

Submission to the Select Committee on Regional Australia's Inquiry into Regional Australia

Introduction

On 25 July 2019, the Select Committee on Regional Australia was asked to inquire into and report on matters affecting Regional Australia. The Committee invited interested persons and organisations to make submissions responding to the terms of reference.

Vocus Group Limited (Vocus) is Australia's specialist fibre and network solutions provider, connecting all mainland capitals with Asia. Regionally, Vocus has backhaul fibre connecting most regional centres in Australia. Vocus also operates an extensive and modern network in New Zealand, connecting the country's capitals and most regional centres. In total, the Vocus terrestrial network is c.30,000 route-km of high performance, high availability fibre-optic cable supported by 4,600km of submarine cable connecting Singapore, Indonesia and Australia and 2,100km of submarine cable between Port Hedland and Darwin and connecting offshore oil and gas facilities in the Timor Sea. Vocus owns a portfolio of well-recognised brands catering to enterprise, government, wholesale, small business and residential customers across Australia and New Zealand.

As an active participant in the telecommunications market in regional Australia, Vocus welcomes the opportunity to participate in this inquiry.

Vocus' response to the Committee's Terms of Reference

This response focuses on three aspects of the Committee's Terms of Reference which are relevant to telecommunications issues in regional Australia:

- Examining the effectiveness of existing regional service delivery and development programs;
- Promoting private investment in regional centres and regional infrastructure;
- Identifying the infrastructure requirements for reliable and affordable health, education, transport, telecommunications, clean energy, water and waste in a new settlement of reasonable size, located away from existing infrastructure

We address these issues through the lens of specific Government programs and policies designed to improve telecommunications services in regional Australia.

1. Mobile Black Spot Program

The three points listed above from the Committee's Terms of Reference are of direct relevance to the Government's Mobile Black Spot Program (MBSP).

The MBSP has delivered a substantial increase to mobile coverage in regional Australia. Under the four funding rounds of the program already announced (with applications for funding under the fifth round currently being assessed as of November 2019), the program is scheduled to deliver 1,047 new mobile base stations across Australia.¹

While the MBSP has successfully expanded mobile coverage in regional and remote Australia, it has been less successful at improving mobile competition. Of the 1,047 sites funded to date, three-quarters of those sites are being delivered by a single operator (Telstra), and just 96 (less than 10 per cent) of new towers funded under the program have

¹ <https://www.communications.gov.au/what-we-do/phone/mobile-services-and-coverage/mobile-black-spot-program>

been used by other mobile network operators (MNOs) to co-locate competitive network equipment.²

Vocus submits that the Committee should recommend reforms to the MBSP to improve competitive outcomes under future funding rounds of the program. The Government has committed \$80 million for Round 6 of the program, which is expected to commence after the Round 5 process is complete.

There are a number of reasons why an MNO may decide not to co-locate equipment on new towers funded by the program. However, one key constraint on competition is the prohibitive cost of backhaul (that is, the cost of carrying data from the mobile tower back into the MNO's network, typically done via a microwave backhaul link or fibre optic cable).

High backhaul costs are often a critical factor in an MNO's decision not to co-locate equipment on a mobile tower. Accordingly, Vocus submits that the Committee should consider the merits of separating funding for the tower and backhaul elements of the program. If the program provided for separate tendering for tower and backhaul providers (or required successful bidders for new towers to obtain competitive quotes for backhaul links), the MBSP could inject a new element of competition into funding proposals – potentially lowering costs and improving competition.

By breaking the nexus between the tower and backhaul elements of a proposal for a new mobile site, the MBSP could incentivise bids from open-access, carrier-neutral backhaul providers. A carrier-neutral operator has a commercial incentive to provide backhaul services to as many MNOs as possible on each tower, as it would enjoy economies of scale from having multiple operators' traffic on the backhaul link.

Under the existing MBSP funding model, the successful applicant for a new tower could be incentivised to keep backhaul prices high to reduce the risk of competitive co-location on that tower. A tower operator may decide that the increased coverage advantage they enjoy from being the only operator in that location is greater than the financial benefit they would enjoy from selling tower space and backhaul services to a competitor. A carrier-neutral, open-access backhaul provider would mitigate this issue.

Beyond the backhaul element of the program, the Committee may wish to consider how a carrier-neutral, open-access mobile network solution could also introduce a greater level of competition.

Under the current model, MNOs each provide their own mobile network equipment (Radio Access Network, or RAN, equipment such as antennas and base station units), which can increase costs as new towers must be strong enough to support the co-location of up to three sets of antennas, as well as base stations, power, and backhaul equipment. But as we have seen under previous rounds of the program, the opportunity to co-locate equipment is rarely taken up by competitive MNOs.

An alternative approach is for a wholesale-only operator to build a new tower with one set of RAN equipment which is made available on an open-access basis to all major telcos, removing the duplicative costs of multiple providers installing multiple sets of equipment.

This model has been successful in the UK and New Zealand. For example, the New Zealand Rural Connectivity Group is an independent entity established to build, operate and maintain a new open-access network where each new tower and RAN equipment is shared by the three MNOs. Like the MBSP, the program utilises public funds to expand mobile coverage in non-commercial areas, and the shared model reduces duplicative costs and delivers greater choice of service provider for end-users.

² Department of Communications statement to Senate Estimates, Tuesday, 9 April 2019

2. 5G rollout and bridging the digital divide

Mobile network operators are in the early stages of deploying 5G mobile networks in major metropolitan areas. Given that existing 3G and 4G mobile networks provide coverage to around 99% of the population but only 30% of the landmass, it is likely that people living in regional Australia will be the last to enjoy the benefits of 5G.

There is no 5G without fibre. Unlike 3G and 4G mobile networks, 5G is dependent on having a fibre backhaul link to the antenna. Today, many 3G and 4G mobile towers in regional Australia continue to operate on microwave backhaul links as they are more cost-effective to deploy – but also have far less capacity than fibre. The improvements in speed and capacity offered by 5G will only be available from sites with fibre backhaul. This translates into a significant investment requirement in backhaul infrastructure to support 5G services that will benefit regional Australia.

As discussed in the MBSP example above, Vocus submits that the Committee should consider ways that Government could incentivise investment in regional fibre to unlock the benefits of 5G. Fibre backhaul can be the most expensive element of a business case to deploy a new mobile site, so policy solutions should consider methods to attract as many operators as possible to use a fibre link – which may be Government-subsidised in areas which are unlikely to ever attract investment on a commercial basis. Vocus proposes that a carrier-neutral, open-access model is the most likely means to achieve this goal. Such an approach could be considered as part of reforms to future funding rounds of the MBSP.

3. NBN Co's Fixed Wireless network

NBN Co's Fixed Wireless network is currently available to around 575,000 premises in regional Australia and some 295,000 premises have an active connection, as of November 2019³.

The Fixed Wireless rollout has delivered high-speed broadband to parts of regional Australia which previously may not have had any broadband access. However, the Fixed Wireless network has been subject to ongoing complaints about capacity constraints and slow speeds⁴. There are a number of reasons for capacity constraints on this network, including insufficient backhaul capacity from Fixed Wireless towers back into the broader network.

As the Committee seeks to identify the infrastructure requirements for reliable and affordable telecommunications services in regional Australia, Vocus submits that investing in additional fibre backhaul capacity to NBN Co's Fixed Wireless towers would substantially address capacity issues on the network. In addition, this fibre would also be available to improve mobile network capacity (for example, 72 MBSP sites are co-located on NBN fixed wireless towers⁵ and these mobile services could also benefit from increased backhaul capacity).

4. Universal Service Obligation and the Regional Broadband Scheme

Following the 2015 Regional Telecommunications Review, the Productivity Commission conducted an inquiry into the Telecommunications Universal Service Obligation (USO). The Productivity Commission's report was made public in June 2017, and in response the Government announced long-term plans to develop a Universal Service Guarantee (USG) once certain preconditions had been met, such as the completion of the NBN.

Under the USO contract, Telstra receives an annual payment of \$230 million (GST exclusive) to deliver fixed voice services and \$40 million (GST exclusive) to deliver

³ NBN Weekly Progress Report

⁴ <https://www.abc.net.au/7.30/how-the-%E2%80%98netflix-effect%E2%80%99-killed-the-nbn%E2%80%99s-dream-of/11290920>

⁵ Department of Communications statement to Senate Estimates, Tuesday, 9 April 2019

payphone services. In broad terms, the Commonwealth contributes \$100 million and industry (including Telstra) pays the remainder via the Telecommunications Industry Levy.⁶

The Government has also announced that it will introduce legislation to establish the Regional Broadband Scheme (RBS). In summary, the RBS will impose a levy on telecommunications operators of \$7.10 per fibre line, per month, and the funds raised from private-sector operators will subsidise NBN Co's regional Fixed Wireless and Satellite networks.

Vocus submits that the Committee may wish to investigate whether these regional service delivery programs are delivering the right telecommunications services for regional Australia – and value for money for taxpayers.

Vocus suggests that there is a policy problem created by the introduction of the Regional Broadband Scheme legislation while the transition from the USO to the USG is still some time away. Telecommunications operators pay a substantial amount into a levy which funds Telstra to deliver the USO, and at the same time will also be expected to pay a second levy to help fund NBN Co's Fixed Wireless and Satellite services – networks which effectively overbuild Telstra's USO footprint. These costs are ultimately reflected in retail prices, meaning Australia consumers will be paying for both Telstra's fixed-line telephone network and NBN's Fixed Wireless and Satellite networks in regional Australia.

This Inquiry provides a timely opportunity for the Committee to revisit previous recommendations to address the challenge of providing communications to Regional Australia. For example, the Vertigan Panel recommended that “absent disaggregation, no specific mechanism for funding any subsidies within NBN Co be put in place, subject to review in five years' time.”⁷

The Productivity Commission in its Report on the USO also highlighted the need for a holistic approach:

“The funding of nbn's non-commercial services should, moreover, not be considered independently of universal service policy reforms. In this context, the Commission has faced a unique challenge in responding to proposed government policy on the funding of nbn non-commercial services (the Regional Broadband Scheme) before the conclusion of this inquiry.

The Regional Broadband Scheme is proposed to (at least initially) include only a narrow levy base. In principle, the choice of funding model for non-commercial services should seek to minimise distortions in the telecommunications market, the risk of which is heightened with a narrowly-based long-term industry levy. As such, the Government may need to revisit the merits of alternative funding arrangements for nbn's non-commercial services.”⁸

Vocus submits that the Committee should take a holistic approach to the challenge of providing telecommunications services to Regional Australia. We submit that the Government should subsidise telecommunications in regional Australia via transparent and targeted budget measures – as recommended by the Productivity Commission – rather than industry levies or internal cross-subsidies.

⁶ Department of Communications “Development of the Universal Service Guarantee Summary Report November 2018”

⁷ [Vertigan Review, NBN Market and Regulatory Report, August 2014, page 22](#)

⁸ [Telecommunications Universal Service Obligation, Productivity Commission Inquiry Report, Overview & Recommendations, April 2017, page 17](#)