



BETTER CONNECTIONS. EVERYWHERE. ALWAYS.

**Pivotel Response to
Ministerial Policy Statement—Expiring Spectrum
Licences**

12th April 2024

[PIVOTEL.COM.AU](https://www.pivotel.com.au)

Pivotel welcomes the opportunity to comment on the Draft Ministerial Policy Statement—Expiring Spectrum Licences.

CONTEXTUAL STATEMENT

- Pivotel is an Australian owned and operated company and has been delivering voice services and connectivity solutions to regional and remote Australian customers since 2003.
- Pivotel operates a mobile and satellite telecommunications network pursuant to a carrier licence issued by the ACMA in accordance with the Telecommunications Act 1997 (Cth) (Telco Act) and operates full Carrier Network Infrastructure including 4G / LTE networks and a Tier 1 Voice Core Network used to deliver targeted connectivity solutions in regional Australia and is one of only four operating licenced Australian mobile carriers.
- Pivotel has over 100,000 connected mobile satellite services and is the only Australian carrier offering services of all major mobile satellite networks including Iridium, Inmarsat, Thuraya, Globalstar, nbn™ and Intelsat as well as agreements with LEO Sat providers including OneWeb and Starlink.
- Pivotel's 4G LTE mobile network solution, ecoSphere®, extends its carrier network to deliver complementary terrestrial wireless services to rural and remote Australians. Using our innovative off-grid ecoCell™ base station technology and network architecture, ecoSphere® can cost-effectively deliver wide area mobile broadband and IoT coverage to remote communities, transport corridors, mining, agriculture and pastoral properties using satellite or terrestrial backhaul complemented by our satellite high-speed data and IoT services.
- Providers such as Pivotel are well placed to play a unique and relevant role in improving coverage and bringing innovation to parts of regional and remote Australia. This is however predicated on access to suitable spectrum at a cost that enables a reasonable return on investment.
- Spectrum in low, mid, and high bands is crucially important for the delivery of 4G/5G/6G services which enable emergency, mobile handheld and mobile wireless broadband (WBB), Fixed Wireless Access (FWA) and IoT use cases.
- A flexible spectrum management approach consisting of Spectrum Licences covering large geographic and even national regions combined with Area Wide Licences that enable place based networks will encourage a larger and more diverse range of network operators and innovation.
- Licence fees need careful consideration with place-based networks typically targeting very specific populations, often with very low density and high natural operating costs that reduce the potential for operators to receive a commercial return on investment.
- Pivotel has consistently advocated for a combination of spectrum licence for more populous urban areas complemented by urban Area Wide Licences (AWLs), and AWLs or Apparatus Licences (ALs), for regional and remote parts of Australia, as opposed to a blanket national spectrum licence approach.

- The creation of a competitive, innovative marketplace for the delivery of 5G services in metropolitan areas also requires that AWLs be available in metro areas, alongside wide area spectrum licences.
- As a mobile operator already delivering 4G/5G services to regional and remote parts of Australia, and with plans to deliver 5G place based services to campuses, ports, utilities, and manufacturing facilities in metro areas, Pivotel is pleased to contribute to the policy settings regarding expiring spectrum licences.

Pivotel Response

Pivotel is very encouraged by the Ministerial Policy Statement (MPS) on Expiring Spectrum Licences (ESL) being:

- Supporting service continuity for end users, particularly where no alternative service is available
- Opportunities for new entrants and use cases, including for low earth orbit satellites (LEOsats)
- Connectivity and investment in regional areas to deliver improved services to end users
- Promote competition
- Capacity for sustained investment and innovation.

Spectrum is an essential input for a competitive and thriving market. Encouraging competition through access to suitable spectrum will promote innovative products and services creating a conducive environment for Australia to take advantage of the social and economic benefits of a digitally connected society.

Crucial to the renewal of spectrum licences is the public interest test applied by the ACMA which is “designed to ensure that spectrum is used efficiently, by preventing it from being locked up in uses that no longer offer the highest value or the maximum public benefit. It is a tool for us to analyse the potential benefits that renewal of a licence may offer to the long-term public interest, consistent with the object of the Act”.¹ Whilst the public interest test is somewhat of a subjective test it is an important overriding test that should be consistently applied to ensure spectrum isn’t ‘locked up’ where it doesn’t meet the Highest Value Use (HVVU) principle.

Traditional approaches to allocating spectrum in Australia have been through auctioning long-term spectrum licences where the spectrum is allocated to the highest bidder with very limited ability for innovative alternative providers to acquire appropriate spectrum to deliver targeted solutions for specific use cases.

Pivotel has consistently advocated for a combination of spectrum licences for more populous urban areas, complemented by local Area Wide Licences (AWL) to facilitate ‘private’ networks around ports, manufacturing facilities and industrial parks. Such a mix of spectrum and Area Wide Licences (AWLs) will help facilitate a dynamic, innovative and competitive urban marketplace. In addition, Pivotel has advocated for apparatus licensing for regional and remote Australia, as opposed to a blanket national spectrum licence approach. Pivotel’s view is that such a dynamic and flexible approach is necessary to recognise the different needs and characteristics of Australia’s unique and geographically dispersed population. It is pleasing to see this approach being adopted through AWLs in recent spectrum allocation processes for mid-band and high-band spectrum.

Unfortunately, and importantly however, there remains a significant gap with regards to low band spectrum (i.e. < 1 GHz), which has traditionally been spectrum licenced for longer terms, typically 20 years, some of which are now coming up for expiry in the 700MHz and 850MHz ranges. Pivotel was a participant in the 850-900 MHz auction in December 2021 where it bid substantial sums to attempt to acquire 2 * 10MHz of regional spectrum. Unfortunately, due to the structure of the lots being

¹ ACMA, **Our approach to radiocommunications licensing and allocation**, Implementing the *Radiocommunications Legislation Amendment (Reform and Modernisation) Act 2020*, MARCH 2021, page 25.

auctioned and the 20-year licencing approach, Pivotel was outbid by the ultimate spectrum holders



This

spectrum is now licenced for a 20-year term ending in 2044.

Pivotel's experience during the 850 MHz spectrum licence auction, was that the process left no room for new entrants to secure regional and remote spectrum. Limiting the ability of smaller more innovative providers to acquire this spectrum limits competition and stifles opportunity for new entrants, thus discouraging deployment of communication infrastructure in regional and remote areas while the spectrum ends up being poorly utilised (i.e., low productive efficiency).

Low-band spectrum is essential to deploy cost-effective and fit for purpose solutions in regional and remote Australia but is not available via an Area Wide Licence (AWL) mechanism. For three decades, the national MNOs have held low band spectrum licences, and yet there remains a vast gap in fulfilling the communication needs of regional and remote Australia. LEO satellite solutions are evolving and will help to close the gap, however, there remains an ongoing requirement for high mobility (indoor-outdoor), low latency and reliable communication that satellite services are unable to offer. Furthermore, the long-term sustainability of new LEO constellation providers is yet to be proven. Therefore, access to low-band IMT spectrum for smaller, innovative, new entrants should be an important consideration under the ESL process.

Whilst it is acknowledged that existing spectrum holders and users thereof, have an ongoing requirement to the use of that spectrum, Pivotel's view is this should only apply in areas where the spectrum is being utilised and where the Highest Value Use (HVVU) is being applied. Where the spectrum is not being utilised, it should be made available to alternative users under either the 'Use it or Lose it' (UIOLI) or 'Use it or Share it' (UIOSI) principles.

This service continuity requirement is acknowledged in the Minister's statements, however, it is pleasing to see the Minister also acknowledge the requirement to support new entrants and use cases, enhancing investment and connectivity to bridge the digital divide in regional Australia, promoting competition and supporting investment and innovation. It is through enabling alternative providers in addition to the three large national incumbent MNOs that a truly diverse, competitive, and innovative environment can be created to support and deliver against these additional statements.

To provide some additional context, Pivotel does support incumbent spectrum licence holders to have first rights to spectrum licences in areas where they have existing (and demonstrated planned) mobile coverage. That is where incumbent operators are generating value from their spectrum holdings and is the border at which they have effectively ceased extending their coverage without some form of government subsidy. Under the expiring spectrum licence policy framework areas outside of these existing coverage areas should be open to existing incumbents and other new providers via AWLs to deliver more targeted and innovative approaches, which are better suited to service these low-population density areas and more unique locations.

This approach would still meet the objective of protecting incumbent licensees' right to unencumbered spectrum, with the proposed approach being to issue AWLs in parts of the reallocated spectrum.

Other items for consideration

Spectrum squatting

Pivotel would like to ensure there are adequate protections against spectrum hoarding and squatting to avoid spectrum being held but not utilised. For example, where a licence holder has been issued with spectrum, but evidence shows that it has not been used or planned to be used, the ACMA should have the discretion to review the licence with the ability to withdraw and re-allocate spectrum where appropriate.

Neutral Host

To make the deployment of infrastructure more affordable in rural and remote regions, active network sharing is becoming increasingly popular via a neutral host model or active radio sharing such as Multi Operator Core Network (MOCN) or Multi Operator Radio Access Network (MORAN) models. Neutral host approaches are increasingly being considered through government co-funding programs as it's a far more cost effective and rational approach to fund regional coverage expansion on a shared basis, however, this approach is only viable where the host can access relevant spectrum.

As a part of future band reviews, the ACMA could consider establishing a framework that supports setting aside of low-band spectrum for neutral host requirements. This approach is likely to encourage investment towards reducing designated Black Spots e.g., national parks, roads and tourist spots having weak or no coverage.

PSMB FDD 850 MHz Spectrum

5MHz of FDD 850 MHz spectrum has been set aside for PSMB safety and emergency services, however, due to the lack of device support of this band, the spectrum remains unutilised. This spectrum could be made available more broadly to industry and entice the User Terminal Suppliers and Radio Network Vendors to become more interested in supporting the band by creating products that support the Band due to the increased demand. Base stations could be shared through neutral host arrangements using MOCN and emergency traffic could be prioritised over regular traffic, thus safeguarding the prime objective of the band.

Underground mines

Recognising the substantial isolation of (local area) underground mines from the spectrum-licensed (wide area) footprint above ground, it's prudent to explore enabling the utilisation of spectrum-licensed bands for such private use cases via coordinated approaches like AWL (Area Wide Licensing) or Apparatus Licensing mechanisms.

For any questions concerning this response please contact:

[REDACTED]

[REDACTED]

[REDACTED]

Pivotel Group Pty Limited