

# Expiring Spectrum Licences

**Stage 2 Presentation to the ACMA**

31 July 2024

# The ESL process is critical to the future of Australia's mobile sector

## 1. Changes to existing frameworks risks damage to Australia

- The ESL process will determine the future market structure of Australia's mobile sector – changes to market structure should be based on evidence.
- We are unaware of anything that is being asked for that the market has not already delivered or is incapable of delivering
  - There is no unmet demand that requires regulatory intervention in the ESLs.
  - Changes to ESL arrangements should be to address identified market failures, based on evidence – none exists.

## 2. Any case for change must demonstrate very high public benefits

- Mobile services deliver billions of dollars of economic activity each year; any change must demonstrate even greater economic benefits
- The ACMA should interrogate any claims, particularly without clear supporting evidence, that there is a failure in the market to access spectrum.
- We reiterate that approaches to examining use should reflect the realities of network planning and deployment.

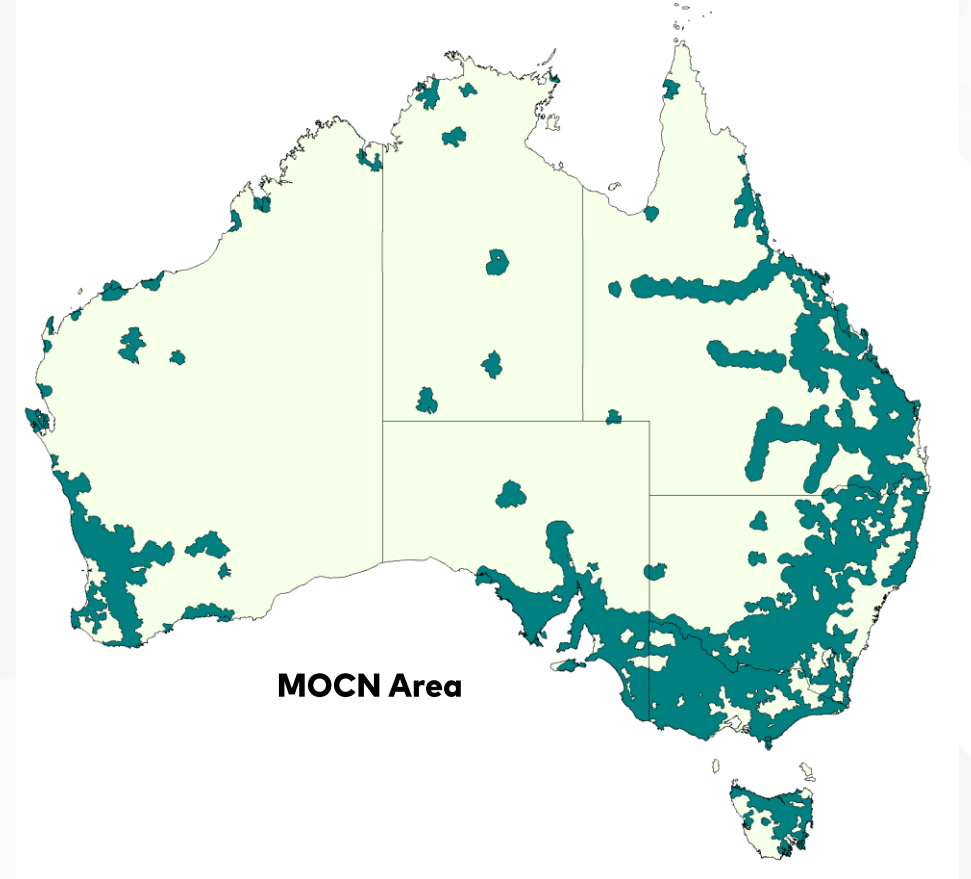
## 3. Burden of proof lies with those who advocate for change

## 4. Pricing transparency is needed for planning

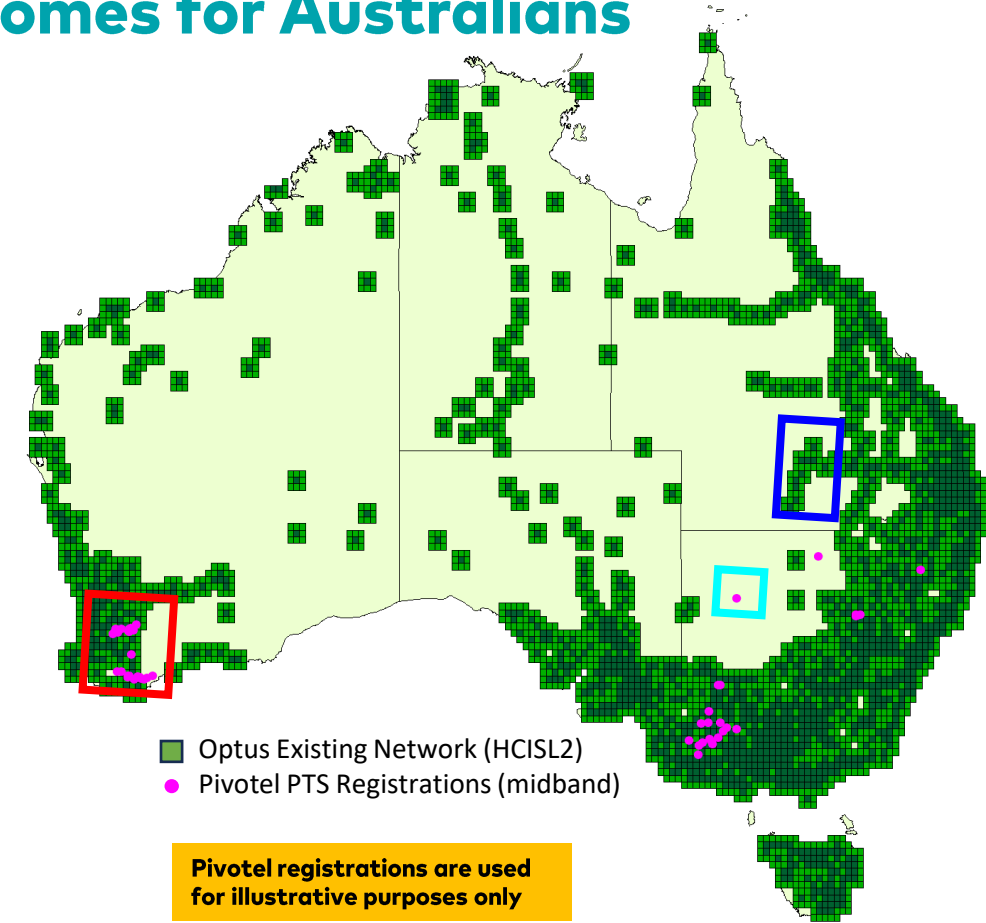
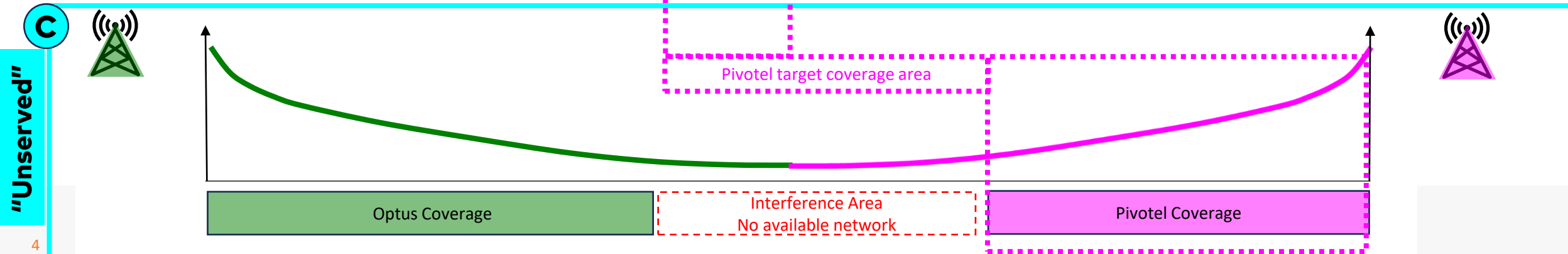
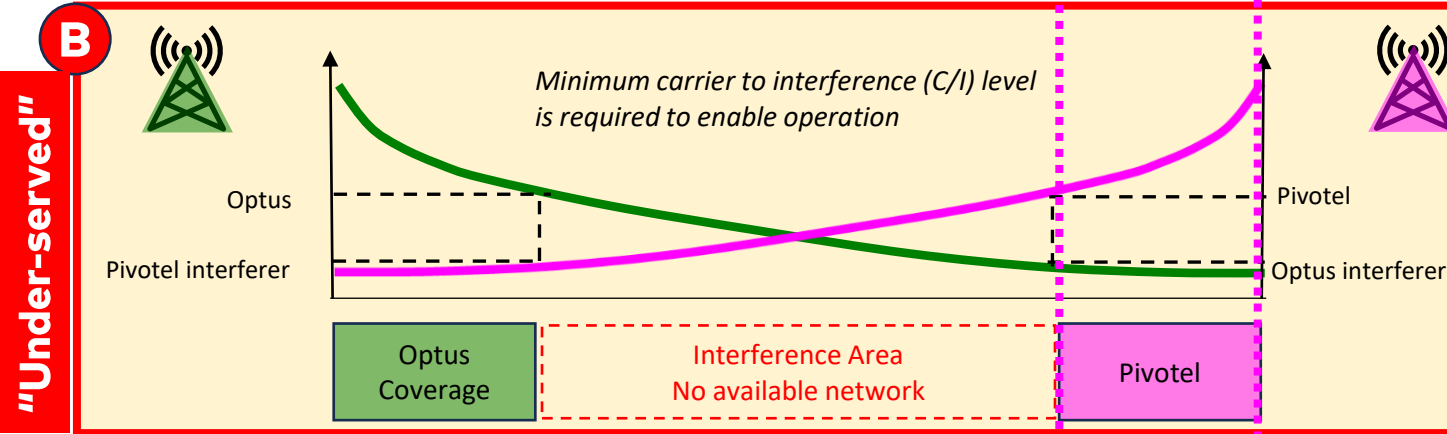
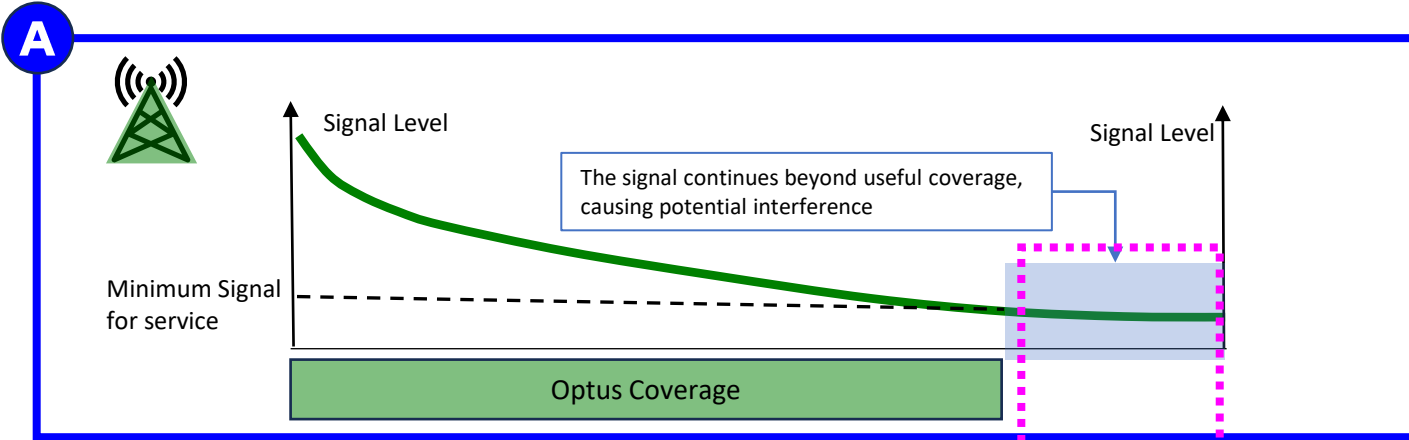
- On pricing, Optus considers that transparency as to the methodology used to value ESL spectrum is essential.
- We would welcome insight as whether the ACMA intends to publish an outcomes paper and/or consult again on its preferred approach to valuation and pricing before Stage 3.

# ESL renewal is required to deliver competitive 5G to regional Australia via the Optus/TPG MOCN

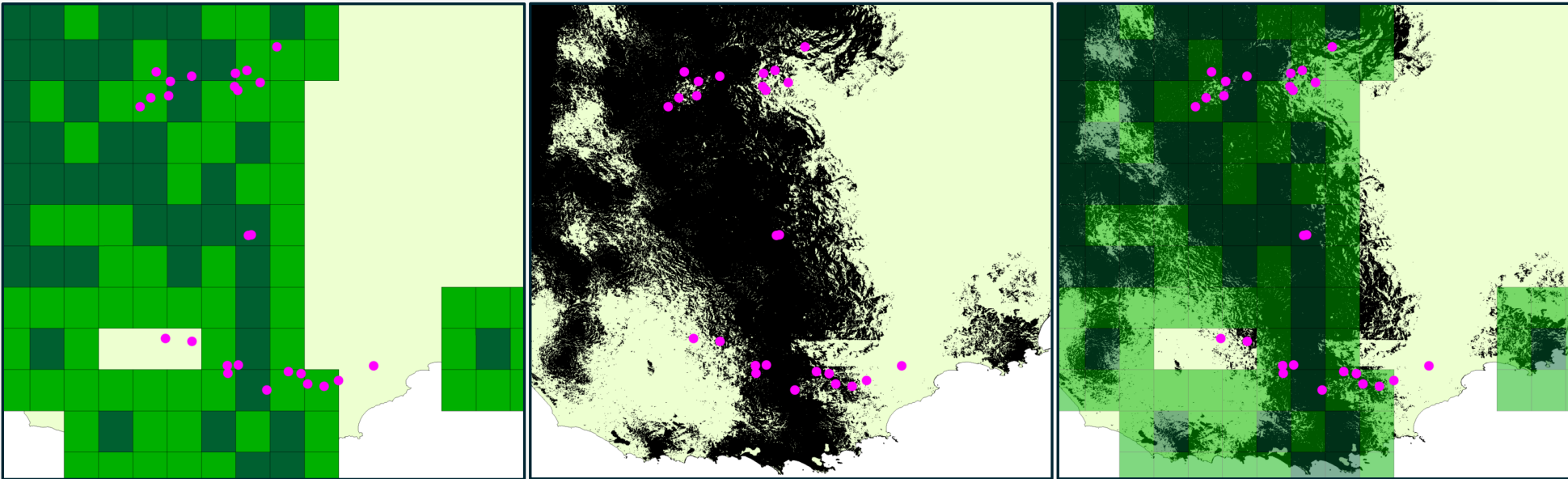
- The MOCN will facilitate sustainable competition to Telstra in the areas of the MOCN network.
- ESL spectrum used for the MOCN needs to be renewed to enable Optus to fast track the number of 5G sites in the regional MOCN to 2,444 by the end of 2030 and to continue to supply 5G services in the MOCN area beyond that date.
  - The combined spectrum holdings of Optus and TPG are what allows this to happen.
  - Neither Optus or TPG alone can compete with Telstra based on spectrum holdings and therefore user experience or data rates.
  - Telstra continue to hold as much or more mid-band spectrum than the combined holdings of Optus and TPG in the MOCN area.
- Access to spectrum beyond the MOCN area is essential for further network expansion, including bespoke local area use cases and the enablement of LEO satellite DTM.



# Low band carveout scenarios result in poor outcomes for Australians



# "Under-served" and "unserved" areas are immediately adjacent to existing networks – spillover effects will undermine public network performance



Pivotal registrations are used for illustrative purposes only

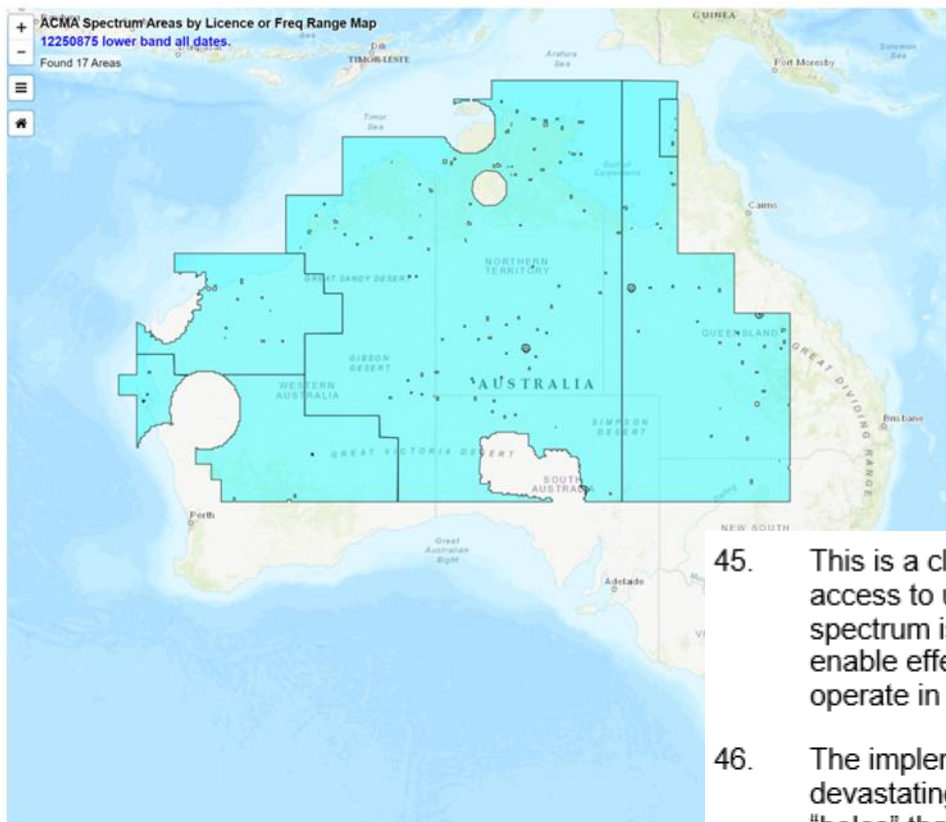
- Optus L7 Coverage -115dBm
- Optus Existing Network (HCISL2)
- Pivotal PTS Registrations (mid band)

**There are no good places to impose retrospective licence boundaries**

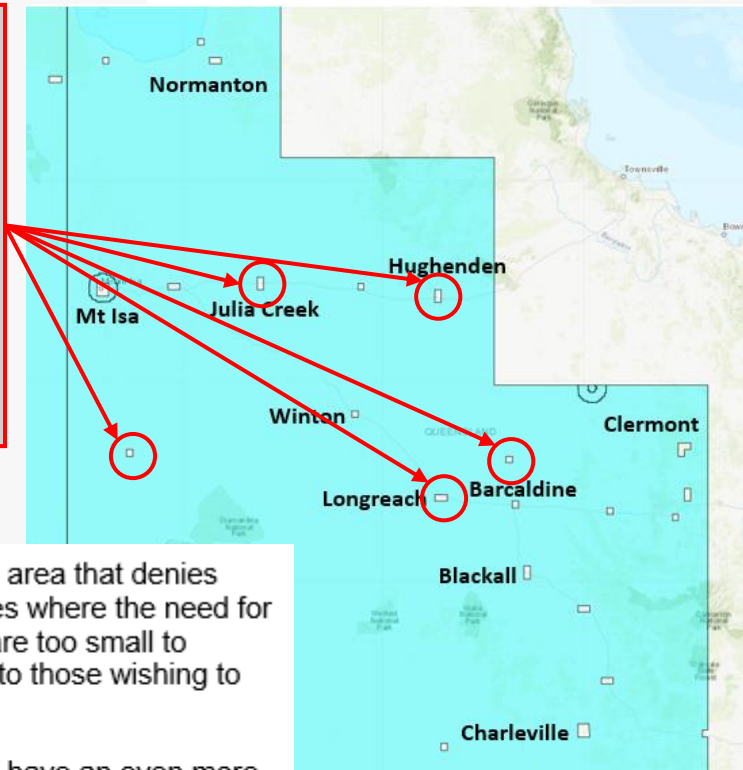
- MNOs have considerable industry experience in managing spectrum and interference to their public networks. Smaller operators lack this experience.
  - Prospective licensee proposals would result in the underutilisation of spectrum that they criticise MNOs for, as is illustrated by Pivotal's approach to 3.8GHz AWLs and the resultant spectrum denial from their boundaries <sup>1</sup>

- Spectrum coveted by prospective licensees will deliver public detriment, not public benefit
  - Prospective licensees would fail the device boundary criterion in the areas they are interested in
  - Interference into current networks will reduce service availability and user experience due to interference
- The main use case of private networks offers no public service, benefit or emergency calls <sup>2</sup>

# Pivotel's AWLs in the 3.8GHz band



- **All registrations in these areas**, other than if Pivotel purchase an AWL, **will fail DBC.**
- The **spectrum** in the highest density regions (towns) is **denied to all other users.**
- The **spectrum is denied to all others**, regardless of demand.
- **A similar result** for ESLs would be **catastrophic for incumbent low band licensees.**



45. This is a clear illustration of an acquisition of spectrum in a regional area that denies access to up to 80MHz of spectrum in the highest population centres where the need for spectrum is likely to be greatest. The "holes" in the spectrum map are too small to enable effective coordination, meaning that services will be denied to those wishing to operate in those smaller centres.
46. The implementation of an AWL regime in low band spectrum would have an even more devastating effect by preventing access to mobile services altogether in much larger "holes" than those present in Pivotel's 3.4GHz AWLs. This is because low band spectrum, with its substantially more favourable propagation characteristics and associated interference, will be susceptible to harmful interference over much greater distances than mid-band spectrum. On this evidence alone, the ACMA has sufficient reason to reject the use of AWLs in low band.



# The secondary market is operating as intended, but low band trading is largely untested

**Not testing a market does not constitute market failure, nor does it require regulatory intervention: the current regulatory framework already supports third party access**

## MOCN spectrum sharing

- Our MOCN agreement promotes the efficient use of spectrum and cost-effective network deployment in regional Australia.
- Our MOCN agreement will enable Optus to deliver a 5G network in regional areas (98.4% pop and 2,444 sites) for Optus and TPG customers by the end of 2030.
- Spectrum sharing under our MOCN agreement will help mitigate the significant spectrum advantage that Telstra holds in regional Australia – thereby promoting competition.
- Renewal of our ESL spectrum is needed to deliver these benefits for regional Australia.
- Telstra's version of UIOLI would have the effect of delivering the same outcome as their rejected MOCN proposal with TPG would have delivered: namely a greater concentration of spectrum under Telstra's control.
- Our MOCN agreement preserves TPG's discretion to use its spectrum outside the MOCN area, unlike the rejected TLS/TPG MOCN.

## Satellite DTM

- DTM promotes the use of national FDD spectrum in previously unserved areas – extending terrestrial coverage.
- DTM hints at the potential of a **"single network future"** of seamless connectivity between terrestrial and non-terrestrial networks (as 3GPP standards develop).
- Viable and competitive LEO services require MNOs to have national FDD spectrum licences
- Current spectrum licencing arrangements are crucial to facilitating such agreements – and are attractive to NGSO operators due to potentially lower administrative burden.
- Carving up national spectrum licences will potentially destroy any LEO services market
  - The same is true of converting spectrum licences to apparatus licences (AWL or other)
- LEO DTM services are nascent so firm commitments on user experience and functionality are unavailable
- ESL spectrum beyond the MOCN coverage area will be required for Optus to compete and continue to innovate in the supply of these services.

## Existing arrangements enable sharing and efficient outcomes

- While the market is thin this doesn't mean it is inefficient – high value assets do not typically trade with high frequency.
- Three largely overlapping national holdings mean that there is a competitive market for spectrum. Optus is unaware of any evidence that licence holders are preventing access to spectrum.
- Existing ACMA rules support trading of "one or more whole standard trading units" of an ESL, which corresponds to an area of 9km x 9km – i.e., sufficiently small to support local area use cases.
- MNOs have strong incentives to monetise unused spectrum.
- **The secondary market for low band spectrum is, to the best of Optus' knowledge, untested**
- The procedure outlined in the OmniTouch submission can be achieved by using existing secondary market mechanisms and requires no regulatory intervention

**Thank you**