Submission in response to Issues Paper

Regional Telecommunications Review

Public Version

July 2024

EXECUTIVE SUMMARY

1. Optus welcomes the opportunity to provide a submission to the 2024 Regional Telecommunications Independent Review Issues Paper (the Issues Paper). These reviews provide important insight into the telecommunications needs of regional, rural and remote Australians and help examine the effectiveness of existing policies settings.

2. The Committee seeks feedback and proposed solutions to a wide range of issues relating to the availability, accessibility, affordability and reliability of telecommunications services. The Inquiry takes place in the context of a broader Government work program to bridge the Digital Divide and Close the Gap.[1] Optus has made submissions to those inquiries and refers the Committee to them for further information.[2] The focus of this submission is on regional mobile networks and services and recent Optus initiatives.

3. Mobile services are increasingly recognised as essential to Australians. Reliable services and resilient networks are necessary to ensure connectivity is accessible when needed. However, the network investment required to deliver high quality networks and services in parts of regional Australia can be challenging. Generally, the more remote and the lower the population density, the more marginal the network investment case.

4. While government and regulators increasingly characterise the mobile industry as an essential service, the economics of the industry is far below that of an essential infrastructure industry. For example, the regulated rate of return for NBN Co is more than three times higher than the current return on capital for Optus. This has been compounded by Government security decisions that delayed and increased the cost of regional mobile networks. Discussions around the essential nature of mobile service should also include discussions on how revenue can grow to support the expectations around essential provision of services.

5. However, "despite ongoing challenges, new opportunities are emerging in regional Australian telecommunications".[3] Market driven solutions, such as our Multi-Operator Core Network (MOCN) agreement with TPG Telecomm (TPG), along with advances in LEOSat technology and deployment, promise to deliver improved service quality and network resilience for the long-term benefit of regional and remote Australians. Optus remains the only real infrastructure-based competition to Telstra outside of metro areas. As Australia's only dual national mobile and satellite network operator, Optus is well placed to understand how terrestrial and non-terrestrial radio networks can complement each other to deliver Australia's communications needs.

6. Private investment, coupled with targeted Government co-contribution and programs to support uptake and awareness of new services, represents the most effective means of meeting regional Australians communications needs over the long term. Striking the right balance is challenging, with some legacy Government funding programs continuing to distort the market in Telstra's favour and chill competitive investment. Reform or repeal of out of date or duplicative funding schemes must be a key near term priority.

7. There remains a risk that Australia is facing a "digital investment gap" due to long term declines in returns on invested capital (ROIC) and the high levels of investment required

[1] ACCC, Regional Mobile Infrastructure Inquiry, Final Report, 30 June 2024 and Connecting the country: Mission critical – Inquiry into co-investment in multi-carrier regional mobile infrastructure; House of Representatives, Standing Committee on Communications and the Arts; November 2023

[2] We also refer to our recent submission to Stage 2 of the ACMA's Expiring Spectrum Licences Process

[3] Issues Paper, p.6

to densify 5G networks and meet growing community expectations.[4] Delivering essential mobile services across Australia means avoiding inefficient costs on industry, including for spectrum renewal. Carving up spectrum licences to support speculative new entry risks undermining continuity of existing services. The long-term sustainability of a competitive mobile sector is crucial to regional Australia's development and digital future.

8. Optus sets out our response to the Issues Paper below, focussing on the general themes raised and encouraging the Government to implement a reset of approaches to deployment, spectrum pricing and co-investment for the long term benefit of regional Australia.

[4] REPORT: State of the Australian Telecommunications Industry - Venture Insights; 13 June 2023

INVESTMENT AND INNOVATION REMAINS KEY TO REALISING REGIONAL CONNECTIVITY GOALS

9. There has undoubtedly been significant improvement in telecommunications services in regional, rural and remote areas over the last decade. Optus' typically invest over $1.5 billion a year in our mobile network and we have a long-standing commitment to regional investment.[5] This investment has helped deliver competition to rural and remote Australia – often giving regional consumers choice in their provider for the very first time.

10. Optus continues to deploy its 5G network across Australia.[6] Our MOCN sharing deal with TPG will help us to accelerate our 5G deployment in regional Australia, fast-tracking the number of 5G sites in the MOCN area to 1500 sites by 2028 and 2444 sites by the end of 2030.[7] TPG will gain access to these sites increasing its current national 4G coverage from around 400,000 km^2 to around 1,000,000 km^2.

11. This network will be used by both Optus and TPG to better compete with Telstra and to compete with each other, delivering enhanced 5G competition for the long-term benefit of Australians. Unlike the proposed Telstra/TPG MOCN proposal rejected by the Competition Tribunal, our agreement preserves TPG's discretion to monetise its spectrum outside the MOCN area, thereby supporting market access and entry.

12. Our MOCN agreement highlights that the right form of network sharing can help overcome the barriers to competitive infrastructure-based competition in regional Australia. By sharing spectrum, our agreement will enable cost reductions and improved efficiencies for Optus network deployment. It will incentivise investment including by exerting greater competitive pressure on Telstra over the longer term. A second 5G network will also enhance regional network resilience in times of emergency.

Reliable and resilient communications networks in regional areas are essential

13. Optus continues to investigate and implement measures it can take to improve the resilience and availability of its services during and after natural disasters/emergencies. The industry has invested heavily in ensuring sites, particularly those in vulnerable areas, are made to be as resilient as possible. This has included increased back up battery power, transient generators, cells on wheels (COWs) and other temporary facilities such as Satellite COWs (SATCOWs). Some of these efforts have also been supported by the Federal Government's Mobile Network Hardening Program (MNHP).

14. Power outages remain the main reason mobile services are disrupted in some emergency situations caused by natural disasters, particularly the fires and floods experienced in NSW and VIC in recent years. The industry has pushed for greater transparency and engagement with power companies as it is critical that our network facilities are prioritised for access to mains power so that we are able to reconnect customers, households, and businesses as quickly as possible, when it matters most. Optus will continue to work with all stakeholders to investigate and implement measures that support availability and resilience of our services in times of natural disaster.

---

[5] https://www.optus.com.au/about/media-centre/media-releases/2017/07/optus-to-invest-1-billion-to-improve-regional-mobile-coverage

[6] As at March 2024, Optus has a total of 4273 5G enabled sites, with 3511 of these being macro sites.

[7] The MOCN coverage area covers approx. 17% of the population – from 81.5% to 98.5%) TPG Telecom and Optus sign network sharing agreement marking new era of mobile services for regional Australia

CO-INVESTMENT REFORM IS NEEDED TO OVERCOME THE EFFECTS OF TELSTRA'S LEGACY ADVANTAGES

15. The Australian market is unique globally in that the incumbent dominant MNO holds more than a 1 million km^2 geographical coverage advantage over its nearest rival. This coverage advantage is the result of legacy network funded by the Australian public. Telstra's legacy network advantages have provided it with a significant first mover advantage across most generations of mobile technology, including 5G. Telstra's enduring advantage in these areas also undermines other MNOs incentives to invest.[8]

16. Understandably Telstra defends its coverage advantage – it is a point of competitive differentiation it can use for marketing. Telstra's defence of its legacy advantage is evidenced by the fact that it does not offer full network access to all its wholesale partners. Telstra's wholesale network covers 98.8% of the population, around one million square kilometres less than its retail coverage.[9] This is also the full extent of access that Telstra offered to TPG under their proposed MOCN deal.

17. Government funding programs have historically focused on funding "new" coverage. Given Telstra's existing coverage advantage, this approach implicitly favours Telstra and undermines competitive investment. Numerous rounds of the Mobile Black Spot Program (MBSP) show that Telstra win by far the lion's share of funding.[10] Optus reiterate calls for a strategic reset in the design of any future MBSP, Regional Connectivity Plan (RCP) and other schemes to ensure a level playing field in access to funds which should be redirected to funding "improved" services rather than "new" coverage.[11]

Repeal the USO to encourage greater competitive investment

18. Optus' views on the out-of-date Universal Service Obligation (USO) framework are well documented.[12] While the USO has provide an important safety net, the need for regulatory driven delivery of basic voice services, is now, and has been for some time, the exception rather than a universal rule. The market and technological advances, particularly in satellite, are enabling new services of far superior quality to Telstra's copper based standard telephone service (STS). The $270 million in annual funding for Telstra to meet its own obligations takes capital away from alternative solutions. The Government should set out a plan for how and when it will repeal the USO.

19. To this end, Optus considers that there are services for which the USO and attendant funding requirements should be repealed now – for example, the approximately 14,500 payphones towards which Telstra receives $40 million of annual subsidy. If payphones are to be maintained for public interest reasons they should be funded by the Government as a non-profit community service. To support migration off copper, funding could be redirected to provide demand side support for the wider adoption of new technologies.

[8] ACCC Regional Mobile Inquiry

[9] Telstra vs. Boost vs. Belong vs. ALDI Mobile coverage and others | WhistleOut

[10] See for example, Mobile Black Spot Program—Improving Mobile Coverage Round Target Location Outcomes | Department of Infrastructure, Transport, Regional Development, Communications and the Arts

[11] Optus submission to the Inquiry into co-investment in multi-carrier regional mobile phone infrastructure; April 2023; para 22 to 23; p.5

[12] Optus submission to the Department's consultation on "Better delivery of universal service"; March 2024

20. History has shown that where infrastructure competition is weak the dominance of Telstra grows and outcomes for consumers are poorer. In reviewing public funding, the Government should ensure funding decisions in regional connectivity, particularly outside Optus network footprint is directed at overcoming the distortionary effects of Telstra's legacy network advantages. Such an approach would be consistent with an "integrated and coordinated framework for regional development regardless of a region's economic circumstances".[13]

Satellite services will underpin a multi-pronged approach to connectivity in remote areas

21. The area outside of Optus network coverage (i.e that captures the Telstra only coverage area and beyond) clearly presents a more challenging investment case for competitive mobile network deployment. Indeed, there are remote areas of Australia that are unlikely to ever have terrestrial mobile coverage, including from Telstra.[14]

22. Satellite services have long offered the potential of "ubiquitous coverage". There is significant technological innovation taking place in the sector, largely driven by the rapid expansion of non-geostationary satellite orbit (NGSO) systems. The lower latency of these Low Earth Orbit (LEOSat) solutions opens up new service opportunities, particularly in the consumer market. Even without regulated service guarantees and relatively high-priced retail offerings, the rapid take-up of Starlink services is clear evidence of regional Australians willingness to pay for USO alternatives.[15]

23. The potential benefits for remote Australia have been recognised by the Government.[16] Optus encourages support for satellite services as a complement to terrestrial mobile networks. Our collaboration with SpaceX highlights the potential of LEOSat services to help meet the Government's communications policy objectives, particularly for remote Australia. The satellite direct to mobile (DTM) opportunity will require MNO's to have access to national Frequency Division Duplex (FDD) spectrum.

24. The international nature of satellite systems means that Australian satellite DTM services are also dependent on decisions by overseas administrative bodies, such as the US Federal Communications Commission (FCC). Optus notes the Government's ongoing consideration of whether the existing regulatory regime is fit for the purpose of LEOSats and urges it to ensure that the regime continues to promote competition and investment.

Existing Geostationary Earth Orbit (GEO) satellites can deliver reliable and quality services

25. As a leading satellite service provider in Australia, Optus understands the increasing role that satellite can play in addressing Australia's connectivity needs and in helping to "Close the Gap". While LEOSat solutions such as Optus and SpaceX collaboration have captured the public attention, satellite systems of all configurations (GEO, MEO and LEO) have a role to play in "plugging gaps" in terrestrial connectivity.

26. Optus is the only provider in Australia to own and operate its own fleet of (five GEO) satellites, providing a number of critical and sovereign satellite services to millions of Australians. GEO satellites can provide reliable voice services across the country as demonstrated by Optus during the Government's AVST. Further, despite higher

[13] Regional Investment Framework, May 2023 Regional Investment Framework: the Australian Government's approach to supporting strong and sustainable regions (infrastructure.gov.au)

[14] 'Difficult terrain and low population density means there will always be large parts of Australia's land mass that will not get terrestrial based mobile coverage, even with co-funding initiatives.' See Telstra's submission to the Inquiry into Co-Investment in Multi-carrier Regional Mobile infrastructure

[15] Elon Musk's Starlink has charged past the NBN's number of (afr.com)

[16] Low Earth Orbit Satellite Working Group – 2023 Chair's Report January 2024

latencies than LEOSats. GEO satellites can also provide the speeds and capacity that outperform existing universal services. Optus's future launch of the multi-band (Ka/Ku/QV bands) Optus-11 GSO satellite will deliver a new reliable high-capacity broadcast/broadband service that will cater to a wide range of market demand nationally.

ESSENTIAL MOBILE SERVICES REQUIRE A SUSTAINABLE MOBILE SECTOR

27. Digital connectivity is essential for regional people to participate economically, access services and stay connected.[17] Access to many vital services relies on mobile networks, including emergency services, banking, and everyday work. Reliability and service performance is particularly crucial where there is no alternative services. Mobile services are predicted to deliver $37 billion in annual GDP by 2030.[18]

28. However, the mobile sector is facing serious financial pressure, raising the real prospect of a "digital investment gap". ACCC data shows that between 2014 and 2022 retail mobile prices in Australia declined by 79% in real terms.[19] With long term declines in revenue, industry returns on invested capital (ROIC) are now below the cost of capital.[20] Industry analysts have stated Optus' ROIC at 1.7%, materially below the cost of capital. Improving access, affordability, reliability and redundancy of telecommunications for regional areas requires a financially sustainable mobile sector.[21]

29. Optus notes that some advocates and regulators are insisting mobile services should be regarded as essential. While claims around essential services are often reflected in calls for more regulatory intervention in the supply of services; there seems less focus on other aspects of providers of essential services – namely guaranteed regulated returns. Other essential utilities – electricity, gas, water, rail, ports – are regulated entities with regulated rates of return. With these regulated returns comes regulated terms of access and regulated levels of services.

30. If mobile services are treated by government and regulators as an essential service, then the financial returns of the industry must also reflect that of essential utilities. This will have impacts on the price level of mobile services and/or the level of investment. For example, the regulated rate of return for NBN Co sits around 7.7%.[22] This can be compared to Optus' current ROIC at 1.7% and TPG Telecomm's ROIC at 4.6%. Realigning ROIC to the levels expected of essential service providers requires revenue growth from customers or other new sources.

31. Advocates of regulating mobile services with essential service obligations typically do not extend the analysis to the financial implications of such outcomes; namely, significant price increases. Yet these two outcomes go hand in hand. Discussions around the essential nature of mobile service should also include discussions on how revenue can grow to support the expectations around essential provision of services.

[17] Issues Paper, p.6; see also ACMA calls on telcos to improve support for customers in hardship | ACMA
[18] Optus 5G Impact Report and PwC's Productivity Insights 2020: Recent productivity trends
[19] See ACCC Communications Market Reports and page 38 of Coleago's "ESL Pricing Paper", dated 15 March 2024
[20] Choi, Eric & Annie Zhu; Barrenjoey; "Will Singtel sell a partial stake in Optus?"; Equity Research update, Sector Report, Telecommunications Services; 14 March 2024, p.2
[21] See further Optus submission to Stage 2 of ACMA ESL process; June 2024
[22] Frontier Economics, 2023, Return on capital and inflation; Prepared for and in collaboration with NBN Co | 7 December 2022.

Policy decisions influences the future viability of the industry

32. The Australian mobile sector is characterised by high fixed cost investment and low variable costs. In addition to billions of dollars of annual investment in infrastructure and equipment, the annual cost of spectrum to industry has grown from $241 million in 2015 to $818 million in 2024.[23] Few, if any industry sectors pay such sizeable upfront licence fees with no link to future revenue, cost savings or profits generated from those licences.

33. Spectrum licence fees are a significant fixed cost for mobile operators and this cost, including the cost of capital for the initial and ongoing investment, has to be recovered over the life of the licence/s for a sustainable industry. Absent retail price increases for services – which may have a knock-on effect on acquisition and retention of customers – MNOs have limited options to reduce tangible capital expenditure. The ACMA's expiring spectrum licences (ESL) process provides an opportunity to reduce spectrum costs and realise greater network investment and wider public benefit.

34. Other Government policy decisions such as the security decision to ban Huawei equipment from being used in 5G networks have also materially impacted the financial health of the industry. As noted by the Competition Tribunal, Optus and TPG face significant commercial impediments in the rollout of their 5G networks, particularly in regional areas. Most significantly, Optus and TPG face additional costs in upgrading their networks to 5G by reason of the TSSR guidance and the need to replace exiting Huawei equipment.[24]

35. Optus submits that Government decisions should support competitive investment in regional Australia rather than imposing cost impediments which delays and limits the scope of regional investment.

Sufficient certainty of access to spectrum and land will support network investment

36. The ACMA is currently reviewing whether existing arrangements for use of spectrum under a set of expiring spectrum licences (ESLs) MNOs use to supply mobile services continue to promote the public interest. Optus notes that while the Government recognises telecommunications as essential, the ESL process makes no reference to the essential nature of mobile services and there remains no presumption of renewal. In Optus view a refusal to renew our ESLs will undermine continuity of service and further complicate the regional network investment case.

37. We note the view expressed by the Australian Broadband Advisory Council (ABAC) that national MNOs business models mean that they cannot solve "local connectivity problems" in regional Australia.[25] However, carving up regional spectrum holdings, particularly low band, to support speculative new entry will create interference risks that will undermine service quality and increase deployment costs for MNOs supplying essential public networks and services to Australian communities.

38. The ACMA has recently made alternative spectrum available for Wi-FI in the lower 6GHz band and for local area private networks in the 3.8GHz band. Spectrum is also only one among a number of barriers to entry to the mobile market and there are existing mechanisms of spectrum access available to access seekers – however, in Optus experience, these are not being utilised by prospective local area operators.[26]

[23] Amortisation of spectrum licence payments

[24] Applications by Telstra Corporation Limited and TPG Telecom Limited (No 2) [2023] ACompT 2 [665]

[25] Australian Broadband Advisory Council, Agri-tech Expert Working Group report, June 2021, p. 5

[26] Applications by Telstra Corporation Limited and TPG Telecom Limited (No 2) [2023] ACompT 2 [335]

39. Renewal of Optus' ESL spectrum at a nominal low price will enable Optus to continue to provide, maintain and invest in essential mobile networks and services in regional Australia. A lack of certainty about spectrum renewal and/or too high a renewal price, risks continuity of service, network resilience, lower productivity and economic competitiveness, lower levels of innovation and a slower energy transition.

40. Similarly, industry has for some time raised concerns about physical access to land and site approvals as an impediment to timely network deployment. Our concerns relate to both (i) access to land with appropriate tenure, including rent levels; and (ii) planning approvals for construction. While there is an expectation that telecommunications services are an essential service, like electricity, water or gas; telecommunications carriers like Optus do not have the same corresponding rights to install infrastructure.

41. Access to and tenure on crown land and council approval processes remain the largest barrier to physical deployment of telecommunications 5G infrastructure. Fundamentally, it is Optus' view that some local government and state authorities do not view telecommunications companies as infrastructure partners providing an essential service, but instead as revenue generating opportunities. This is unsustainable.

42. Reform of land access and planning arrangements to ensure MNOs have sufficient rights and powers to deploy network infrastructure in a timely manner is needed to support the efficient and cost-effective deployment of advanced mobile networks. Optus refers the Inquiry to the valuable work being undertaken by the Australian Mobile Telecommunications Association (AMTA) to deliver these much needed and overdue reforms.[27]

[27] See for example AMTA's submission to the ACCC Regional Mobile Infrastructure Inquiry; 16 May 2023