



Our Ref: D15642; 20/107676

Your Ref: Mobile Black Spot Program – Round 5a Discussion Paper

The Hon Mark Coulton MP  
Minister for Regional Health, Regional Communications and Local Government  
Parliament House  
CANBERRA ACT 2600

Dear Mr Coulton

### **INPUT INTO THE DESIGN OF THE NEXT ROUND OF THE COMMONWEALTH'S MOBILE BLACK SPOT PROGRAM (ROUND 5A)**

Thank you for your letter dated 21 May 2020, inviting feedback from the Department of Fire and Emergency Services (DFES) in Western Australia (WA) into the design of the Round 5A of the Commonwealth's Mobile Black Spot Program (the Program).

Availability of robust and reliable data and voice services plays a critical role in emergency management response. Given the scale of the WA, the reliability and resilience of the telecommunications network for emergency management communications is an issue for both DFES and the community, with service availability in remote areas and blackspots a significant concern.

By way of context, DFES coordinates emergency services for a range of natural disasters and emergency incidents threatening life and property across WA. The agency comprises of more than 1,600 operational personnel and corporate staff. It also has an extensive network of more than 26,000 volunteers engaged in the delivery of services to the community.

DFES works in collaboration with Western Australian communities, government and non-government organisations to help prevent, prepare for, respond to and recover from diverse hazards including fires, cyclones and floods. This includes providing advice on emergency management issues to various local, state and national stakeholders. DFES is responsible for delivering emergency management services across 2.6 million square kilometres (the largest jurisdiction in Australia) to a population of more than 2.5 million.

DFES welcomes the announcement by the Minister for Communications, Cyber Safety and the Arts on 12 May 2020 regarding \$37.1 million to improve telecommunications resilience and redundancy following the devastating 2019-20 bushfires. DFES is proactively engaging with the Commonwealth Government to establish a case for WA to access funding or resources. It is recognised that this program will benefit rural and remote high-risk communities.

As part of this opportunity, DFES proposes the following elements be considered as part of the design of Round 5A of the program:

- **Expand funding to cover the installation of small cells and microcells to expand coverage in low volume areas.** Although shorter range, these are a much lower cost option than a full cell and tower. The satellite based small cells will also provide resiliency for local backhaul network outages resulting from fire or flood damage.
- **Mobile Black Spot Funding being contingent on carrier roaming being allowed for emergency service phone SIMs.** Rather than being dependent on one carrier's network - roaming enabled SIMs could access/'jump to' the next available, backup or better coverage, carrier network.
- **Funding could also be contingent on providing a prioritisation of emergency services traffic.** This service may be activated under emergency conditions and may not need to be active at all times.
- **Expanding cover for emergency numbers other than triple zero '000' calls.** Currently only triple zero '000' calls can be connected across any network, even with no SIM or expired SIMs. Expanding to cover other emergency numbers could provide an access to a dial up automated message service providing pre-recorded evacuation instruction/locations for public safety. While this may be a matter for the National Emergency Communications Working Group rather than as part of the Mobile Black Spot Program, it is considered worthy of discussion as part of this feedback opportunity.
- **Change to the Universal Service Guarantee<sup>1</sup>** - It is considered that the Universal Service Guarantee (USG) should include mobile access and further consideration given to guarantees of mobile access and minimum data rates available. Mobile services are provided commercially and not included in the Universal Service Guarantee (USG). Australia's mobile services reach 99.4% of the population and cover around 31% of Australia's landmass.
- **Focus on power resilience at remote mobile sites** - Mobile Black Spot Program funding should also be directed to enhance and extend power resilience at remote mobile sites with battery and solar backups. The minimum backup power operating times of 12 hours is agreed while noting that some communities in isolated high bushfire risk areas would demand longer service times.

DFES is currently participating in the *Royal Commission into Natural Disaster Arrangements 2020*. DFES' responses regarding telecommunications issues and opportunities for improvement are summarised below for your information.

- **Power supply disruption** - Emergency service organisations throughout the state rely on a combination of WA Emergency Radio Network (WAERN); high frequency network, mobile phone and satellite phone communications to support their response to emergencies. This infrastructure also has dependencies on power supply. In some instances, the loss of mobile towers due to either unreliable power services, or fire damage to towers or power lines has affected communication options for communities and organisations seeking or coordinating emergency response.

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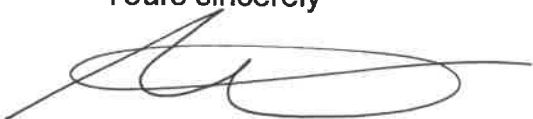
<sup>1</sup> <https://www.communications.gov.au/documents/universal-service-guarantee-fact-sheet>

- **Network capacity** – Particularly in regional areas, the capacity of mobile towers can be challenged during emergencies. Existing satellite data services also currently have insufficient bandwidth to provide an acceptable level of performance to manage an incident from the field.
- **Commonwealth assistance to WA communities** - Improved awareness of the Commonwealth (Australian Defence Force/Department of Defence) resource cache would ensure there is no duplication of State/Commonwealth resources and enhanced opportunities for targeted Commonwealth assistance to WA communities during incidents.
- **Warning systems** - DFES is part of the National Warnings Framework Group and supports the work being done to develop a national warnings framework. There is an opportunity for consistency in emergency alert messages to mobile phones and landlines across jurisdictions and for the distribution of the alerts to be mandatory for the telecommunications providers to provide free of charge when the appropriate authority requires it. The necessary legislative changes may inhibit the quick implementation of this opportunity.
- **Next generation services** - The future development of data services will include reliance of two-way data communication with emergency responders providing greater ability to target life-saving services and aid communities during recovery. Initiatives such as artificial intelligence to give predictive impact areas and providing information on google in-home devices will also require greater dependency on a robust telecommunications network.
- **Telephone Warning System (TWS)** – The system is currently inflexible, inaccurate and incapable of delivering tailored and niche messages. Furthermore, where text messages are delivered through telephone warning system and phones are on silent, it will not alert the recipient. A system called 'emergency cell broadcast' exists which would automatically switch the silent function off. It would be of benefit to explore this capability further.

DFES continues to promote the importance of having a communications plan in place for emergency situations that includes using traditional methods to keep abreast of emergency information, where it is safe and possible. Notwithstanding this, it is clear that mobile phones are a commonly accepted form of communication and any outages to this service can have a serious impact on the community. This especially affects those vulnerable regional communities who require stable mobile telecommunications to contact, coordinate and manage emergency response activities across significant geographical areas.

Thank you for seeking the department's input into this important matter. DFES provides approval for this submission to be published if required. Should you require any further information please contact Mr Richard Burnell, Executive Director Corporate Services at DFES on [richard.burnell@dfes.wa.gov.au](mailto:richard.burnell@dfes.wa.gov.au) or 08 9395 9828.

Yours sincerely



**DARREN KLEMM AFSM  
COMMISSIONER**

19 June 2020