Public Safety Mobile Broadband

Productivity Commission

Submission from

The Council of Ambulance Authorities

October 2015

The Council of Ambulance Authorities

Providing leadership for the provision of ambulance services

The Council of Ambulance Authorities (CAA) is the peak body established by its members to collaborate on ambulance matters of national, regional and international importance. The CAA's members comprise the ten public ambulance services of Australia and New Zealand. These are listed below.

The CAA is governed by a Board, consisting of the Chief Executives of each member service, and supported by a Secretariat, headed by the CAA Chief Executive Officer. The collective knowledge and expertise of CAA's members combines to provide advice; explore opportunities for continuous improvement and innovation; and advocate on behalf of the sector to governments and key stakeholders.

The CAA exists to help advance ambulance services so that they are able to further develop superior pre-hospital care and ambulance services to communities across Australasia.

CAA supports the concept of national registration of paramedics under the Australian Health Practitioner Registration Authority (AHPRA) arrangements.

Members of the CAA:

Ambulance Service of New South Wales
Ambulance Tasmania
Ambulance Victoria
Australian Capital Territory Ambulance Service
Queensland Ambulance Service
SA Ambulance Service
St John Ambulance Australia NT Ambulance Service
St John Ambulance Australia WA Ambulance Service
St John New Zealand
Wellington Free Ambulance

Associate Members:

Ambulance New Zealand
St John Ambulance Papua New Guinea

Contact for Further Information:

David Waters
Acting Chief Executive Officer
The Council of Ambulance Authorities

Postcode: 8004

SUBMISSION

The Council of Australian Ambulance authorities supports the premise of Public Safety Mobile Broadband within the context of achieving a service that meets the needs of emergency services in all of the operational contexts which can be delivered in an economic and cost effective manner.

Ambulance services, like all emergency services across Australia, whilst having varying degrees of activity, complexity and functionality all require a robust and efficient communications system and network. The proposal outlined within the study would of course be generally endorsed, as any measure that will improve the reliability, security and operability of communication networks into the future is supported. This is particularly relevant in respect for ambulance services to enable and ensure dedicated voice channels in a command and control situation, the ability to transmit lifesaving data such as ECG reading and the future use of video and still photography material to enable remote diagnostics. The usage of Smart devices and body worn video will all require robust and reliable communications networks.

Any proposed network should be separate from commercially available public networks so at times of peak activity or during a security event it is made exclusively available to emergency services. We should not support any network that is shared with other commercial or public entities for this reason. The potential for hardware or programming issues to occur on a shared network; thus not allowing emergency services capability could be higher.

The broad assessment of the Productivity Commission that the better value for money approach is to acquire priority access to bandwidth in the 4G / 5G spectrum has merits.

However, the authority has been made aware that there are limitations within the 4G architecture that would result in client devices, even priority devices, being “shut-out” of the network at times of peak capacity or reduced infrastructure as a result of a major incident. These limitations are best solved through the use of dedicated spectrum.

The specific circumstances are as follows:

1. Priority mobile client devices are able to assent their priority after connection into the mobile network. The advice is that any priority device will compete with equal chance of success or failure until it has been able to establish a connection. This means that priority devices will have the same difficulty as non-priority devices in establishing a connection during periods of peak capacity, regardless of the cause.
2. Although a priority mobile device is able to maintain its priority status as it transverse from cell to cell, this can be impacted if the infrastructure is damaged and the transition from one cell to the next is not achieved within specific timeframes. In this instance the mobile device would have to compete with every other device to gain a connection back into the network.

The advice is that the better approach to safeguarding against these two types of circumstance is with the provision of dedicated spectrum.

If it is the position of the Australian Government that all emergency service communication is to transition to broadband data services, it is critically important that the services are able to provide clear, consistent, accurate and timely communications, (almost) regardless of the circumstances of the emergency service response. Therefore, a combination of both bandwidth and dedicated spectrum from commercial providers is the better option.

The CAA would also assert that the Australian Federal Government has the following roles in the decisions about and the implementation of Public Safety Mobile Broadband:

1. Set standards for the carriers and the individual Emergency Service Agencies (standards for performance, security, architecture and the like)
2. Co-ordinate the implementation of PSMB through-out all states in a co-ordinated and operationally risk adverse manner.

3. Support the continuation of Government Radio Networks until the full extent of rich data services have been implemented, the current GRN networks are reaching end of life and 4G / 5G Push to Talk technology is mainstream and reliable.

Ends