

NSW Police Submission the Parliamentary Joint Committee on Law Enforcement Inquiry into the Spectrum for Public Safety Mobile Broadband, June 2013

(a) How much broadband spectrum law enforcement agencies need to be able to communicate safely and effectively during mission critical events such as natural disasters and potential terrorist incidents?

Law enforcement agencies have made consistent representations over a three year period that they require a minimum allocation of 20 MHz (10 MHz Tx + 10 MHz Rx) of spectrum for this purpose. This has been further supported by:

- a letter by NSW Police Commissioner Scipione, on behalf of all Commissioners to the National Security Advisor on 14 September, 2010;
- in evidence given by Commissioner Scipione on 9 August, 2011, representing all Commissioners as a member of the board of Australia New Zealand Police Advisory Agency (ANZPAA), to the Senate Committee on Environment and Communications with reference to the capacity of communication networks and emergency warning systems to deal with emergencies and natural disasters;
- in studies undertaken by the Public Safety Mobile Broadband Steering Committee in consultation with consultants from Gibson Quai – AAS;
- the Public Safety Mobile Broadband Joint States and Territories Submission to the Australian Communications and Media Authority; and
- in international research and development.

Despite this the Australian Communications and Media Authority (ACMA) has set aside evidence of the operational requirements of law enforcement agencies in preference for a multi-layered spectrum solution and an allocation of only 10 MHz (5 MHz Tx + 5 MHz Rx) of spectrum from the 800 MHz band. This solution is not supported by law enforcement bodies and a joint States and Territories submission has been made to the ACMA seeking further consideration of the matter.

Of particular issue is the need for the ACMA to examine the demand profile for small and medium scale incidents. These types of incidents occur regularly but have effectively been disregarded by the decision to only consider business as usual requirements.

This will significantly restrict the capacity of operational communications in responding to a range of common scenarios in a timely and effective manner.

The contention by the ACMA that additional capacity can be provided through additional infrastructure is not consistent with the operating environment of public safety agencies. For example, the Sydney basin is punctuated and bordered by challenging terrain, bushland, national parks and water catchment areas that significantly restrict the opportunity for infrastructure development. However, these areas are regular fields of operation for public safety agencies, particularly in bush fire danger periods.

NSW Police Submission the Parliamentary Joint Committee on Law Enforcement Inquiry into the Spectrum for Public Safety Mobile Broadband, June 2013

(b) Which of the 700 or 800 MHz bands is the most appropriate for law enforcement agencies given the current licensees occupying spectrum?

This issue was explored by the Environment and Communications References Committee during hearings on the 8 and 9 August, 2011. Representatives of the ACMA and the Department of Broadband Communications and the Digital Economy (DBCDE) advised that regional and international standards were under development to identify harmonised Public Protection and Disaster Relief (PPDR) spectrum in the 800 MHz band and this would drive the availability of equipment, particularly in the Asia-Pacific Region. It is understood that these developments are yet to reach fruition. Similarly, the ACMA review of the 800 MHz band has not been finalised. As such, it is difficult to determine the suitability of an appropriate allocation of spectrum in the proposed harmonised PPDR 800 MHz band, its immediate availability or its impact on incumbent users.

It is likely, that any allocation beyond 10MHz would require the clearing of the band and result in a significant delay in it being made available to public safety agencies. The difficulty in securing a contiguous block of spectrum in excess of 10 MHz within the 800 MHz band free of incumbent license holders, together with the intention to preserve available allocations within the 700 MHz band, will restrict the ability of the ACMA to further consider the public safety requirement for a minimum allocation of 20 MHz. The proposed harmonised PPDR band also has incumbent users across the Asia-Pacific region. At this time, it appears unlikely there will be a significant demand for LTE equipment operating in the proposed harmonised PPDR 800 MHz band in the immediate future. As such, law enforcement agencies still contend that an allocation within the 700 MHz band is more appropriate, particularly now that recent auctions failed to attract buyers for all available allocations and the forecast revenue has not been realised.

(c) How the necessary spectrum for public safety agencies should be secured in a timely manner.

Law enforcement agencies still contend that the most timely and available opportunity to secure a contiguous block of spectrum, appropriate for operational purposes, remains with an allocation from the 700 MHz band. There is still no certainty that international representations for an allocation of harmonised spectrum for PPDR in the 800 MHz band will come to fruition or that there will be sufficient demand generated for broadband equipment to generate competition, improve product availability and reduce development costs. The opportunities highlighted by the ACMA in previous submissions have not been realised.

NSW Police Submission the Parliamentary Joint Committee on Law Enforcement Inquiry into the Spectrum for Public Safety Mobile Broadband, June 2013

(d) What arrangements should be put in place to ensure that, in extreme circumstances, law enforcement agencies can effectively use spectrum of commercial carriers to protect public safety and maintain public order?

This issue has been addressed in the Joint States and Territories submission to the ACMA providing further evidence of the need to provide an appropriate allocation of spectrum to public safety agencies. It was noted that the operation of current legislative provisions were untested and it seemed highly unlikely that they could be used to enable time-critical surge capacity in an emergency due to procedural requirements and the time taken to put any such strategy into operation. The current legislative provisions are appropriate in consideration of National Security issues but are not considered a realistic mitigation strategy for addressing network capacity issues arising from periods of peak demand. The use of carrier allocated spectrum by law enforcement agencies would also restrict consideration of tactical and investigative options in some circumstances. Examples of this can be provided in camera, as required.

(e) What applications dependant on broadband spectrum will contribute significantly to saving lives and property?

The individual applications that can contribute significantly to saving lives and property are many and varied in nature, particularly when considered as a component of a broader digital innovation strategy. However, the potential to realise a significant benefit through technology has been previously articulated by the Department of Prime Minister and Cabinet in the publication of The National Security, Science and Innovation Strategy¹. The strategy identifies twelve objectives across two key themes of a more prepared and resilient society and smarter use of information. Almost all of these objectives can be significantly advanced through the provision of public safety mobile broadband solutions and applications.

The capacity for mobile broadband solutions to save lives and property must also be considered in regard to the safety of first responders. Law Enforcement and Public Safety Agencies are not exempt from the requirements of Workforce Health and Safety legislation. Innovative solutions are now available to significantly enhance the safety of first responders deployed in hazardous situations by monitoring their personal welfare and location in relation to a potential threat. The real time collection and analysis of data against existing information holdings allows for improved modelling, enhanced information sharing and more accurate risk assessment. The provision of accurate and timely information through the operation of mobile broadband technology will be a key element in the future protection of first responders operating in hazardous environments.

¹ Available at http://www.dpmc.gov.au/nsst/docs/NSSIS_strategy.pdf

NSW Police Submission the Parliamentary Joint Committee on Law Enforcement Inquiry into the Spectrum for Public Safety Mobile Broadband, June 2013

f) The impact on law enforcement agencies which utilise the available spectrum in relation to budgets, implementation strategies, current infrastructure and existing technology.

Law Enforcement agencies must continue to pursue innovative solutions through the deployment of technology in response to traditional operational challenges and new and emerging threats. The use of mobile broadband technology is a significant enabler in the effective use of information to deliver improved public safety outcomes. Law Enforcement agencies have been seeking access to an allocation of spectrum to deliver mission critical mobile broadband services for almost three years. The uncertainty created by the ongoing consideration of this issue has severely restricted progress in regard to this particular innovation and limited the development of a broader digital innovation strategy. The focus to date has been on satisfying the requirements of the ACMA to justify an appropriate allocation of spectrum, rather than the development of the wider scope of requirements needed to develop and implement an ICT program of this magnitude. This siloed approach has not afforded Law Enforcement and Public Safety Agencies the opportunity to draw upon existing science and innovation capabilities as promoted by the National Security and Innovation Strategy.

The failure to secure an appropriate allocation of spectrum to enable a public safety mobile broadband network significantly increases the potential cost of infrastructure and may compromise the capacity of the network to meet the operational requirements of end users. The failure to properly recognise user requirements is a common feature in the failure of large scale ICT projects. The risk of reverse engineering a solution based on the limited availability of spectrum should be avoided by properly considering the wider scope of requirements.

Law Enforcement and Public Safety agencies already pay significant license fees in support of existing technology, particularly narrow band voice networks. They have also had to invest heavily in upgrading existing infrastructure to comply with the 400 MHz band plan and operate within the allocation afforded to Government. Despite this, there remains uncertainty in the future costs of spectrum licenses and the continued provision of appropriate spectrum through the operation of the Radiocommunications Act. Indeed the ACMA has sought comment on both opportunity cost pricing and the objectives of the Radiocommunications Act in recent times.

NSW Police Submission the Parliamentary Joint Committee on Law Enforcement Inquiry into the Spectrum for Public Safety Mobile Broadband, June 2013

(g) any other related matters.

Governments and industry around the world are seeking innovative solutions in the use of technology to enhance public safety. Innovations such as next generation emergency call centres, mobile broadband solutions, big data and secure cloud storage solutions present both challenges and opportunities. Commonwealth and State Governments have invested heavily in both national security and innovation. There are current initiatives around the country seeking to support innovation and enhance regional development in partnership with government, industry and tertiary institutions. Australia has a unique opportunity to take a lead in the development of public safety solutions in the Asia-Pacific region by harnessing the skills and expertise available across the private and public sector. These opportunities have the capacity to return significant benefit to the community. It is recognised that the DBCDE and ACMA have a very valuable role to play in the development of innovative solutions supported by broadband communications. However, they should not attempt to extend their influence into the operations of law enforcement and public safety agencies. Certainly, there is no known precedent for the ACMA to require such a significant body of evidence to be produced in support of an allocation of spectrum.