

Regional Telecommunications Review

July 2024



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July 2024 Committee Secretariat Regional Telecommunications Independent Review Committee Lodged via web portal -

Dear Committee Members,

Indara is pleased to provide this submission to the 2024 Regional Telecommunications Review. Whilst the Review takes place every three years, the environment is substantially changed from 2021 there are a significant number of new and evolving dynamics that impact on the needs of regional consumers and the manner in which industry and government can meet those needs.

Since 2021, there have been two major developments that have introduced real changes in the regional telecommunications market. Firstly, the tower-assets of the mobile operators have been divested with those assets now operated by "Mobile Network Infrastructure Providers" (MNIPs) who are motivated to share the infrastructure to all interested commercial parties. Secondly, low-earth satellites have come of age and now provide "anywhere" connectivity. These changes to the structure of the market for mobile services, developments in technology and the impact of broader economy wide investment incentives have significantly altered the way Australian consumers experience mobile telecommunications services. This review offers the opportunity for the independent committee to inform the Minister for Communications in the development of "fit for purpose" public funding to support the wider availability of competitive mobile services in areas where market failure is evident and private investment unresponsive as well as structuring of universal service guarantees.

This submission to the Review commences with an overview of key dynamics that Indara believes are relevant to regional telecommunications. It then makes recommendations for actions that could be taken to respond to these dynamics and to improve the effectiveness of Government investment in the regions.

Indara own and operate approximately 4,500 tower and rooftop assets. Indara's sites are located in all Australian states and territories and it is currently building more than 500 new tower sites to support the digitalisation of our communities. All MNOs make extensive use of Indara's assets, as do approximately 200 other businesses, including emergency services organisations, broadcasters, wireless internet service providers (WISPs) and community service organisations.



BACKGROUND AND CONTEXT

Review and Major Market Trends

The Committee's Review is focussed on a review of the adequacy and equity of evolving telecommunications services in regional Australia and the extent to which the suite of commercial and public sector investments are addressing the identified and emerging needs.

The Review is set against a backdrop of continued growth of service availability nationwide off the back of some \$6.2b in capital investments (forecast for 2023-24) from Telstra, Optus and TPG. Connectivity both in the home and businesses through a fixed broadband connection or mobile handsets is now recognised as an essential service that is now required for modern work and living.

Data from GSMA Intelligence shows that there were 33.59M mobile services active in Australia at the start of 2024 corresponding to 126.4% of the population and up 1.5% from the start of 2023. Mobile phones are used by almost all Australians to communicate, with 97% owning at least one smartphone and 96.4% using the mobile network to access the Internet¹. Over the same period the number of Internet users increased by 1% to 25.21M, some 94.9% of the total population.

Whilst these number would appear to reflect a reasonably static market, they are overlaid with enormous traffic growth, with a doubling of traffic approximately every three years². Considering the up to 10 year lifespan of active network equipment, these networks need to be designed with the expectation that they will need to cope with a ten-fold increase in traffic over that period. The need to refresh and redesign places significant pressure on capital budgets when the number of customers and the amount they are willing to pay is stagnant.

The increased traffic is matched to increasing customer expectations. It is extremely rare for network coverage to get worse – as infrastructure is very rarely decommissioned without being replaced, but the customer experience can deteriorate as networks become loaded and applications more demanding.

The reality for operators with their limited capital budgets is that they must direct their investment towards those parts of the network where they create most shareholder value – and those locations vary by operator.

Market Segmentation

At the beginning of 2021, all the mobile network operators owned substantial portfolios of mobile towers and rooftop sites.

In the second half of that year, Telstra spun out its tower assets into a new business named Amplitel and Optus transferred its portfolio into a new business named Australian Tower Network (ATN). Australian Super purchased an 80% stake in ATN which subsequently acquired Axicom (Australia's largest independent portfolio of towers and rooftop sites); that combined business was renamed Indara. In August 2022 Waveconn was created through the acquisition of TPG's tower assets as well as that of Stilmark (a second

¹ Datareportal's Global Digital Report 2024

² Ericsson Mobility Report June 2024



independent portfolio of towers and rooftop sites). Within the space of just over a year, a key new set of industry participants appeared – the Mobile Network Infrastructure Providers (MNIPs).

The underlying driver for this change was the acknowledgement by the integrated MNOs that the investment profiles and operational capabilities of their active network equipment were no longer aligned with the requirements of the (passive) physical tower infrastructure that supported the active equipment.

MNO returns on active equipment require relatively rapid investment horizons due to the pace of technological change driving demand. Investments for upcoming technology such as next generation 5G, 6G services, or additional spectrum to satisfy demand incur substantial costs.

The investment profiles for the tower infrastructure, on the other hand, are very different to the capital requirements for spectrum and network technology investment needs. Towers have long payback periods, often greater than 20 years. The proliferation of mobile network sites also means there is less competitive advantage to the MNO in retaining "their" tower, as tower sites are readily available.

Emerging from these transactions is a market structure underpinned by the services offered by independent tower infrastructure companies such as Indara, Amplitel, Waveconn and BAI. These companies now own the towers and rooftop infrastructure the MNOs rent to locate their active radio networks.

It is noteworthy that institutional investors, primarily superannuation funds, have been the purchasers of these tower assets as they present long term investment returns of a kind aligned with pension fund type returns. The divestment of tower assets by MNOs has been a world-wide trend in recent years and the newly formed tower companies are seeking to broaden their assets under management by investing in the growing digital infrastructure requirements of society.

Importantly, the emergence of independent tower companies, such as Indara, offers a different set of investment incentives in terms of encouraging open access, carrier neutral hosting and multi-user co-location on the towers and other digital infrastructure assets. This is contrasted with the MNO owned and operated towers of the past where an MNO would deploy infrastructure for their initial exclusive use. This preferencing was justified on account of the commercial and marketing benefits of having superior coverage in an area at a time when coverage differentiation was more pronounced than it is today.

In remote areas, it was often only after several years of exclusive use that an operator would see other MNOs co-locating on that tower.

Today, the mobile network operators do not generally build or own their tower or rooftop sites. They have essentially operationalised this cost: MNIPs finance, build and operate sites and seek to sell access to this new infrastructure to all interested parties. It is the MNIPs that face the challenges of finding locations to build sites, negotiating with land owners, councils and communities.

Indara has a portfolio of over 4,700 tower and rooftop sites. It is currently deploying several hundred new sites across the country in partnership with Mobile Network Operators.

Indara also works closely with a range of enterprise and government organisations, ranging from the National Broadband Network to emergency services organisations and wireless internet service providers (WISPs). Many of its facilities host critical emergency or government communications infrastructure, playing a key role in ensuring the safety of the community.



Indara's facilities provide essential mobile telecommunications services to communities across Australia. It is continually investing to build new sites to satisfy the increasing wireless traffic demands of our society.

Emerging Technologies

5G mobile is often quoted as the major trend in mobile communications. In Australia as in other developed parts of the world, 5G deployment is advanced, and it is expected that 90% of users will be utilising it by 2030. When compared to the now ubiquitous 4G technologies, 5G improvements are based largely around capacity increases, new quality of service capabilities and reduced latency. These enhancements will lead to new applications many of which will have farming and other regional uses. Unfortunately, the move to 5G does not bring any material advantages in coverage as the same frequencies and same basic signal coding approaches as for 4G are being used.

Low Earth Orbit Satellites (LEOs) are already making a much larger difference to the regional telecommunications environment. Traditional satellite connectivity (such as provided through NBN's Sky Muster platform) is to satellites in geosynchronous orbit where the satellites rotate at the same velocity as the earth and are therefore, always in the same location with respect to earth. These satellites orbit at around 36,000km from the earth and any signals must travel at least twice this distance (from the earth to the satellite, and back). By comparison, the circumference of the earth is around 40,000km. The latency or delay for this journey is significant (at around 600ms), an amount that is unattractive for many applications and is suboptimal for voice calling. The other challenge is that the geostationary orbit is small, congested and expensive to reach. Sky Muster operates two satellites from which it has delivered over 100,000 services. These are expensive, high capacity, and relatively modern satellites, but they are unable to effectively compete with terrestrial networks. To manage congestion, traffic is metered at peak times.

A low earth orbit, by contrast corresponds to an altitude of under 2,000km. LEOs represent a revolution in regional communications for several reasons:

- (a) The constellations are large (with, in some cases thousands of satellites) and allow limited spectrum to be carved up in such a manner that it is much more reusable. The amount of available bandwidth is several orders of magnitude higher than from geosynchronous satellites
- (b) The much shorter links between satellite and customer mean that satellite customer equipment can be small (including facilitating use of hand-held mobile phones)
- (c) There are several competitive constellations resulting in very competitive pricing and performance
- (d) The (significant) deployment costs of the constellations are spread around an international customer base allowing for global economies of scale

Apple has recently launched a nationwide emergency messaging service in Australia based on the Globalstar constellation. These satellites orbit at around 1400km and offer a latency of around 60ms. Starlink, which operates a constellation of 6159 (June 2024) satellites at an elevation of 550km has a latency of around 40ms and is forecasted to reduce this to 20ms.

LEOs are still early in their technological lifecycle, however some trends are clear. They have an important role today in providing economical and high-performance fixed services everywhere. Other than serving residential and business users, they are being used to provide redundancy to terrestrial networks and have been used in military applications in countries such as Ukraine. In Australia, they are likely to play a role in



the provision of ubiquitous voice calling within the next 5 years. With such connectivity, a user would be likely to be able to make a telephone call anywhere in Australia so long as they are outside and with a reasonable view of the sky. Optus, for example announced a collaboration with SpaceX targeted at the rollout of ubiquitous SMS from late 2024 and voice (and data) from late 2025.

Data will be much more challenging. The system gain from the even the second Starlink satellite generation (with a 25 square meter antenna) is such that only a small amount traffic can be sent to all users in a "cell" sufficient for thousands of calls, or millions of SMS messages, but very little data³. Some providers such as AST Space Mobile are developing much larger satellite antennas that can facilitate data to terrestrial mobile phones, but this is still likely to be many years from being broadly available.

There is likely to be a temptation to see LEO satellites as the solution to regional communications challenges. While it is clear that LEO technology will be incorporated into telecommunications networks and it is also likely to result in changing investment patterns from the mobile operators, including a likely reduction in interest in investing in regional areas. Indara believes that there are a number of risks associated with the technology. Broadly the risks relate to the certainty that the infrastructure and services will provide appropriate and equitable service to Australian users, particularly regional users, and will continue to be available to Australian users in a form that is consistent with the Australian public interest. In particular:

- (a) The LEO constellations are owned and operated in other countries and whilst they may be obligated to operate in accordance with Australian laws in the context of their delivery of telecommunications services to Australian customers, they are also operating in a much wider international market.
- (b) The LEO infrastructure are not Australian owned and does not contribute to a material number of Australian jobs. The relationship with the regional community is only that of a supplier to a customer.
- (c) None of the LEO constellations are yet profitable, although Starlink is expecting to generate free cash flow for its owner SpaceX in 2024. Without a profitable business model, some of the constellations may be short-lived,
- (d) There is concern that these constellations are being used for intelligence gathering and other military purposes which would make the technology a "a legitimate target for retaliatory measures, including military ones.⁴"

Emergency and Disaster Response Considerations

The mobile network is playing an increasingly important role in public safety networks. Public safety organisations now use mobile data services to provide much of the meta-data required in responding to emergencies. Those locations that are critical from a public safety point of view are not always those that lead to the greatest commercial revenue and public funding is an important ingredient in achieving the required coverage. Further, the ability to attach seamlessly to the networks of all mobile network operators is also critical.

Indara facilitates the connection of public safety organisations co-locating with the mobile operators networks on is sites. Some of these sites are highly sensitive: the loss of a key site (normally due to the loss of power)

³ https://arstechnica.com/science/2022/08/forget-5g-wireless-spacex-and-t-mobile-want-to-offer-zero-g-coverage/

⁴ https://www.space.com/russia-private-satellites-legitimate-target-wartime-united-nations



can result in a much broader loss of service due to its location in the overall network topology, particularly in more remote locations where sites are not connected directly to optical fibre and are daisy-chains from other mobile transmission sites.

There are two major stakeholders in an emergency or disaster situation: the general public, with their need to stay in touch with their families/communities and the emergency service or public safety agencies who need effective and always-on communications. There are three key elements required to ensure that continuity of service:

- (a) Appropriate 'hardening' of mobile communications transmission sites so that they can remain operational through a flood or fire through the use of design, materials and clearance zones;
- (b) Redundant backhaul that might be economically provided through a LEO satellite connection; and
- (c) Protection from power outages either through on-site generation or backup sources (such as generators).

It should be noted that whilst there is a very important place for mobile equipment that can be brought into the field in response to an emergency, access into disaster zones can often be limited or unsafe and there is genuine benefit in ensuring that the investment is made ahead of time, preferably through a dialogue between the mobile operators and public safety agencies.

There are existing government programs such as the Mobile Network Hardening Program (MNHP) and (to a lesser extent) the Telecommunications Disaster Resilience Innovation Program (TDRI) which acknowledge that there is public (rather just than commercial) benefit in making the mobile networks as robust as possible with an emphasis on those locations that have the greatest impact. Indara is a strong supporter of these programs.

Site Economics and Viability

The deployment of a new telecommunications tower in 2024 with one mobile operator costs, on average, approximately \$800,000. Operating that infrastructure for ten years costs a further \$650,000. These costs can vary significantly with major "moving pieces" being the cost of connecting power, the cost of backhaul and land rental.

This quantum of funds can be very challenge to recover from more remote locations in a market where annual revenue from a customer might be less than \$250. Such a scenario highlights the need for subsidisation either from other parts of the mobile operator in question, or through the investment of public funds. In some cases, deployment costs can be minimised because the anticipated usage of a site may be low, but in others (such as holiday destinations), peak traffic (which is experienced for only 4-6 weeks) might be ten times that of the remainder of the year. In this latter case, capacity (implemented through hardware choices and the provisioning of backhaul capacity through the network) must be provisioned for those higher traffic levels with the attendant higher costs.

The level of cross subsidisation that an MNO is prepared to offer to a regional site varies significantly by MNO and is dependent on their customer profile. Each operator has a different "value proposition" offered to the market. Telstra, for example has shown a greater willingness to invest in regional Australia and this is reflected in their dominance in many regional markets. Even then, the Commonwealth Mobile Blackspot



Program has subsidised over 1000 Telstra sites and has been integral to getting mobile services into Australia's smaller communities.

Most locations that are currently un-served are likely to require ongoing public funding support at levels up to 100% for both capital and operational costs, particularly if the objective is that the infrastructure is to be available for use by all Australians.

Deployment Challenges

Contributing to cost and time associated with deploying new infrastructure is the increasing difficulty of finding appropriate locations for sites and negotiating with their owners.

The *Telecommunications Act 1997 (Cth)* (the Act) allows certain kinds of minor facility to be installed without development consent (for example, installation of antennas on an existing structure). The Act does not presently grant these powers to larger scale infrastructure like standalone towers, which must, in the main, follow the same town planning processes as any private structure. This is in contrast to other providers of critical service infrastructure such as power and water utilities.

At a state level, telecommunications regulations offer some assistance, but are inconsistent. For example:

- New South Wales and Victoria have specific policies to encourage mobile network deployment, including town planning exemptions allowing some kinds of facility to be deployed without DA consent. This allows infrastructure to be delivered more quickly and efficiently.
- Western Australia has a state telecommunications policy which broadly recognises mobile connectivity but does not provide any specific town planning exemptions. The policy makes recommendations for Councils to consider, but these are not mandatory.
- Other states do not have any specific telecommunications policies or exemptions. Queensland, for example does not even mention mobile connectivity in its State Planning Policy.

Most new telecommunications facilities deployed across Australia require local government development consent. This raises significant challenges for deployment.

- Because telecommunications Development Applications (DAs) are not prioritised, and are treated in the same manner as any other application, town planning approvals often take a very long time (it is common for development applications to take over 12 months and occasionally approval can take years).
- Council attitudes play a large role. Some councils welcome and encourage mobile deployment while others actively oppose it. There are councils with blanket prohibitions preventing telecommunications facilities from being deployed in specific land use zones. Some councils are known to oppose mobile deployment on ideological or political grounds, meaning even very reasonable proposals have a low chance of gaining consent. These issues are amplified in jurisdictions where mobile connectivity is not identified as a strategic priority.
- Because mobile infrastructure is subject to the normal development consent process, a DA for a new facility can be sidetracked by a small number of vocal objectors to the detriment of the wider community.



• If a court appeal is required (for example, if the DA is refused or a DA consent is challenged by a third party) it can create significant additional delays, uncertainty and cost.

The impact of current planning regulations includes unnecessary delays in facilitating service provision, higher costs and greater risk. Taken together, these impacts significantly impede investment and progress.

Indara notes that a more consistent and coordinated approach to planning approvals is required. In this respect, we specifically note that the federal government has, through its Mobile Telecommunications Working Group, released the National Principles to Support Streamlined Telecommunications Planning Arrangements on 4 July 2024. This document provides a good overview of the challenges to deployment, from a regulatory perspective, and strongly encourages a coordinated approach to deployment at all levels of government.

Indara strongly endorses the recommendations made by the Working Group. We consider that the town planning framework for mobile deployment, at all levels of government, needs to more readily encourage deployment of mobile infrastructure.

To deploy a mobile telecommunications facility, the mobile provider must secure tenure with a landowner willing to accommodate the site. Where private land is unavailable, mobile providers must often rely on use of council or Crown Land to deploy new telecommunications facilities. Securing tenure (via a lease or licence) can be challenging.

- Use of Crown Land is subject to lengthy, complex and expensive application processes that can often take years to complete. Crown rental expectations can often be unreasonable, much higher than those for private land and there are also additional financial barriers, such as co-user fees which further disincentivise deployment of shared, 'neutral host' facilities. Telecommunications facilities often appear to be regarded less as a public good, and more an opportunity to secure a windfall for the relevant state government.
- Sites owned outright by local councils can also be challenging to use. Some local authorities simply
 refuse to allow telecommunications infrastructure on public land. Others will allow facilities but
 require a lengthy and complex process to acquire the site. Some councils will only allow MNOs to
 use their land and refuse access to MNIPs, or will only allow infrastructure that is 'Low Impact' under
 federal telecommunications exemptions (excluding new towers or other infrastructure that needs DA
 consent). Unreasonable, revenue driven rental expectations are not uncommon.
- Use of land owned by other utility providers (including water, transport and power authorities) can also be challenging, with specific build and design constraints and unreasonable rental expectations being common.

If it is not possible to utilise public land, or if the terms offered by the relevant authority are not viable, the unfortunate outcome is often that investment is shifted to other areas more amenable to deployment, leaving local connectivity issues unresolved.

Tenure is a significant issue for telecommunications deployment, because unlike other forms of utility infrastructure, which have much more secure tenure arrangements, mobile facilities often only have agreed tenure for 10 to 20 years. We have observed losses of sites in key locations because leases have expired,



and the landlord is no longer interested in accommodating a site. This can lead to circumstances where the lost coverage is impossible to effectively replace.

Indara highlights the importance of being able to secure tenure. We suggest all levels of government should encourage the use of public land, where appropriate and subject to reasonable terms, for telecommunications infrastructure.

Competitive Landscape, Sharing and Regional Relevance

One of the most interesting developments in the regional telecommunications environment over the last ten years has been the emergence of the Rural Connectivity Group (RCG). Essentially a joint venture between the three New Zealand mobile carriers and the New Zealand Government, it has successfully deployed and now operates a shared network across much of regional New Zealand. RCG is funded through Government programs and contributions from the three operators, with the locations of sites being determined by the relevant funding programs. Each operator contributes spectrum and all operators share the one piece of infrastructure including the pole, antenna, power and backhaul. One of the factors that makes this solution possible is that all three operators have roughly equal market shares. Regional connectivity in New Zealand is not a source of competitive differentiation.

This is not true in Australia.

Mobile Network Operator	Population coverage	Mobile Base Station (2022)
Telstra	99.5%	11,002
Optus	98.5%	8,632
TPG	96%	5,728

Current Network Coverage ⁵

Whilst the population coverage from each Australian operator appears high, the difference between the Telstra and Optus networks is considerable. Roughly 270,000 Australians have coverage on the Telstra network that do not have coverage on either Optus or TPG and these are the customers that are most distributed and difficult to serve. The preparedness of Telstra to invest to maintain that competitive advantage in regional areas is reflected in their participation in the Mobile Blackspot Program: of the 1342 sites funded to-date, Telstra deployed 75% with Optus 20% and TPG 6%. However, even for Telstra, the provision of additional coverage has greatly diminishing returns. Areas currently without coverage are decreasingly commercially relevant, with a handful of local customers and/or modest numbers of transiting customers.

By contrast, when Optus or TPG invest in a new regional site, it is likely to be for the benefit of their customers *visiting* the regional area rather than local residents. Only when they have developed more complete coverage of a region will they have a chance of successfully churning local customers off the

⁵ ACCC Preliminary Views Telstra & TPG transaction.



Telstra network. This scenario was reflected in reporting on the ABC in 2019⁶ and 2021⁷. This entrenched disadvantage makes the threshold for regional investment by Optus and TPG all the higher and increases the incentive to develop solutions (such as voice calling over LEO satellites) that address their customer base when travelling without the huge investment.

The Current Network Coverage table above demonstrates that the residual of the of the Australian population that does not have access to mobile services is now relatively small. However, the ability of the MNOs to commercially expand their networks to service those potential "new" customers becomes economically challenging as the costs of deployment, commissioning and maintaining the infrastructure in what is essentially the most remote regions of the continent is prohibitively high. Furthermore, the incremental returns available to the MNO from subscribers that connect to these remote areas are also low, which merely adds to the un-economic nature of the business cases to expand the network.

Existing Infrastructure-based Government Programs

There is a relatively long history of public sector contribution, both at the State and Federal level, aimed at increasing the availability and performance of mobile telecommunications services to Australian consumers.

To date, these public sector investments were targeted at geographical areas that displayed a fundamental market failure for private sector investment. From a policy perspective, the notion of "national equity" between metropolitan and regional locations supported the justification for public funding being allocated to establish privately owned and operated assets supporting private sector revenues. That is, an acceptance that members of the community in remote and regional areas should also benefit and participate in the digital economy with telecommunications services comparable to those available for most of the urban population.

The Mobile Blackspot Program (MBSP) and Peri-Urban Mobile Program (PUMP) are two examples of Federal government intervention to make available mobile phone services to Australians otherwise unable to connect to the commercially deployed mobile network operator (MNO) infrastructure of Telstra, Optus or TPG.

The traditional method of selection for Blackspot funding candidates led to some substantially beneficial government, industry and community co-contributions towards network expansion, with an opportunity for all MNOs to participate.

There has, however been a tension in the program between balancing coverage and competition whilst seeking to support investment that would not have proceeded without public financial support.

The Mobile Blackspot Program has led to service improvements for the customers of the one "winning" mobile service provider, which is to say, no benefits aside from emergency '000' calling for other Australians. The low participation of Optus and TPG in the last three rounds of the program suggests that these operators do not see participation in the program as a priority.

⁶ https://www.abc.net.au/news/2019-09-16/anger-as-optus-chosen-to-fix-mobile-black-spots-far-north-qld/11513630

⁷ <u>https://www.abc.net.au/news/2021-02-11/questions-over-optus-base-station-at-remote-wa-roadhouse/13008012</u>



Changes in the guidelines for recent rounds of both the MBSP and PUMP demonstrate an understanding in the program structure of the value of sharing, and of having the public funding support all mobile subscribers. The barriers to sharing have been reducing in recent years. The emergence of independent tower companies now provides an improved opportunity to have public funding support all MNO subscribers. Importantly, these independent tower companies respond to incentives to maximise usage and therefore revenues from the tower and so benefit from all potential MNO usage. Their independence is also attractive to the MNOs.

Further, technology developments in radio access networking and spectrum sharing now support multiple carriers using the one set of network equipment. This sharing, similar to that used by the New Zealand Rural Connectivity Group was proposed by Telstra and TPG in 2022 (and rejected by the ACCC in 2023) then subsequently proposed by Optus and TPG in 2024. Such sharing could dramatically reduce both the capital and operating costs for the solution.

RECOMMENDATIONS

Regulatory Reforms

Schedule 3 of the *Telecommunications Act 1997 (Cth) (the Act)* is the main regulatory tool used by telecommunications carriers to facilitate the deployment of their networks. In the current environment, in the main, the licensed carriers do not build, own or operate the tower infrastructure. Given that the schedule 3 powers relate to the building and operating of infrastructure, it makes sense that those parties that perform the work, the MNIPs have these powers.

In response to the increasing difficulty of finding and building sites in regional (and other) areas, Indara recommends that additional amendments are made to the Act with the same effect as legislation enacted in the United Kingdom and New Zealand to facilitate installations that meet certain agreed criteria.

1. Regulatory Reforms to Federal Legislation

- Acknowledging the increased role of MNIPs in deployment, expand land access and installation powers under Schedule 3 of the *Telecommunications Act* 1997 to include MNIPs as well as MNOs.
- Expand the kinds of activity that can be considered Low Impact under the *Telecommunications* (*Low-Impact Facilities*) *Determination* 2018 for example, to include deployment of standalone smart poles.



• Expand the ambit of the Telecommunications Act 1997 to enable deployment of new standalone telecommunications facilities – for example, by implementing a modified version of the 'Facility Installation Permit' process for MNOs and MNIPs, or by creating rules for local and state governments relating to deployment (such as certainty of access, reasonable rentals, and a presumption of development consent subject to requirements).

Deployment Challenges

As a MNIP, Indara faces the daily challenge of deploying new mobile infrastructure. It faces a regulatory and planning environment that is piecemeal and does not recognise the critical nature of the infrastructure being deployed. If anything, these challenges are increasing, particularly as there is less and less discretion in the choice of the sites required to cover blackspots, or to optimise benefit in commercially challenging locations. The deployers and operators of telecommunications networks deal with challenges that are not faced by other providers of critical services such as power and water. The recommendations outlined in this section are based around harmonising planning policies and facilitating the use of public land for the public good.

2. Streamlining and Alignment of Federal, State and Local Town Planning Policy

- Encourage states to implement telecommunications policies which recognise connectivity and facilitate deployment of infrastructure (as is already the case in New South Wales and Victoria).
- Require local authorities to create policy, and assess applications, in a way that encourages and fast tracks delivery of appropriate infrastructure. Planning decisions should work off a presumption that is supportive of connectivity; onerous or excessive development conditions should be limited; and an escalation pathway (outside the court appeals process) should be established for situations where the local authority is unreasonably delaying or withholding planning consent.
- Ensure that telecommunications facilities are not prohibited in any land use zone.
- Consider ways of de-politicising the approvals process, for example by having telecommunications proposals be assessed by an alternate consent authority rather than Council.
- Ensure that development application fees are fair, reasonable and justifiable.
- Ensure that connection of electrical supplies by state power authorities are fast tracked and not subject to unreasonable delay.

3. Enabling and Incentivising Access to Public Land



- Ensure that all public land, regardless of ownership, is accessible for use by MNIPs and MNOs.
- Create an expectation on state and local land agencies to make land available for new telecommunications facilities.
- Streamline the process to utilise Crown Land.
- Encourage rental terms that are fair, reasonable and non-discriminatory.

Government programs

Most of the existing government programs targeting regional Australia remain fit for purpose, however Indara believes that this is no longer true for the Mobile Blackspot Program (MBSP). Whilst in some instances it results in the "filling of a blackspot", and achieves co-investment from a mobile operator, it can also result in anti-competitive outcomes. It may be that the Regional Communications Inquiry in 2027 or 2030 takes the view that LEO systems are starting to reduce the need for public investment in regional areas, but Indara believes that at this time the LEO industry is much too young, and the technology outcomes much too unclear to be making that decision now and the needs of regional Australia to be too important to wait for that clarity. Indara believes that a redesigned MBSP should operate according to the principles below.

4. Redesigning Government Programs to meet Current Regional Needs

- Collaborate with other tiers of government to define locations of agreed public need
- Provide funding for blackspots at up to 100% of the capital and 10 year operational cost for the infrastructure which would be able to provide basic connectivity services in the local area. Any additional capacity or differentiation required by an operator would be fully at their cost.
- Provide funding only for sites where all three operators agree to participate
- Provide funding to a party that is willing to build and operate the infrastructure on the following basis:
 - o That all operators offer services from the infrastructure
 - That any incremental costs are shared by the users of the infrastructure in proportion to the amount that their customers use the facility
 - That there is space on the facility to support any other relevant users such as providers of emergency services.

CONCLUSION



The size of Australia and remoteness of many of its communities represents a major technological and financial challenge for its suppliers of telecommunications services. Through the NBN and long term investment in mobile infrastructure in regional areas, Australia has put in place reasonable solutions for its communities. However, connectivity is now a key ingredient of modern Australia and governments has the role of ensuring that access is equitable. This is a multi-dimensional problem, but in Indara's opinion, at its core it is important that the right regulatory environment is created to support efficient private investment where it is viable, and that effective public funding programs are designed to build infrastructure where it is not. In this submission, Indara has made some suggestions as to changes it believes would improve regional outcomes.

Communications technologies have been noteworthy in their rapid change, and LEO satellites are likely to represent significant change in the coming years, but from a public policy point of view Indara believes their time has not yet come.

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