

Our reference: BN-03808-2024

The Manager  
Spectrum Planning Section  
Australian Communications and Media Authority

By email: [freqplan@acma.gov.au](mailto:freqplan@acma.gov.au)

Dear Manager,

**NSW Telco Authority submission to the consultation on the future use of the upper 6 GHz band**

NSW Telco Authority (NSWTA) thanks the Australian Communications and Media Authority (ACMA) for the opportunity to provide input to the consultation on the future use of the upper 6 GHz band.

NSWTA owns and operates the Public Safety Network (PSN), a radio network used by frontline emergency services, government agencies and essential services to communicate via radio handsets and other devices during emergencies. Next to Australia's Triple Zero (000) emergency hotline, the PSN is the most important critical communications network in NSW and one of the largest of its type in the world.

NSWTA holds 14 apparatus licences for the upper 6 GHz band that are used for essential backhaul links for PSN sites in regional areas. We have made the following comments with reference to how these backhaul links will be affected as a result of the 4 options presented in the paper.

NSWTA is concerned that options 3 and 4 could require the upper 6 GHz band to be cleared to enable wide-area wireless broadband (WA WBB) use in the band. As such, options 3 and 4 present significant risks to the ongoing operation of 14 backhaul links to the PSN and potential risks to lives and property in the relevant areas if emergency services organisations lack PSN coverage.

NSWTA engineers have scoped the availability of alternative spectrum to support backhaul of the relevant PSN sites. For 1 backhaul link (using licence number 11274767/1), our engineers could not identify available useable spectrum, such as the lower 6 GHz, mid 7 GHz and 8 GHz bands. We note that higher frequency ranges are not suitable as a replacement for upper 6 GHz spectrum as this would require fitting of larger antennae and would impact tower loading considerations.

For the other PSN backhaul links impacted by options 3 and 4, NSWTA expects that alternative licences would be required. This presents a further risk to our links as we would need to compete with other current users of the upper 6 GHz band, such as large mobile network operators, for other available and useable spectrum, with a risk that the NSWTA might not acquire suitable alternatives.

With both options 1 and 2, there would be minimal risk to PSN backhaul links. Option 1 presents no change and option 2 proposes the introduction of radio local area network (RLAN) access to some or all of the upper 6 GHz band. We understand that RLAN can coexist with point to point backhaul links if adequate power limitations and deployment constraints are applied.

NSWTA requests that ACMA prioritise public safety in consideration of the options for the future use of the upper 6 GHz band. We ask that ACMA works with NSWTA to ensure that adequate

spectrum is available to enable backhaul links at the impacted PSN sites prior to implementing options that require users to relocate.

For further information, please contact James Pickens, Chief Digital and Technology Officer, NSWTA at [REDACTED].

Yours sincerely



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

21/06/24