CEO

Chris Althaus
AMTA CEO