

The Manager  
Spectrum Licensing Policy  
Australian Communications and Media Authority  
Online submission

Dear Manager

### **Submission to Five-year spectrum outlook 2022-27 and 2022-23 work program consultation**

I am pleased to provide comment to the Australian Communications and Media Authority (ACMA), on behalf of the NSW Government Telecommunications Authority (NSW Telco Authority), on the *Five-year spectrum outlook 2022-27 and 2022-23 work program - consultation draft* (FYSO).

The NSW Telco Authority is constituted by, and functions under, the *Government Telecommunications Act 2018* (NSW) to operate and maintain mission-critical operational communications services for public safety and government agencies within NSW. The NSW Telco Authority holds responsibility for coordinating telecommunications services support during emergencies under the *State Emergency and Rescue Management Act 1989* (NSW), has a central role in coordinating spectrum holdings on behalf of government agencies and manages major digital connectivity programs for the NSW Government.

NSW Telco Authority provides the following commentary on current spectrum issues relating to the performance of its functions and delivery of its services.

#### **850 MHz expansion band (809-824 MHz and 854-859 MHz)**

The Commonwealth has set-aside 2 x 5 MHz (Band 27, 809-814 MHz and 854-859 MHz) for a national Public Safety Mobile Broadband (PSMB) capability. However, there is currently no existing equipment ecosystem to support the deployment of Band 27, making its utilisation for PSMB unviable at this time.

The lead time for the manufacture of equipment capable of operating in Band 27 may be several years, depending on the appetite of major manufacturers to develop both network equipment and a range of end-user devices (including mobile phones and tablets) solely for a relatively small Australian PSMB market. In the absence of any existing international interest or markets for the band for either PSMB or commercial long-term evolution (LTE) services, the cost to Australian emergency services for any bespoke Band 27 equipment, were it to be available, may be considerable and equipment choices limited.

The NSW Telco Authority, on behalf of NSW emergency services organisations, is continuing to work with other states and territories to identify a path forward to address PSMB's spectrum requirements. This may include the future use of Band 27. While considerations continue, including through consultation with the Commonwealth, it is important that Band 27 remains reserved and available for potential future allocation to PSMB in the absence of any sub-1 GHz alternatives in the foreseeable future.

#### **4.8 GHz (4800–4990 MHz)**

This band includes provision at 4940-4990 MHz for public protection and disaster recovery (PPDR) purposes under the *Radiocommunications (Public Safety and Emergency Response) Class Licence 2013* (PSER class licence). This spectrum's inclusion in 3GPP standards makes it

increasingly important for emergency services organisations as a 5G element of a PSMB capability, meaning the full 50 MHz should be preserved for the co-existence of both PPDR equipment and 5G PSMB applications. This may require a review of the existing emission mask parameters against 5G application requirements.

The PSER class licence currently limits the deployment of a fixed service from a fixed location to six months. While this is aligned with incident-based deployments, consideration should be given to removing this restriction to enable greater flexibility and broader, long-term operational use purposes as part of a PSMB capability. Similarly, the existing limitation of operating on a maximum of two contiguous channels should be reviewed to enable services requiring greater spectrum concatenation.

While the PSER class licence does not provide any regulatory protection from harmful interference by other radiocommunications devices, PSMB communications must be mission-critical. Therefore, a mechanism to support the protection of PSMB communications from interference in this band should be considered. Deployments could be coordinated by the National Coordinating Committee for Government Radiocommunications representatives, a Network Operations Control Centre or an equivalent authority in each jurisdiction, noting also the requirements relating to potential interference with radio astronomy observations. The potential conversion of the PSER class licence into a fee-free spectrum licence, in the public interest, could also be considered to further support this protection.

#### **400 MHz Harmonised Government Spectrum**

While Harmonised Government Spectrum (HGS) is not referenced in the draft FYSO, the NSW Telco Authority raises its interest in consideration of the potential for enabling its use purposes to include LTE. While HGS will continue to focus on land mobile radio networks for voice and narrow-band data communications (P25) in the coming years, the long-term future of this spectrum could evolve to increasingly align with 3GPP technologies, including PSMB services.

#### **13 GHz (12.75-13.25 GHz)**

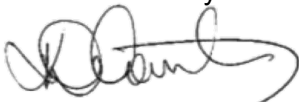
Existing licensees in the 13 GHz band include Commonwealth, State and local governments for point-to-point services. While the ACMA proposes to continue to monitor developments in this band, alternative provisions would need to be made for these existing users should spectrum allocation plans change in the future.

#### **RNSS repeater trials**

NSW Telco Authority acknowledges the ACMA's continuing support of RNSS repeater trials in road tunnels being undertaken in NSW under scientific licensing arrangements. The ACMA's proposed plans to consider longer-term licensing solutions to authorise the use of these critical facilities for public safety, emergency management and general transport purposes, including in other environments where GPS location services are otherwise unavailable, should remain a priority for 2022-2023.

Should you wish to discuss this submission, please contact Khalid Salim, Director Engineering and Spectrum, NSW Telco Authority on 02 9372 7860 or email at [khalid.salim@customerservice.nsw.gov.au](mailto:khalid.salim@customerservice.nsw.gov.au)

Yours sincerely



**Kylie De Courteney**  
**Managing Director, NSW Telco Authority**

29 April 2022