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5 September 2022

Grahame O'Leary
Director
Regional Mobile Infrastructure Inquiry
Mobiles, Transmission and Consumer
Branch
Australian Competition and Consumer
Commission

By email: grahame.oleary@accc.gov.au
Cc: rmii@accc.gov.au

Dear Mr O'Leary,

Regional Mobile Infrastructure Inquiry - Submission

Thank you for the invitation to respond to the ACCC's Regional Mobile Infrastructure Inquiry Consultation Paper dated 1 July 2022 (**Consultation Paper**).

Amplitel welcomes the opportunity to respond and provide input to the matters to be considered by the inquiry.

This submission responds to the questions in the Consultation Paper relevant to Amplitel.

This submission is the redacted version of Amplitel's confidential submission and may be published on the public register.

Please contact Sally Aitken or Emma Harrison if you have any questions.

Yours sincerely

Sally Aitken
General Manager Strategy and
Commercial

Emma Harrison
General Counsel & Company Secretary



Amplitel's Submission to the ACCC's Regional mobile infrastructure inquiry 2022-23

5 September 2022

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Executive Summary

The objective of the ACCC's Regional Mobile Infrastructure Inquiry is to provide evidence-based findings that can clarify technical and market issues and contribute to potential policy and program development to improve mobile coverage, capacity and competition with a particular focus on regional, rural, remote and peri-urban areas within Australia.

Amplitel agrees that any effort to improve mobile coverage, capacity and competition must be informed by an understanding of the costs associated with providing telecommunications towers and associated infrastructure. Amplitel participates in a relatively small segment of the value chain required to deliver an effective and contiguous telecommunications service. The total costs required to deliver an effective mobile telecommunications service are large and involve many different providers along the value chain. In order to understand investment decisions at an individual site, it is also necessary to understand a carrier's investment drivers at both an aggregate level, as well as the relative returns associated with each additional location. These investment decisions can only be considered in whole by a carrier.

As a mobile network infrastructure provider (**MNIP**), Amplitel provides one component of the total value chain of telecommunications services: the passive infrastructure costs associated with telecommunications towers. Amplitel is in a position to provide the ACCC with information about the costs of these towers and the associated business infrastructure required to build and maintain these assets. Overall, Amplitel notes that there is no 'typical' cost that can be quantified so as to apply generally to all sites. There are costs that cannot be directly attributed to individual towers and any useful comparison of any 'typical' costs between MNIPs will be difficult.

This submission:

- (a) sets out the various costs of tower infrastructure, from planning and development through to end of life costs;
- (b) explains the types of costs involved in setting up business practices and systems to facilitate such infrastructure development; and
- (c) describes the complex factors that contribute to the cost of tower infrastructure, including the location, site and specifications of the infrastructure being developed.

As the ACCC notes, the commercial incentives for investing in regional Australia remain challenging and the commercial returns from sparsely populated areas are generally low. This can make the commercial case for extending networks a difficult one to make. In making decisions around specific tenancies, Amplitel considers the need to recover costs plus an appropriate margin for risk. The actions of landlords, including government as landowners, can adversely impact a business case for tower locations and, in regional, rural and remote areas, cause the business case for sites to become marginal or negative. This is particularly problematic in regional and remote areas. Government landowners are in a unique position to reduce the cost of providing new telecommunications infrastructure in regional and remote regions by reducing rents on government lands.

The Consultation Paper rightly recognises the significant and ongoing structural changes in the telecommunications tower industry. The dramatic shift away from vertical integration means that examining historical practice and the existing "*typical commercial arrangements for access to towers and associated infrastructure*" which applied prior to the significant shifts in structure over the recent past may well lead to conclusions which do not take account of these structural changes. The effects to date, and likely short and medium term future effects of recent structural changes, should be carefully considered when evaluating any amendments necessary to improve mobile coverage, capacity and competition.

The current commercial and regulatory arrangements for access are effective and no further regulation is required. However, consideration should also be given to potential regulatory changes to make it easier for MNIPs to rollout infrastructure. Potential reforms include exemptions from planning and development approval processes for MNIPs for telecommunications towers including for towers built under co-funding agreements, the harmonisation of State and Territory planning and development approval processes for telecommunications towers, and reconsideration of the required lot size for telecommunications towers.

Consideration should also be given to adopting some of the Independent Pricing and Regulatory Tribunal of New South Wales' (**IPART's**) recommendations from its November 2019 final report of on 'Rental Arrangements for Communication Towers on Crown Lands'.

Introduction

Amplitel welcomes the opportunity to contribute to the ACCC's Regional Mobile Infrastructure Inquiry, which will be important in helping to achieve better mobile connectivity in rural, regional and remote areas. Achieving this aim is of critical importance to Australia, and the people who live and work in these areas. However, it is clear that improving connectivity in these areas will not be achieved without significant ongoing investment in mobile infrastructure, and that such investment is an ongoing challenge given the difficult commercial incentives.

As a passive MNIP, Amplitel provides a small component of the total value chain of telecommunications services, namely the provision of passive infrastructure assets at a tower site required to establish and operate a telecommunications tower. It is from this perspective that Amplitel provides the information in this submission to assist the ACCC with the first aspect of its public inquiry, namely *“access to towers and associated passive and active infrastructure provided by telecommunications and other infrastructure providers in regional, rural, remote and peri-urban areas within Australia, that can be used in the supply of mobile telecommunications and other radiocommunications services”*.

While the scope of the ACCC's inquiry, as directed by the previous Minister, covers regional, rural, remote, and peri-urban areas within Australia, Amplitel notes that it will be important to understand any differences between these areas.

Amplitel responds in this submission to those questions raised by the Consultation Paper which concern mobile network infrastructure. Amplitel is not a mobile network operator, not a carrier and does not supply carriage services.

Our submission is structured around the following themes covered by the inquiry:

- Section 1 provides an overview of Amplitel and its core objective to create value for our customers;
- Section 2 describes the mobile network value chain and details the components of the chain where Amplitel provides infrastructure services;
- Section 3 describes the type of costs associated with building and maintaining telecommunications towers and the importance of understanding the lifetime costs of ownership;
- Section 4 explores the cost of obtaining approvals to install telecommunications towers and the influence of local community on this. Amplitel proposes a number of reforms that would increase the efficiency of securing new sites for telecommunications structures;
- Section 5 highlights the drivers of variability of construction and maintenance costs of towers;
- Section 6 highlights the costs and consideration of customer co-location after initial tower construction;
- Section 7 reviews the arrangements available to tower providers to secure land and the risks that may arise from different forms of land tenure;
- Section 8 highlights the non-attributable costs, including business practices and systems;
- Section 9 explores how Amplitel assesses the business case for investment in new tower sites and the role that co-funding programs play in marginal infrastructure;
- Section 10 explores the impact of industry structural changes on the commercial arrangements for access to towers and associated infrastructure;
- Section 11 explores Amplitel's general terms of access to towers and other infrastructure;

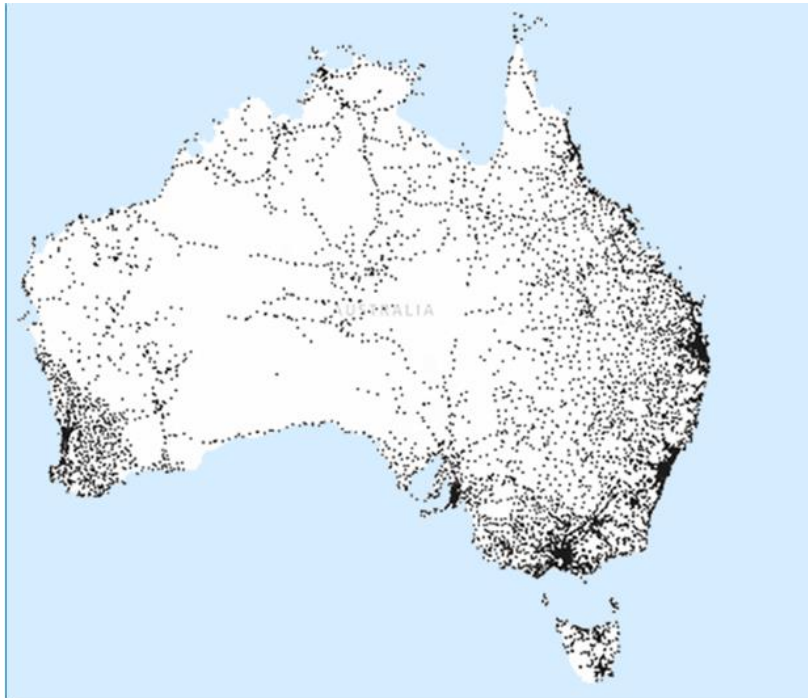
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- Section 12 reviews the impact that commercial land aggregators and major government landlords may have on the cost of providing tower infrastructure;
- Section 13 provides commentary on the effectiveness of current commercial and regulatory arrangements for access; and
- Section 14 provides commentary on the requirements for greater mobile coverage, in particular infill densification and 5G.

1. **Section 1: About Amplitel**

- 1.1 Amplitel was established on 1 September 2021 following the transfer of the towers business of Telstra Corporation Ltd (**Telstra**) to Amplitel and sale of a 49% interest in that business to a consortium of investors. This consortium includes the Future Fund, Australian Retirement Trust and Commonwealth Superannuation Company, and has appointed H.R.L. Morrison & Co as manager of its holdings.
- 1.2 Amplitel's mission is to be Australia's leading provider of towers infrastructure to support customers to deliver wireless communications. Amplitel operates over 8,000 towers, masts, poles, and other structures. Amplitel also has access to Telstra's equipment building rooftops and approximately 160,000 of Telstra's street side poles. Amplitel's tower locations are available at <https://www.amplitel.com.au/tower-locations>.
- 1.3 Amplitel's strategic objectives are to:
- (a) invest in new passive tower infrastructure to support its customers' mobile and non-mobile networks;
 - (b) increase utilisation of its infrastructure by providing better access;
 - (c) provide competitive market offerings;
 - (d) improve asset health;
 - (e) pursue growth and drive asset efficiency; and
 - (f) be the home of tower infrastructure expertise.
- 1.4 Amplitel is focused on investing in new services and solutions including:
- (a) implementing a new asset management system for asset inventory, workflows, and order tracking;
 - (b) creating digital twins of the network to enable available space to be visually shared for more cost-effective planning for customers; and
 - (c) creating innovative approaches to reducing the cost to upgrade infrastructure to accommodate more customer equipment and to reducing the overall life-cycle cost of building and maintaining infrastructure.
- 1.5 Amplitel serves a broad range of customers including the three main mobile carriers, public emergency networks, private wireless providers, major corporations, and not-for-profits.
- 1.6 **Figure 1** shows the locations of Amplitel's macro towers, masts, poles, and other structures across Australia. As is apparent from the diagram, Amplitel is well placed to comment on issues concerning the provision of necessary mobile network infrastructure in regional and remote areas of Australia.

Figure 1: Amplitel's macro towers, masts, poles, and other structures



1.7 Amplitel responds in this submission to those questions raised by the Consultation Paper which concern mobile network infrastructure. Amplitel is not a mobile network operator, not a carrier, and does not supply carriage services. Amplitel's submission does not respond to the issues raised by the Consultation Paper which relate to the supply of mobile carriage services.

2. **Section 2: The mobile network value chain and Amplitel's role in the chain**

Key points:

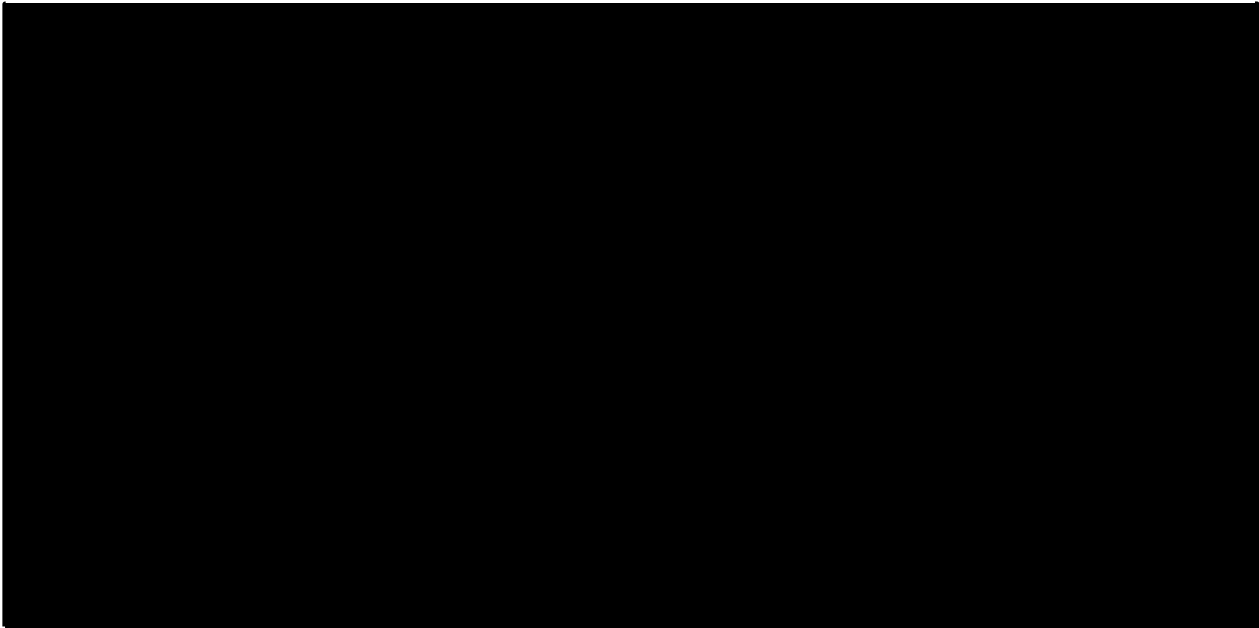
- Passive tower infrastructure is a small part of the total upfront and ongoing investment required to deliver a telecommunications service.
- The scope of infrastructure provided by a MNIP at any individual tower site will vary depending on the customer contract and the characteristics of the site. Services that Amplitel offers will likely differ from other MNIPs.
- There are substitutes to building towers: this ensures the lowest cost solution is used to build new telecommunications infrastructure.
- Every tower is unique and is designed to meet customers' radio frequency requirements, which have a substantial impact on site choice and tower design (height and capacity).

Passive tower infrastructure is a small part of the total upfront and ongoing investment required to deliver a telecommunications service.

- 2.1 The provision of mobile and non-mobile telecommunications services requires the installation and use of both passive assets and active assets. These assets will include, at a minimum, spectrum (for mobile services), radio/mobile antennas, radio units, network access equipment, power, shelter, and the infrastructure required to install antennas at height (e.g. a tower). Depending on where a tower is located, connection to the mobile network (backhaul) will be via the fibre network or via microwave dish connections between towers until a connection to the fibre network can be made.
- 2.2 Amplitel is a passive MNIP and provides most of the passive infrastructure assets at a tower site required to establish and operate a telecommunications tower. The active assets (those that require power to operate or can transmit data) are provided and operated by the customer. In addition, some passive assets which are unique to a customer's equipment will be provided by the customer.

The scope of infrastructure provided by a MNIP will vary depending on the customer contract and the characteristics of an individual site. Services that Amplitel includes will likely differ from other MNIPs.

- 2.3 The responsibility for providing assets and the ownership of the assets required to deliver telecommunications services for each tower differ between tower operators and may differ for each customer contract. Therefore, it is important to understand what each MNIP is contractually required to provide before comparing costs of passive infrastructure provision. In addition, it is possible in some circumstances for some assets to be excluded from the service provision at an individual site depending on site specific circumstances. [c-i-c]



[C-I-C]

There are substitutes for passive tower infrastructure: this ensures the lowest cost solution is used to build new telecommunications infrastructure

- 2.4 There are several substitutes for both passive and active tower infrastructure. Amplitel's customers, in particular the carriers, will make network investment decisions considering a range of alternatives, optimising for the lowest cost to coverage outcomes.
- 2.5 In Amplitel's experience, the location of a site and the benefit that the site delivers to the overall network is often the most important factor in determining the best location for the installation of a new telecommunications site. In these cases, available existing telecommunications towers may not be the preferred choice for a carrier.
- 2.6 Substitutes for a mobile or fixed network service may include satellites (for example, low-earth orbit satellites are increasingly being used in remote locations where high latency is not an issue). Substitutes for a macro mobile service may include small cells (4G or 5G). Substitutes for a tower (as the antenna placement solution) may include rooftops, building walls, water tanks, grain silos, electricity stanchions, signs and rock faces.

Lifetime costs are optimised at the point of initial build: costs of co-location after initial construction may be significant

- 2.7 The costs of establishing a site must be considered in relation to the context at the point the site is established. A rational owner of infrastructure will build infrastructure for expected users of that infrastructure within a certain period. This reduces the overall costs of the infrastructure to the initial users of the site and does not drive a first-mover burden on either the infrastructure developer or the first customer on the structure (typically called the anchor customer). This approach, while capital efficient, may increase the cost to subsequent tenants who may wish to co-locate on the structure at a future date.

Every tower is unique and is designed to meet customers' radio frequency requirements which have a substantial impact on site choice and tower design (height and capacity)

- 2.8 Customers' radio frequency requirements determine the quantity of equipment and the height at which that equipment is installed. This impacts choice of structure and structural capacity

of the tower. For mobile networks, radio planners will select an ideal height to maximise coverage and to minimise interference from buildings, landforms, or vegetation. The ideal height is also dependent on the type of frequency and antennas that the network operator seeks to deploy on these structures and these choices will likely trade-off propagation distance, speed, and network capacity. Amplitel has limited input into the radio frequency design process and this process is typically locked in at the site selection phase.

- 2.9 For non-mobile equipment used to support long-range point to point microwave transmission, height requirements are set to maximise the distance between towers while ensuring topology issues are minimised.

3. **Section 3: Types of costs associated with building and maintaining telecommunications towers**

Key points:

- It is difficult to compare the costs of providing telecommunications tower between sites and MNIPs.
- There are a range of initial and ongoing (or periodic) costs of providing a telecommunications tower.
- Commercial contracts determine which of these costs are borne by the MNIP and which by the customer. These commercial arrangements differ between customers, sites and between MNIPs.
- The underlying costs of providing a telecommunications tower differ significantly between locations.
- The period over which a customer needs a service will heavily influence the design of the tower and the costs to build and maintain the tower. Lifetime cost of ownership, over the period of use, is the only way to understand the total upfront and ongoing costs of providing infrastructure at an individual site.

There are a range of initial and ongoing (or periodic costs) of providing a telecommunications tower

3.1 These cost categories include:

- (a) site selection, acquisition, engineering design and planning approvals (often referred to as 'SAED');
- (b) tower and site construction, and maintenance;
- (c) access tracks, and access track maintenance;
- (d) power connection costs and power resiliency;
- (e) site tenure and other access costs;
- (f) costs associated with new co-locations or increased equipment volumes post initial construction;
- (g) end of life costs (tower decommissioning and site remediation costs); and
- (h) the cost of securing and providing returns to debt and equity funders (financing costs).

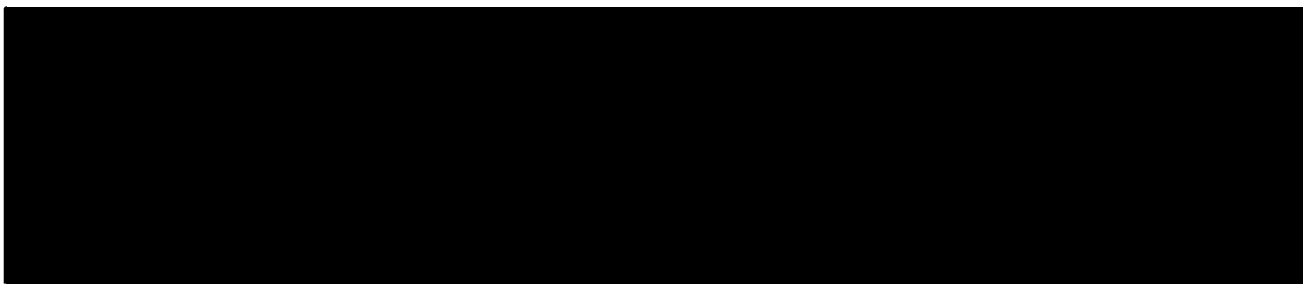
Commercial contracts determine which of these costs are borne by the MNIP and which by the customer - these commercial arrangements differ between customers, sites and between MNIPs

3.2

[c-i-c]

[Redacted]

[Redacted]



[C-i-C]

The underlying costs of providing a telecommunications tower differs significantly between locations

3.3

[C-i-C] [Redacted text]

[REDACTED]

[REDACTED]

[C-i-c]

The period over which a customer needs a service will heavily influence the design of the tower and the costs to build and maintain the tower. Lifetime cost of ownership, over the period of use, is the only way to understand the total upfront and ongoing costs of providing infrastructure at an individual site.

- 3.4 The measure of costs needs to be consistent for any comparison to be useful. Comparing initial construction costs underestimates the total lifetime cost of a site. Amplitel recommends that the total cost of ownership of the site over the lifetime of that tower, or the lifetime of expected use (whichever is shorter), should be used to understand the cost of providing telecommunications services.
- 3.5 Comparing total cost of ownership ensures that trade-offs MNIPs and customers make between initial costs and lifetime maintenance / technology upgrade and replacement costs are understood. For example, it allows a comparison between a cheaper tower that may require more maintenance and needs replacement earlier due to a relatively short asset life, with a more expensive tower that requires less maintenance and will last longer. It also allows comparison between the costs of a tower on a freehold site versus one that is on a short-term lease which has a substantial risk of lease costs increasing, or the underlying lease being terminated.

4. **Section 4: Costs of obtaining approvals to install telecommunications towers**

Key points:

- Community opposition can drive a significant increase in the site selection, acquisition, engineering design and planning approval (SAED) costs.
- Site location must maximise benefit to a carrier's network, which limits the availability of suitable sites.
- Local zoning and community acceptance of the development has a significant influence on the difficulty to secure a suitable site. This can add substantial time to secure a site.
- Appealing adverse development decisions adds substantial additional costs and time to secure a site.

Proposed reforms to reduce infrastructure provision costs:

- Amplitel proposes several reforms that would increase the efficiency in securing new sites for telecommunications infrastructure:
 - (a) the harmonisation of State and Territory planning and development approval processes for telecommunications towers;
 - (b) exemptions from planning and development approvals should be extended to non-carrier MNIPs for telecommunications towers, in particular for towers built under a co-funding programs, towers under specified heights, and towers in certain development zones (e.g. industrial zones); and
 - (c) the required lot size for telecommunications towers should be reconsidered in planning and development requirements.

Community opposition can drive a significant increase in the site selection, acquisition, engineering design and planning approval (SAED) costs

4.1 The costs to identify a suitable site, reach an agreement with a landlord, undertake environmental assessments, design the structure, and secure planning approvals for a site vary significantly between sites. This phase of the development process is often referred to as SAED.

4.2 [c-i-c] [c-i-c].
The lower range of SAED costs reflect the cost to secure a site and prepare materials to support a planning application. Higher costs reflect sites where additional speciality consultants (e.g. environmental, ecological, hydrological, heritage or local aboriginal land councils) are required to provide evidence for the application, extensive community consultation is undertaken, or where Amplitel may need to appeal against adverse planning decisions.

Site location must maximise benefit to a carrier's network, which limits the availability of suitable sites

4.3 Carriers are very particular about site choice, aiming to maximise the benefit of a site to their network against the costs of establishing and maintaining that site. Amplitel's customers will specify a search ring to Amplitel within which to secure a new site, and that location and the size of the ring will depend upon expected network demand, spectrum to be used, distance to the core network (backhaul distance), distance to power and topology of the surrounding region.

Local zoning and community acceptance of the development has a significant influence on the difficulty to secure a suitable site

- 4.4 The cost and difficulty of securing a site within that search ring will depend on surrounding land use (for example residential, commercial or rural) and the local community’s attitude to the use of mobile infrastructure. Carriers often seek to locate towers at high points within the search ring, and these can often be sensitive areas (such as local landmarks, in national parks, or locations that may be significant to traditional owners).
- 4.5 Difficult locations where the local community may object to the establishment of a telecommunications site, or in locations where suitable sites are scarce (e.g. sites zoned for commercial or industrial use) can take many years to secure. Amplitel consults with landlords, communities and other stakeholders for the development of sites. The length of time for approvals to develop a site will vary depending on the capability and resourcing of the stakeholder, and the stakeholder’s requests. For detail on issues with securing tenure and costs, see section 7.

Appealing adverse development decisions will add substantial additional costs and time to secure a site

- 4.6 Appealing the rejection of a development application can add substantial costs and time to the build of a tower. [c-i-c] [c-i-c]
[redacted]
[redacted] [c-i-c].

- 4.7 The length of time for approvals to develop a site will vary depending on the capability and resourcing of the stakeholder and the stakeholder’s requests. A site with minimal community objections may take [c-i-c] [c-i-c] to secure all approvals for construction. Appealing a rejected development application adds significant time to construction of telecommunications facilities. Negotiated outcomes increase acquisition times by a minimum of [c-i-c] [c-i-c], court-based appeals add an additional [c-i-c] [c-i-c]. When sites are in locations where a planning application is rejected, it may take significantly longer to secure a suitable alternative site.

Amplitel proposes several reforms that would increase the efficiency in securing new sites for telecommunications infrastructure

- 4.8 There are several potential changes to increase efficiency in the development of infrastructure by MNIPs, to enable the fast and cost-effective rollout of new infrastructure by industry. This would in turn lead to achieving better mobile connectivity in regional Australia.
- 4.9 Some potential regulatory changes that Amplitel considers may lead to more efficiency in rolling out infrastructure are set out below:
 - (a) **the harmonisation of State and Territory planning and development approval processes** would improve the efficiency, and could reduce the cost, of developing telecommunications infrastructure. Currently the planning and development approval process for mobile infrastructure varies between States and Territories. This adds uncertainty in planning new infrastructure and can increase the costs of the site selection, acquisition and planning approvals during the development phase;
 - (b) currently, certain telecommunications facilities are exempt from certain State and Territory laws for carriers. For example, low-impact facilities as defined in the *Telecommunications (Low-impact Facilities) Determination 2018 (LIFD)* are exempt

from a range of planning and development approval requirements. This is critical to the efficient deployment and maintenance of telecommunications networks as exemptions minimise the regulatory burden on carriers so they can quickly and cost-effectively meet the community's need for access to affordable, fast and reliable telecommunications services in a nationally consistent way. However, the LIFD does not apply to non-carriers. **Exemptions from planning and development approvals should be extended to non-carrier MNIPs for telecommunications towers.** At a minimum the exemptions should apply for:

- (i) towers built under a co-funding programs;
 - (ii) towers under specified heights; and
 - (iii) towers in certain development zones (e.g. industrial zones);
- (d) **the required lot size for telecommunications towers should be reconsidered in planning and development requirements.** Currently, planning rules may mean Amplitel purchases more land than is required for a tower site. Amplitel typically seeks to secure a site that can accommodate at least 2 tenants. For a standard pole location, this can be achieved in an 80-100 sqm plot, increasing to 10,000 sqm for a large guyed-mast. Minimum lot sizes may mean that Amplitel purchases more land than is required for a standard pole e.g. for a minimum lot size of 1,000 sqm, Amplitel will only need 100 sqm of the lot. These requirements are inefficient and unnecessarily increase Amplitel's costs in developing and maintaining infrastructure.

5. **Section 5: Costs of building and maintaining telecommunications towers in regional, remote and peri-urban areas**

Key points:

- Site and tower construction costs vary significantly by site, driven by customer radio frequency requirements, local environmental and geotechnical conditions and site location.
- Customers' radio frequency requirements impact tower height and capacity requirements. On average, towers in regional and remote areas are taller than in metropolitan areas.
- Build costs vary significantly between sites and are influenced by more than just height and remoteness. Drivers of build cost variance include:
 - (a) Local environmental (wind and corrosion) and geotechnical conditions which significantly influence variability of construction costs between towers of similar height and Australian Bureau of Statistics (**ABS**) remoteness;
 - (b) Site security costs: these costs are increasing, particularly in areas where there is substantial community opposition, or risk of members of the public accessing towers;
 - (c) Access tracks: these costs are site specific and dependent on length of track and local weather and ground conditions; and
 - (d) Power connection costs: like access tracks, these are site specific and dependent on the distance to and capacity of the local power network.
- Site remoteness increases construction costs due to mobilisation, transportation, and construction crew costs. In some locations, competition for competent construction workers and equipment also poses issues.
- Maintenance costs must be considered as part of the total life-time cost of a tower. Amplitel maintains its assets to optimise lifetime costs and meet customer and community expectations. This involves:
 - (a) General site maintenance, which is regularly undertaken to ensure access, reduce risks (such as snakes and fire) to customers and the public, and meet landowner and community expectations of upkeep;
 - (b) Tower maintenance, which is managed by a regime of inspection, rectification and renewal to optimise lifetime costs. Lifetime maintenance costs are heavily influenced by environmental conditions as well as location; and
 - (c) Replacing a tower at end of life, which can often be at a higher cost than the original build, demonstrating the need for effective design and maintenance.
- Historical costs are not a good guide for future costs. Inflation is increasing and disproportionately impacting construction costs. Some tower suppliers are based overseas, and the lack of availability of steel and sea freight is substantially increasing costs.

Site and tower construction costs vary significantly by site, driven by customer radio frequency requirements, local environmental and geotechnical conditions and site location

- 5.1 The costs to build a tower to accommodate tenants vary significantly between locations. Construction costs include the site preparation and levelling, foundations and tower erection,

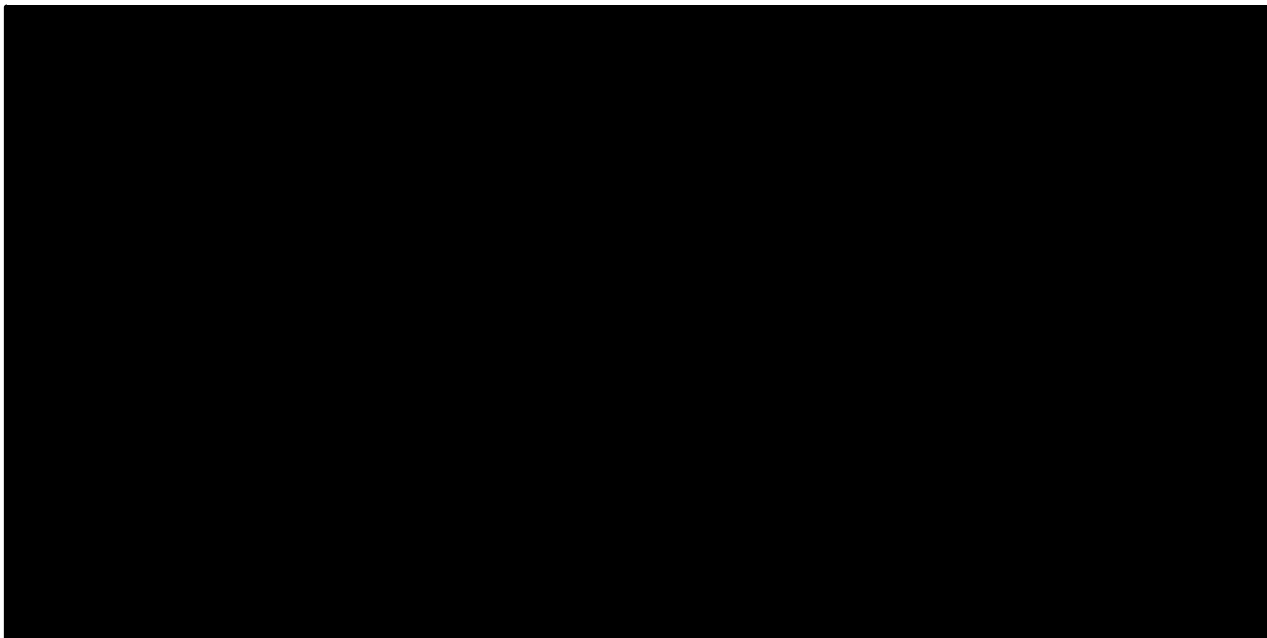
security fencing, and may include preparing the ground for the installation of customer owned huts.

- 5.2 Construction costs are driven by a variety of factors including current and potential future customer requirements (impacting height and strength and foundation), local environmental (wind and corrosion impacts) and geotechnical conditions (rock and unstable soils), site security requirements, access tracks, and power connection costs. Site remoteness increases construction costs through mobilisation, transportation and workforce costs. Amplitel seeks to optimise tower design/type choice across all these factors and balance them with the total lifecycle costs of building and maintaining a tower.

Customers' radio frequency requirements impact tower height and capacity requirements: on average, towers in regional and remote areas are taller

- 5.3 [c-i-c] Figure 4 shows the number and distribution of tower assets by ABS region and height of asset. Towers in regional and remote areas are on average taller than those in major cities. There are a significant proportion of very tall towers in remote and very remote areas.

[c-i-c] [REDACTED]



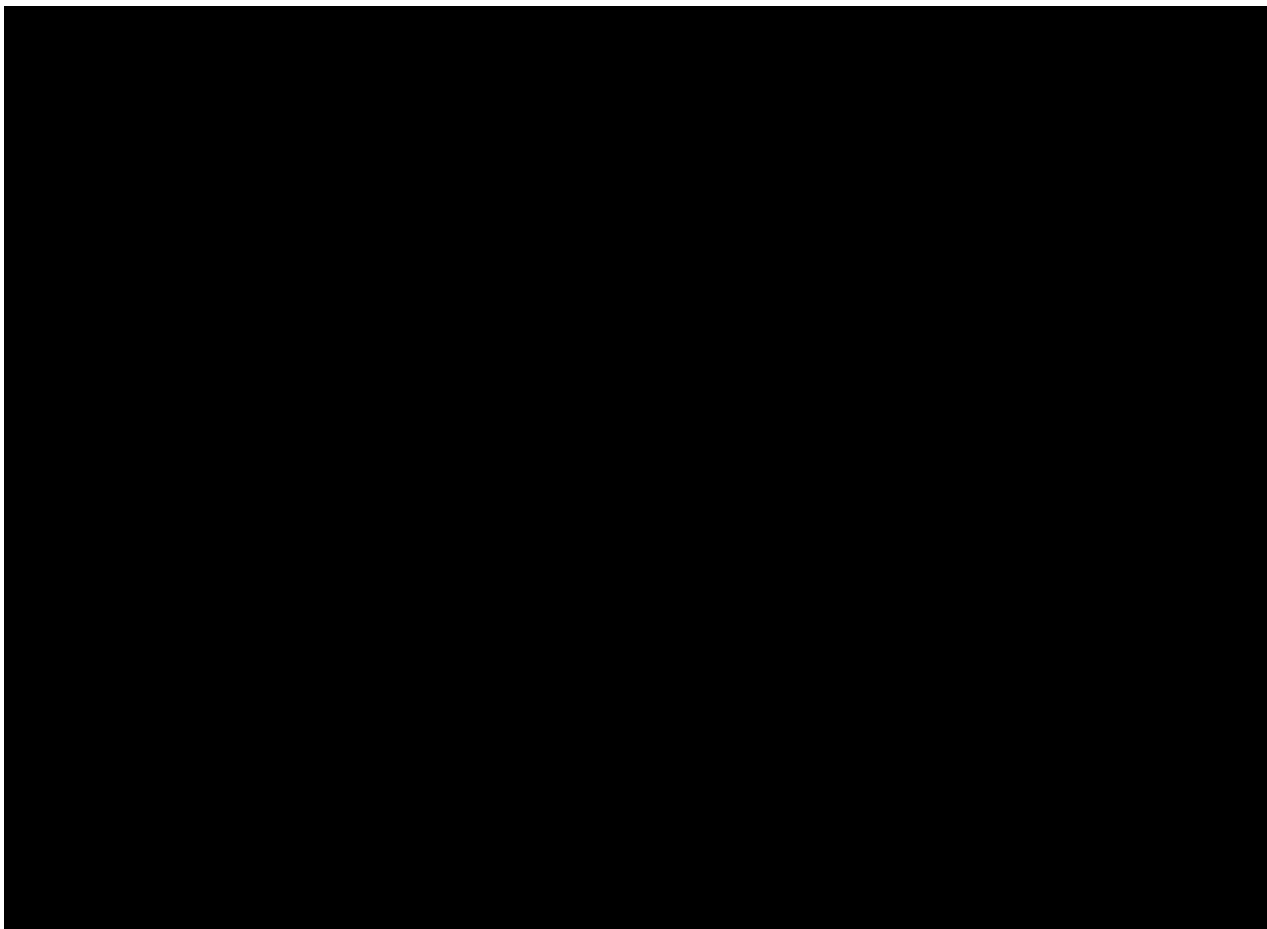
[c-i-c]

Build costs vary significantly between sites and are influenced by more than just height and remoteness

- 5.4 [c-i-c] [REDACTED]

¹ [c-i-c] [REDACTED]
[c-i-c]

[REDACTED]



[C-I-C]

Local environmental (wind and corrosion) and geotechnical conditions significantly influence variability of construction costs between towers of similar height and ABS remoteness

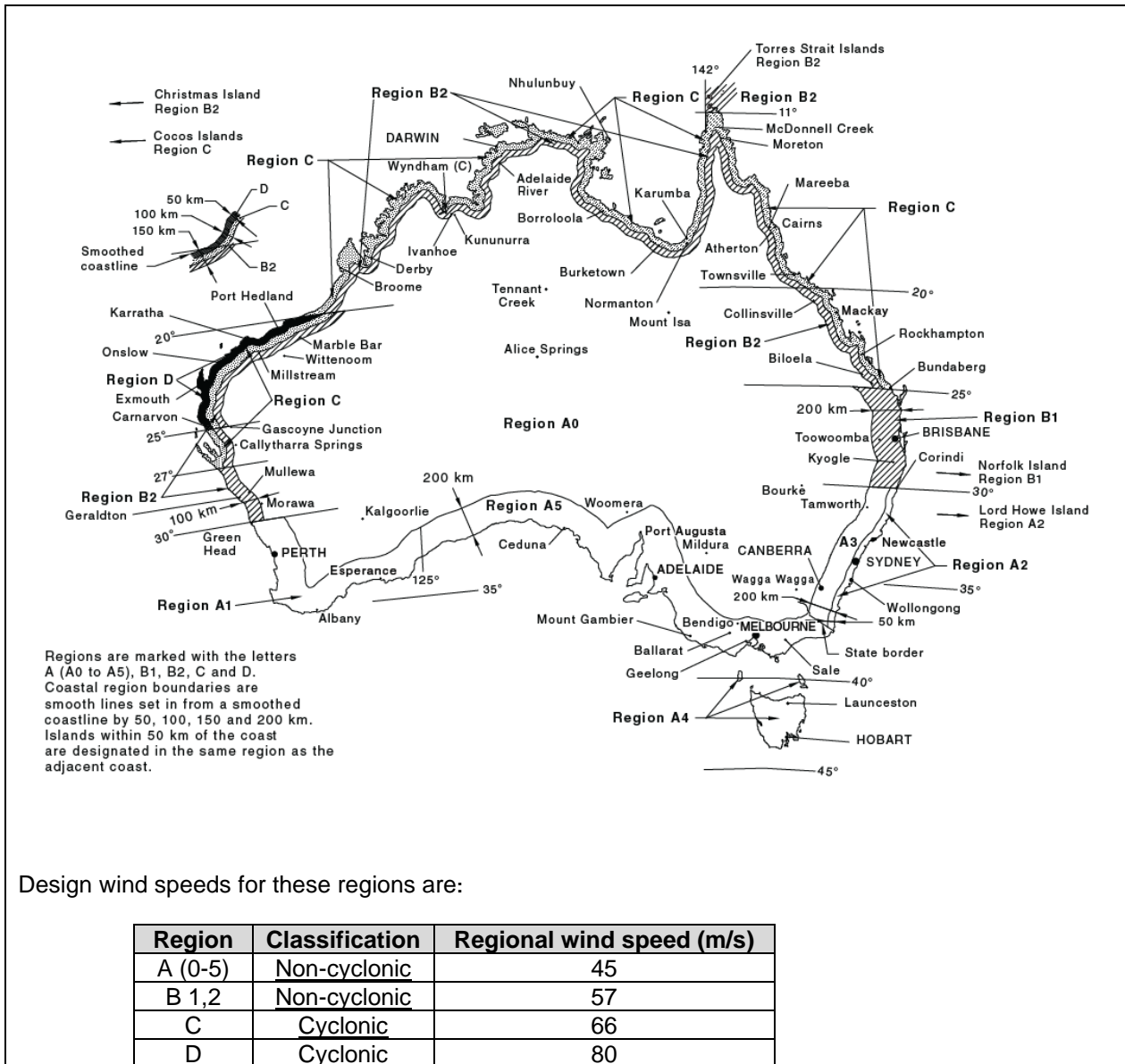
5.5 Local environmental conditions: wind

Amplitel designs its towers to meet the requirements of the Australian wind code. This code sets the wind loading that a structure must withstand in every location in Australia. A tower in a non-cyclonic wind zone can be structurally lighter (both footings and the tower) than towers that are in extreme cyclonic zones when built to accommodate the same equipment. The Australian wind codes are relatively conservative and ensure that infrastructure developed now is likely to be able to withstand future high-wind events. Figure 6 shows the Australian wind zones and design wind speeds.

5.6

Detailed structural analysis is required to design a tower to withstand these design wind speeds, and must incorporate wind speed, terrain, tower height and local topographical effects. The nature of regional and remote sites means that these multipliers can have a significant effect and require more robust structures to be designed. Due to the nature of communications in these areas, tall structures on the top of hills are ideal for long range communications, however, a structure on top of a hill may have a topographic multiplier of 1.5, which could result in 1.5 times increase in the peak design speeds. As climate change increasingly changes weather patterns, high wind areas are expected to change, particularly those dominated by cyclonic conditions.

Figure 6: Map of Australian wind zones²



5.7 **Local environmental conditions: corrosion**
 Corrosion reduces the expected life of a tower, shortening the time between replacements. Towers located in high corrosion areas require more inspections and higher levels of maintenance in order to maximise their useful life. High corrosion areas include high rainfall, high pollution (e.g. dense urban/industrial zones) or high salt environments (particularly within ~100km from the coast). Across Amplitel’s entire portfolio (including metro), around 70% of towers are located in low corrosion zones, 20% in medium corrosion zones and 10% in high corrosion zones.

5.8 Corrosion impacts both steel and concrete towers. High corrosion environments will drive tower type choice and increases the initial cost of the tower, and maintenance costs, over

² Standard AS/NZS 1170.2:2021 Structural design actions, Part 2: Wind actions

time. Protective paint or galvanising is used to maximise the life of the structure which results in both higher initial and ongoing maintenance costs.

5.9 **Geotechnical conditions**

The geotechnical conditions (ground type) drive a significant variation in the costs of constructing a tower, and in some cases increase maintenance requirements of a site. Rock, unstable ground (e.g. sandy soils), and high water-tables will influence site excavation costs and foundation design. These are often hard to foresee and may result in an increase in costs during build (above those estimated above).

- 5.10 Acid sulphate soils may be present in some parts of the Murray-Darling basin. These soils can be highly corrosive and may reduce the asset life of any component of the structure in contact with the soil, including foundations and any stays for guyed masts. Increased maintenance frequency and ad-hoc rectification works are likely required for structures that are at risk of contact with this soil type.

Site security costs are increasing, particularly in areas where there is substantial community opposition, or risk of members of the public accessing towers

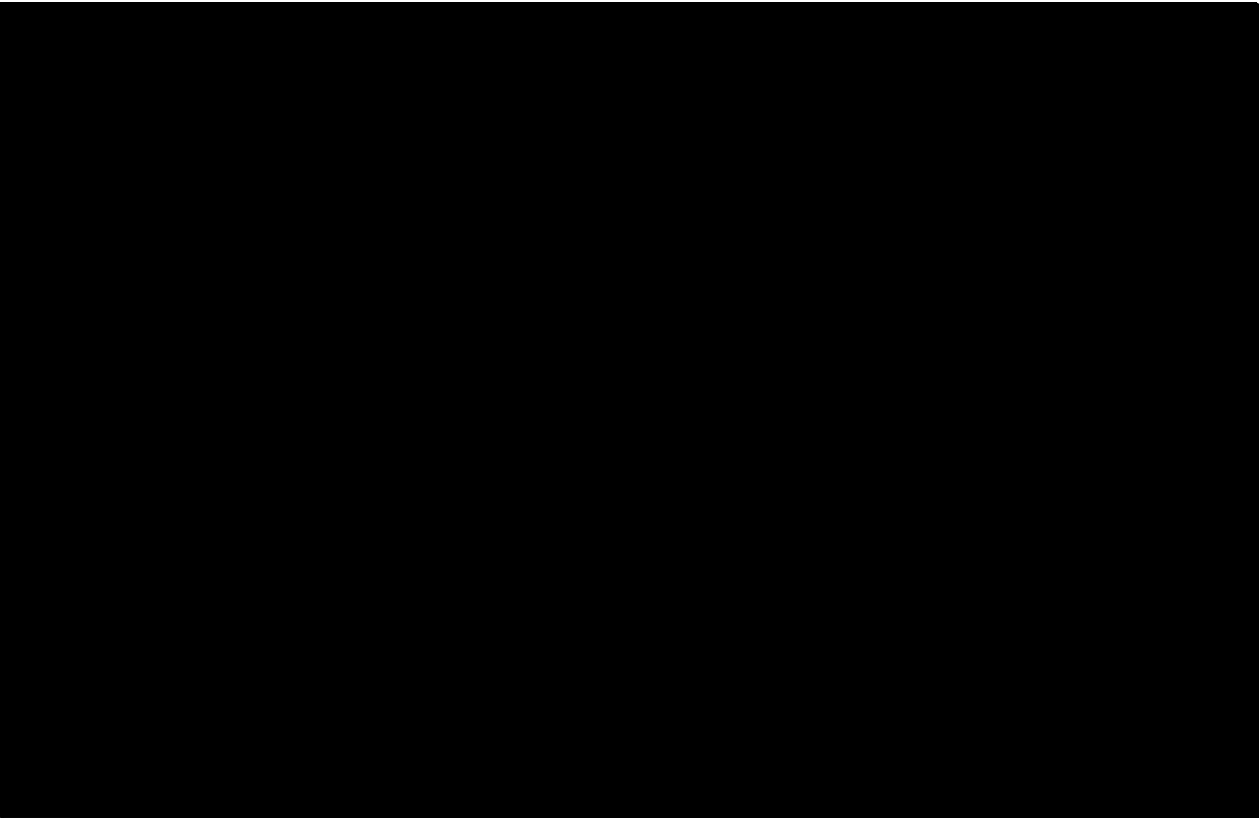
- 5.11 Amplitel is responsible for installing perimeter security fencing at most sites. Fencing is designed to prevent unwanted access and damage to the site to protect Amplitel's and customers' assets, as well as to prevent members of the public from climbing towers. While in most cases, chain link fencing is sufficient to protect a site, in some locations more expensive, climb-proof fencing such as palisade fencing may be required to protect a site.

- 5.12 Wilful damage to sites is a problem for both regional and metropolitan sites. Recent increases in copper prices have resulted in an increase in break and enter incidents to steal copper cable, including earthing cable. This results in increased maintenance costs associated with security fences, and in some cases upgrading fencing earlier than planned to more secure fencing. In some regional locations, proportions of the local community oppose the installation of 5G which has resulted in wilful damage to both Amplitel sites as well as customer equipment on these sites. A recent example of this occurred at Mullumbimby, NSW, where an arson attack on the tower damaged customer feeder cables and antennas. Significantly enhanced security has now been deployed at this site.

Access track costs are site specific and can add significant additional costs which are independent of tower size

- 5.13 The costs to make a site accessible for both tower construction and provide ongoing access for maintenance and customers differ significantly by site and location. Most sites are accessible by an access track, but in some remote locations helicopter access may be required, in these cases a helicopter landing pad would also need to be constructed.
- 5.14 In general access track costs are relatively minor, but as seen from **Figure 7**, there can be a high degree of variability in these costs across all regions. The distribution of these costs from recent examples will be affected by the sample. Amplitel commenced replacement of a tower at Pascoe River on the Cape Yorke Peninsula (QLD) in August 2022 (ABS remoteness: Very Remote). To access this site, 16km of existing access tracks and local roads must be upgraded to support the transport of the construction machinery and tower to site. [c-i-c] [REDACTED]

[REDACTED]



[c-i-c]

Power costs, like access track costs, are site specific and can add significant additional costs which are independent of tower size

- 5.15 Amplitel is responsible for organising electricity connection from the local power grid to the electricity distribution panel at the site boundary. Customers are responsible for ordering an AC meter via their retailer and installing the meter to their equipment on site. Customers organise a connection with the electricity retailer and pay for their electricity usage.
- 5.16 At extremely remote sites, or in areas where power resiliency is an issue, the customer may wish to install a remote power solution (e.g. solar, generator and/or batteries) as either a standalone or supplementary power source. In these cases, Amplitel may provide compound space for these solutions.
- 5.17 Power extension costs can vary significantly as shown in [c-i-c] Figure 8. Key variables include expected power load on site, method of construction (overhead aerial versus underground), distance of the power network extensions, network upgrades upstream from existing point of supply, distance of point of supply to site, in addition to the remoteness of the site. Power network connection and upgrades are also considered a long lead-time and can extend the time to construction completion.

[c-i-c]

[c-i-c]

Site remoteness increases construction costs due to mobilisation, transportation, and construction crew costs

- 5.18 Construction costs in regional and remote areas are higher than in metropolitan areas due to mobilisation costs and transportation of the tower from the manufacturing point to site, and costs of accommodating remote workers.
- 5.19 Mobilisation costs cover costs of getting qualified construction crews, construction equipment (such as earthmoving equipment and cranes) and construction materials (such as concrete and steel reinforcing) to site. Depending on the type of tower under construction, expert construction crews may be brought to location by road or by air and must be accommodated in local towns, or in remote camps. In some instances where a site is inaccessible by heavy machinery, manual construction methods are required which significantly increase the construction time and consequentially, the length of time construction crews are required on site. In regions where mining is a primary industry, heavy machinery is typically highly utilised and attracts premium costs to be secured, or alternatively can be mobilised from outside of mining regions.
- 5.20 Transportation costs refer to the additional costs required to get the tower to site. Amplitel uses a range of different manufacturers for each of its tower types and is aiming to increase the diversity of manufacturers to reduce supply chain and inflation risks. A number of tower types are manufactured overseas – and are transported to the nearest suitable port. Others are manufactured at a few locations in Australia and must be transported by road to site.
- 5.21 Amplitel has a number of towers on islands around Australia and the mobilisation and transportation costs associated with building or replacing a tower in these locations is significantly higher than a site on the mainland. Equipment for these sites must be barged or helicoptered to the site.

Amplitel maintains its assets to optimise lifetime costs and meet customer and community expectations

- 5.22 Amplitel must maintain a site and tower to protect customers, assets and the public. This falls into three main types of maintenance:
- (a) general site maintenance to ensure vegetation is maintained to minimise hazards and to meet requirements of the location community;
 - (b) maintenance of security and tower anti-climb installations to ensure that assets cannot be damaged and to prevent harm (including deliberate self-harm events) to the community; and
 - (c) maintenance of the tower to maximise asset life and prevent potential structural failure.

General site maintenance is undertaken on a regular frequency to reduce risks to customers and the public

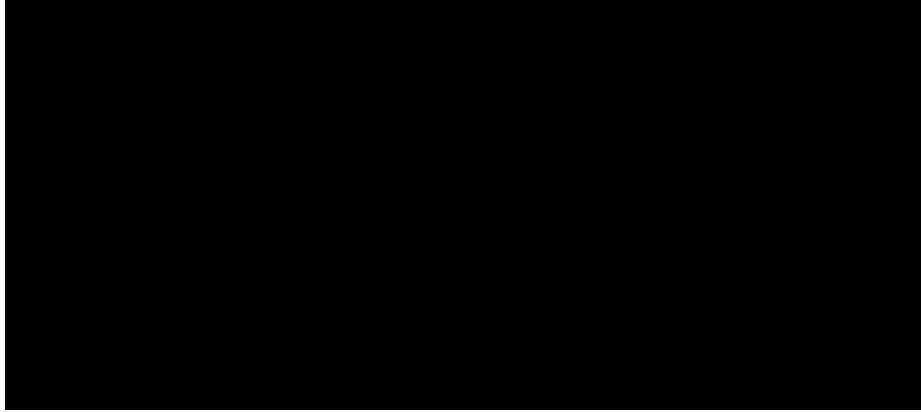
5.23 General site maintenance in most cases will include regular vegetation management or clearing to minimise risk from trip hazards and snakes. If the site has an access track, these may need to be maintained to a level that will enable 4WD access (at a minimum) for inspection but may also require higher maintenance standards to enable large construction vehicles access to install new customer equipment and facilities on site. In regions with relatively stable, benign weather, these costs are small, but the cost to maintain an access track will significantly increase in areas of high rainfall or areas that are at risk of flooding. Access track maintenance occurs on an as needs basis.

Tower maintenance is managed by an inspection, rectification and renewal regime to optimise lifetime costs. Lifetime maintenance costs are heavily influenced by environmental conditions

5.24 To maintain the tower, Amplitel undertakes routine inspections, minor maintenance, and asset renewal maintenance (end-of-life replacement or refurbishment). Routine inspections are conducted on a relatively frequent basis and are used to track changes in asset condition and identify any potential immediate or future maintenance needs. Amplitel conducts inspections via drones or visual inspection from riggers who climb the assets or inspect the assets via cranes. These inspections cost between [c-i-c] [REDACTED].

[REDACTED]

[REDACTED]



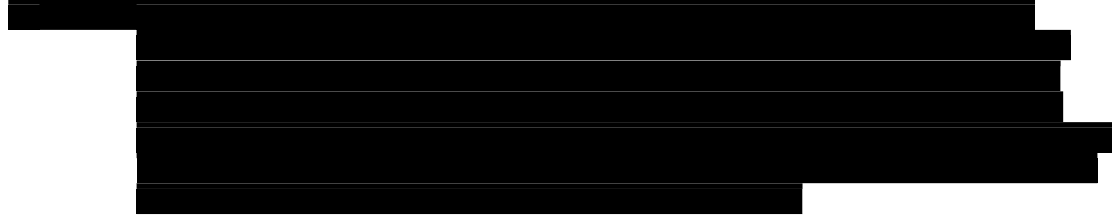
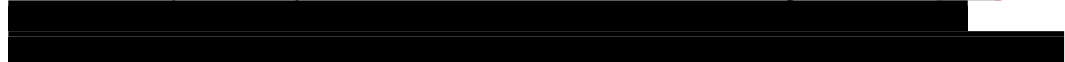
[c-i-c]

5.25 In addition to routine inspections, Amplitel undertakes planned, preventive and reactive maintenance activities on its structures. These activities vary significantly in cost depending on the reason for the maintenance activity. [c-i-c] [c-i-c]. Costs for each of these activities will be higher in regional and remote areas.

Replacing a tower at end of life can often cost more than the original build demonstrating the need for effective design and maintenance

5.26 Replacements can cost more than initial build due to the preference to build within the existing compound footprint while maintaining an active service from the existing structure.

5.27 Amplitel is currently replacing a number of structures which are at end-of-life that are in very remote areas and subject to extreme environments. Installations in extreme environments typically have shorter lives and cost substantially more to replace. While Amplitel does not anticipate many new greenfield towers in locations such as these, Amplitel does expect that it will have to replace many of these structures that are now reaching end of life. [c-i-c]



[c-i-c]

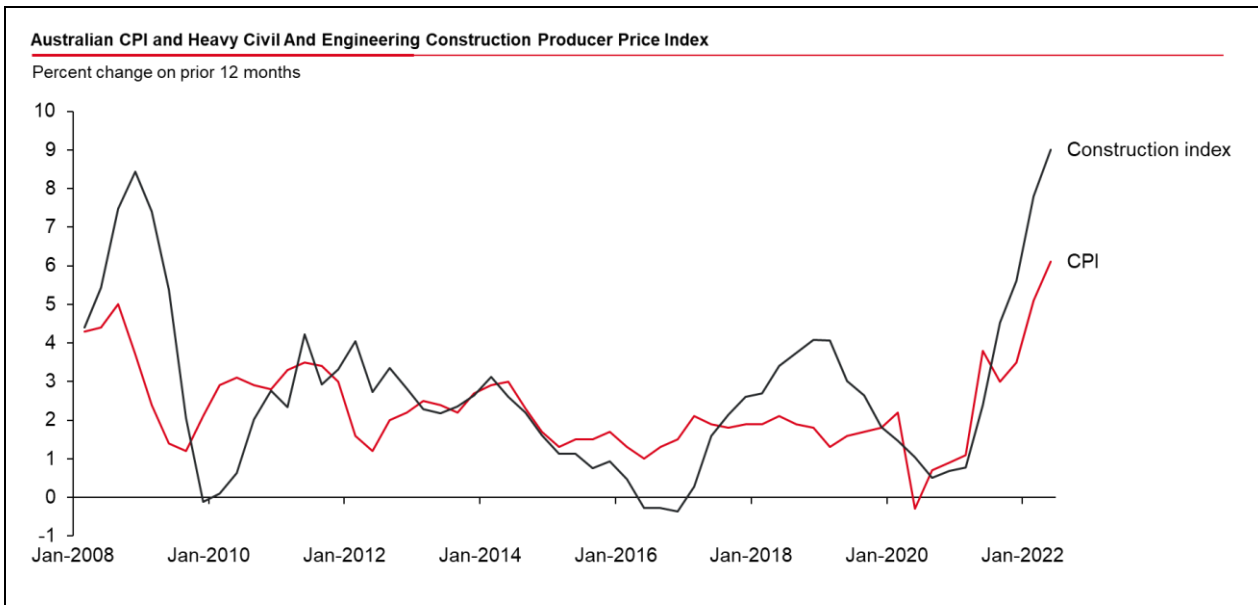
End of life costs must be considered as part of the total lifetime cost of ownership

- 5.28 There are two causes of a tower reaching ‘end-of-life’. The first is the tower is no longer capable of performing the function required to meet customer needs – this is the maintenance definition of end-of-life. The second cause is a tower no longer being required to meet a customer need – i.e., all customers choose to remove their active equipment. In both of these cases, Amplitel will need to decommission the tower, and in the second case, remediate the site to return it to a land-owner.
- 5.29 In addition to these two end-of-life causes, land-owners may seek to terminate a lease early, or not renew a lease forcing early rationalisation of the tower site.
- 5.30 The cost to decommission and remediate a site varies depending on location and type of structure.

Historical costs are not a good guide for future costs: inflation is increasing and disproportionately impacting construction costs. Some tower suppliers are based overseas and the lack of availability of steel and sea freight is substantially increasing costs.

- 5.31 The Australian economy is operating in a highly uncertain inflation environment. The consumer price index (CPI) has risen in the last 2 years from historically low levels to a decade high. Similarly heavy civil construction costs have risen from near industry lows to 9% higher than the comparable period last year. Rising costs will put substantial pressure on the provision and maintenance of tower infrastructure.
- 5.32 This year alone, Amplitel has seen [c-i-c] [c-i-c] increase in the costs of towers.

Figure 9: CPI and Heavy Civil and Engineering Construction Producer Price Index³



³ ABS Consumer Price Index, All Groups, Australia, cat 6201.0 Tables 1 and 2, Australia June 2022; ABS Producer Price Index Cat 6427.0 Table 17, June 2022

6. **Section 6: costs and considerations for customer co-location after initial tower construction**

Key points:

- Amplitel designs new towers to meet current and reasonably expected future demand for a tower
- However, the cost of co-location on a tower after construction may be significant if the tower or site is already at capacity. These costs may arise as a result of an existing tenant seeking to increase equipment on the tower (e.g. when they upgrade to 5G) or a new customer seeking to access the tower
- Additional costs to accommodate a customer at this point may include costs to strengthen the existing tower or replace it with a newer, stronger, and potentially taller structure, or costs to expand the compound and lease to accommodate additional customer shelters
- [c-i-c] [c-i-c]

The cost of co-location on a tower after construction is completed may be significant if the tower or site is already at capacity

6.1 Amplitel designs new towers to meet current and reasonably expected future demand for a tower. However, should there be unanticipated future demand, or the capacity on a tower already be fully utilised, additional investment will likely be required to meet the demands of additional customers.

6.2 [c-i-c] [c-i-c]

6.3 [c-i-c] [c-i-c] Depending on the customer’s contract, additional compound space may be secured either by the customer, or by Amplitel.

6.4 Amplitel also maintains systems, processes and resources to enable customers to access towers. This capability is an indirect cost and detailed in Section 8.

6.5 [c-i-c] [c-i-c]

7. **Section 7: Arrangements available to tower providers to secure land and the risks that may arise from different forms of land tenure.**

Key points:

- Tenure costs and access rights are site specific and vary substantially by region, site size, tenure type and landlord.
- Site size is set to accommodate the tower, which can vary substantially depending on the tower type, and accommodate foreseeable customer huts.
- Rights to traverse neighbouring land (particularly in regional and remote areas) may be required in addition to site tenure rights.
- Amplitel uses a variety of methods to secure tenure, including freehold, leasehold and licence.
- Tenure costs and risks vary by type of landlord. The relatively short-term nature of commercial leasehold increases long-term risks for property costs.
- The approach to setting rental fees differs between government entities and private landlords. Government landlords usually have a pre-determined price of access, while private landlords negotiate fees.
- [c-i-c] [REDACTED]
- [REDACTED] [c-i-c]

Tenure costs and access rights are site specific and vary substantially by region, site size, tenure type and landlord.

7.1

[c-i-c] [REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]

[REDACTED]

[REDACTED]

[c-i-c]

Site size is set to accommodate the tower and accommodate foreseeable customer huts

7.2 Amplitel aims to optimise the overall tenure costs for each tower, which will include making early assessments as to the likely number of tenants on the tower and their required ground space at the point of initial site acquisition. Due to holding costs, it is not in Amplitel's, or its customers' interests, to secure significant excess land for a site with low potential for multi-tenancy. Whereas for sites with high potential for multi-tenancy, Amplitel may secure land in excess of that required for the anchor tenant.

7.3 The site size required for a tower will also depend on the type of structure (e.g. a concrete pole versus guyed mast) and whether off-grid power is required either for resiliency or as the main power source.

7.4 Site size has a substantial bearing on the cost of accessing a site. [c-i-c] [REDACTED]
[REDACTED]
[REDACTED]
[REDACTED] [c-i-c]

4 [REDACTED]

Rights to traverse neighbouring land (particularly in regional and remote) may be required in addition to site tenure rights

7.5 The right to traverse neighbouring land is very important, not only for the initial construction of the tower, but ongoing maintenance of the land, Amplitel’s assets, and customers’ assets. Access to a site may be difficult in regions where telecommunications infrastructure may be opposed by a proportion of the local community, or where historical relationships with a landlord may be difficult.

Amplitel uses a variety of methods to secure tenure

7.6 There are three ways that Amplitel gains tenure, each has different associated costs:

- (a) freehold, for which costs include purchase of the land, stamp duty and registration costs, council and water rates, and land tax;
- (b) leasehold, for which costs include rental fees, costs of entering into a lease agreement (such as legal fees, often born by the lessee), site maintenance costs (including access tracks). [c-i-c] [REDACTED]
[REDACTED]
[REDACTED]
[REDACTED] [c-i-c]; and
- (c) licences (including crown licences and those issued by government departments and agencies), for which costs are similar to leasehold properties.

7.7 For large landowners, such as government, and government corporations, Amplitel’s tenure may be governed by a master lease or licence agreement. Payments may be upfront, as in the case of freehold or prepaid leasehold, or over time as in normal lease arrangements. [c-i-c] [REDACTED]
[REDACTED].

[REDACTED]

[REDACTED]
[REDACTED]

[REDACTED]
[REDACTED]

[REDACTED]

[REDACTED]
[REDACTED]
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[REDACTED]
[REDACTED]

[REDACTED]
[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[c-i-c]

The approach to setting rental fees differs between government entities and private landlords.

7.9 Government landlords usually have a pre-determined price of access, set in each state by a nominated 'independent' authority (e.g. in NSW by the Independent Pricing and Regulatory Authority (**IPART**), in Qld by the Queensland Valuer General (**QLDVG**), and in ACT by the ACT Planning and Sustainable Directorate). Some government and former government entities may levy co-user fees on Amplitel's tenants increasing total rental returns from a site and increasing the total cost of telecommunications infrastructure. Government entities may also seek additional non-fee benefits from leasing sites to MNIPs or carriers. Examples include discounted co-location rights on the structure for the installation of public radio networks or fire watch platforms. These installations consume capacity on the tower and therefore have a cost to Amplitel.

7.10

[c-i-c] [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[C-i-c]

8. **Section 8: Non-attributable costs, including business practices and systems costs**

Key points:

- Amplitel incurs a range of costs that cannot be attributed to individual towers.
- There are costs to set up business practices and systems and grow Amplitel's towers portfolio and associated infrastructure.

8.1 Since establishment of Amplitel as an independent operating entity, Amplitel has continued to build the capability of the business to deliver improved outcomes to customers. This has involved the transfer of employees to Amplitel, the recruitment of additional employees, and the development of new IT infrastructure to support the business. [c-i-c] [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

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[REDACTED]

[REDACTED]

[C-i-c]

9. **Section 9: The business case for investment in new tower sites: the role of co-funding**

Key points:

- Amplitel assesses the business case for each site before developing or upgrading a site.
- Amplitel considers a broad range of risk factors before investing in new towers.
- Amplitel notes that financing costs are rising [c-i-c] [redacted] [c-i-c]

Amplitel assesses the business case for each site before developing or upgrading a site

- 9.1 The decision to develop a new tower site ultimately comes down to an assessment of the relevant business case. For example, where there is a build-to-suit request by a customer, Amplitel would consider whether the customer is willing to pay a charge that will recover Amplitel's costs plus a reasonable return having regard to the risks. Amplitel's costs will include the cost of ground lease, the build costs and the forecast operational expenditure.
- 9.2 Amplitel aims to recover on average returns above the direct construction and operating costs of the tower in order to fund the non-attributable costs of the business and provide a return to debt and equity providers
- 9.3 Returns above the direct costs will come from increased asset utilisation – thereby driving Amplitel's incentives to increase utilisation of its infrastructure. [c-i-c] [redacted] [c-i-c]

Amplitel considers a range of risk factors in its business cases

- 9.4 Amplitel will consider a range of risk factors including: [c-i-c]
- [redacted]
- [redacted]
- [redacted]
- [redacted]
- [c-i-c]

Amplitel notes that financing costs are rising [c-i-c] [redacted]

[redacted]

[redacted]

[redacted] [c-i-c]

10. **Section 10: Impact of industry structural changes on the commercial arrangements for access to towers and associated infrastructure**

Key points:

- Significant and ongoing structural changes in the telecommunications tower industry will result in substantial reformation of historical commercial arrangements for access to towers and associated infrastructure.
- New commercial arrangements are in the process of being negotiated, these commercial arrangements will take time to be implemented and will involve negotiation tension as would be expected for substantial commercial arrangements. Commercial incentives for MNIPs have shifted and as a result Amplitel expects customers to seek more bespoke commercial arrangements to support their business objectives.

Significant and ongoing structural changes in the telecommunications tower industry will result in substantial reformation of historical commercial arrangements for access to towers and associated infrastructure

10.1 As recognised at 3.7 of the Consultation Paper, there has been *"significant and ongoing structural changes in the telecommunications tower industry"*. Historically, many of the market participants have been vertically integrated, however this has changed with significant movement in the industry structure.

10.2 Due to this shift, Amplitel considers there may be limited benefit to the ACCC in examining historical practice and the existing *"typical commercial arrangements for access to towers and associated infrastructure"* in place when there was full vertical integration of infrastructure by the three major MNOs.

[c-i-c]

[c-i-c]

Commercial incentives for MNIPs have shifted and as a result Amplitel expects customers to seek more bespoke commercial arrangements to support their business objectives

10.4 With new specialist tower operators, such as Amplitel and its major competitors, emerging from the divestment of tower assets by MNOs, there are clearly different commercial incentives at play. The primary purpose of tower operators, as specialist infrastructure owners, is to increase infrastructure utilisation through multi-tenancies and to grow through network expansion and densification (as opposed to being vertically aligned with a particular carrier). Encouraging greater utilisation of tower assets in turn drives greater value for shareholders of the specialist tower companies.

11. Section 11: Amplitel's general terms of access to towers and other infrastructure

[c-i-c] [REDACTED]

[REDACTED]

[REDACTED]

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[REDACTED]
[REDACTED]
[REDACTED] [C-I-C]

12. Section 12: Conduct of commercial land aggregators and of government as landowners

Key points:

- The actions of land aggregators can adversely impact a business case for tower locations in regional, rural and remote areas. [c-i-c] [REDACTED]
[REDACTED] [c-i-c]
- Some government land owners also have rent seeking approaches to telecommunications sites, leveraging additional fees (co-user fees) on sites with increased utilisation without any corresponding benefits.
- Government landowners are in a unique position to reduce the cost of providing new telecommunications infrastructure in regional and remote regions by reducing rents on government lands.
- With respect to the Conduct of commercial land aggregators and of government as landowners, proposed reforms to reduce infrastructure provision costs include:
 - implementing IPART’s recommendations that primary users in High, Medium, Remote and Very Remote locations should pay lower rents to government land agencies; and
 - implementing IPART’s recommendation that co-users should only pay rent to government land agencies for the additional land they occupy.
- However, IPART’s recommendations to increase rent for primary users of existing crown land sites in the Low land category should not be implemented.
- Amplitel would encourage matching approaches to be implemented across all Federal and state government owned lands in the public interest.

The actions of land aggregators can adversely impact a business case for tower locations in regional, rural and remote areas. [c-i-c] [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

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[REDACTED]

[REDACTED]



- 12.5 As the ACCC has noted in its Consultation Paper, "*the costs of building networks, both fixed and mobile, are high in rural, regional and remote areas and returns are generally low. This means that the commercial case for extending networks in sparsely populated areas is generally a difficult one to make absent some form of government subsidy.*" Particularly in regional, rural and remote areas, including the peri-urban fringe, where the provision of infrastructure is marginal or negative (and often requires a government subsidy), land aggregators who extract super competitive rents by virtue of sunk costs and RF planning requirements have the potential to affect coverage in those areas, and to increase public funds required to induce investment where private capital cannot obtain a commercial return, which is not in the public interest.

Some government landowners also have rent seeking approaches to telecommunications sites, leveraging additional fees (co-user fees) on sites with increased utilisation without any corresponding benefits

- 12.6 Governments do not seek to aggregate land in the same way as commercial telecommunications lease aggregators, whose business model focuses on the strategic acquisition and management of ground, site, rooftop and in-building telco site leases.
- 12.7 However, because governments are major landholders of telecommunications infrastructure sites, similar issues can arise. Tenure is shorter than the expected useful life of a tower in almost all cases except for freehold sites. Where Amplitel is required to negotiate with landlords to renew tenure, Amplitel is exposed to several risks. Landlords can take advantage of the high cost of moving infrastructure. Increased rents for no corresponding increase in value can adversely impact a business case for tower locations and can cause sites to become marginal or negative.
- 12.8 In the case of regional, rural and remote areas this may be compounded as government land management agencies are often monopoly suppliers of the only suitable communication tower sites. In the case of NSW for example, the availability of mobile tower sites is limited, and three crown land management agencies⁵ control 53% of all land in the State, effectively creating a monopoly in many areas.⁶
- 12.9 An illustration of problems which can adversely impact on the incentives for accessing land required for the establishment and operation of telecommunications tower infrastructure is the November 2019 final report of IPART on 'Rental Arrangements for Communication Towers on Crown Lands'.
- 12.10 In its report, IPART recommended categorising land for the purpose of setting rents on crown lands in the following manner:
- (a) high: metropolitan areas located in the ABS Significant Urban Areas (**SUAs**) of Sydney, Newcastle – Maitland, Wollongong, and the Central Coast.

⁵ Department of Planning, Industry and Environment – Property and Housing (Crown Lands); NSW National Parks and Wildlife Service; Forestry Corporation of NSW.

⁶ 'Final Report – Review of rental arrangements for communication towers on Crown land – November 2019' (**IPART report**), page 35

- (e) medium: areas located in the remaining 35 NSW ABS SUAs. SUAs represent significant towns and cities of 10,000 people or more and cover urban and adjacent areas (the ABS aims to include likely areas of growth).
- (f) low: rest of NSW not located in the High and Medium categories and excluding areas located in the Remote and Very remote categories.
- (g) remote: areas located in Remote ABS Remoteness Areas (**RAs**).
- (h) very remote: areas located in Very remote ABS RAs.⁷

12.11 The figure below shows the location categories on a map of NSW.⁸



12.12 IPART’s review found that the appropriate basis for setting rents for communication tower sites on crown land is rents agreed in a workably competitive market – that is, rents paid by commercial users of communication tower sites on private land are the best-available indicators of efficient prices.⁹ Accordingly, IPART recommended that a new rent schedule should be released for communication tower sites on crown lands. The rent schedule recommended that primary users in High, Medium, Remote and Very Remote locations should pay lower rents to government land agencies.¹⁰ IPART also recommended that co-users should only pay rent to government land agencies for the additional land they occupy, so for co-users wholly within the fenced areas of the primary user’s site IPART recommended

⁷ IPART report page 47.

⁸ IPART report page 117.

⁹ IPART report page 9

¹⁰ IPART report page 6.

that the government land agency charge no annual rent.¹¹ Amplitel welcomes these recommendations.

- 12.13 However, by contrast, IPART's proposed rent schedule recommended increasing rents by 32% for primary users of existing crown land sites in the Low land category.¹² This is concerning given the numbers of mobile towers on crown land that are in the Low land category. Much of the crown land sits in the Low category. Unlike the situation in metropolitan areas, there are few alternate sites for communications towers in Low land categories.¹³
- 12.14 The NSW Government has not accepted the recommendations in the IPART review as it maintains the dataset, which pre-dated COVID, does not reflect current post-COVID market conditions. Amplitel has been told by the NSW Government that the next IPART review is due to commence in 2022 and will benefit from a larger dataset to determine fair, market-based rents for commercial users, while considering appropriate concessions to meet the public need for adequate communications services in remote and rural areas of NSW. This last point on the 'public need' in remote and rural areas is crucially important and was not adequately considered in the last IPART review.
- 12.15 In relation to the recommendations from the last IPART review, Amplitel believes that:
- (a) IPART's recommendations that primary users in High, Medium, Remote and Very Remote locations should pay lower rents to government land agencies should be implemented;
 - (b) IPART's recommendation that those co-users should only pay rent to government land agencies for the additional land they occupy should be implemented. Co-user rents are inconsistent with Commonwealth legislation which encourages co-location, such as the *Telecommunications Act 1997*. Co-location should be encouraged as it has a range of benefits including more efficient use of land, expanded coverage, and increasing the uptake of emerging technology for communication purposes such as small cell technology as required for 5G mobile telecommunications;¹⁴ and
 - (c) Amplitel does not believe that IPART's recommendation to increase rent for primary users of existing crown land sites in the Low land category should be implemented by the NSW Government.
- 12.16 Amplitel would encourage these recommendations to be implemented across all Federal and state government owned lands.

Government landowners are in a unique position to reduce the cost of providing new telecommunications infrastructure in regional and remote regions by reducing rents on government lands.

- 12.17 Government landowners are in a unique position to reduce the cost of providing new telecommunications infrastructure in regional and remote regions by reducing rents on government lands.
- 12.18 This is because, as the ACCC notes in the Consultation Paper, the commercial incentives for investing in regional Australia remain challenging and that the commercial returns from sparsely populated areas are generally low which makes the commercial case for extending networks generally a difficult one to make. Governmental agencies that increase rents on

¹¹ IPART report page 77.

¹² IPART report page 46.

¹³ IPART report page 17-18

¹⁴ IPART Report, pages 85-86.

crown lands in sparsely populated areas makes the commercial case for extending networks into these areas even more difficult, which will result in poor access to towers and associated passive and active infrastructure provided by telecommunications and other infrastructure providers in regional, rural, remote and peri-urban areas within Australia.

- 12.19 Federal and state government co-funding initiatives seek to support the provision of new mobile coverage through investments that address coverage, capacity and competition issues e.g. the Federal Government's Mobile Black Spot Program. There would be a fundamental inconsistency with state governments potentially seeking to increase rents on crown lands in rural and regional areas while there are these types of co-funding initiatives. In considering the appropriate rents, Government land agencies should explicitly consider:
- (a) the maximisation of social welfare outcomes;
 - (b) the positive externalities generated by mobile towers; and
 - (c) the self-defeating effect of increasing rents while at the same time providing co-funding from public funds which in part goes back to the crown in the form of increased rents for sites in these areas.
- 12.20 In Amplitel's view, the public interest in governments setting rents at a level which does not make it harder to establish a business case for a regional and remote area wireless telecommunications infrastructure are clear and override maximising revenue collection by crown agencies in these areas.
- 12.21 In the overall public interest, a whole-of-government and consistent approach, e.g. through the National Federation Reform Council, should be adopted to promote the availability of accessible and affordable carriage services that enhance the welfare of Australians in accordance with the main object of the *Telecommunications Act 1997* (Cth).¹⁵

¹⁵ *Telecommunications Act 1997* (Cth), section 3(1).

13. **Section 13: Effectiveness of current commercial and regulatory arrangements for access**

Key points:

- Given recent shifts in industry structure, the current regulatory arrangements which support access may no longer be appropriate and may impose additional burden and cost of the sector.
- No additional regulation is required.
- Amplitel encourages regulatory changes to make it easier for MNIPs to rollout infrastructure – see section 4.

- 13.1 Amplitel considers that the current regulatory arrangements for access are effective, and no enhancement to the existing regulatory scheme is required. On the contrary, the current access regulatory arrangements, which impose burden and cost, could potentially be reduced owing to the structural change in the sector. The current regulatory arrangements impose a burden on MNIPs in a carrier group that are beyond the benefits they yield.
- 13.2 As previously mentioned, the industry structure has dramatically changed. The historical vertical integration of the major market participants has rapidly shifted with significant movement in the industry structure with MNOs divesting their telecommunications tower assets into new tower entities which run as self-contained business enterprises.
- 13.3 Amplitel expects that the shifts in industry structure will increase competitive forces for both co-locations and new builds:
- (a) in relation to co-locations, Amplitel anticipates increased competition for additional tenancies as well as downward price pressure from carriers. Tower companies are likely to pursue profitable tenancy growth through agreements with carriers as a way of increasing asset utilisation and generating returns for their new investors. In addition, Amplitel expects carriers to exert downward pressure on pricing for co-locations as historical carrier-to-carrier reciprocal relationships will be replaced by supplier relationships. Such carriers will vigorously pursue arrangements with tower companies in order to secure low-cost access to infrastructure. Each carrier will likely seek to exert pressure on pricing via better procurement and the threat of arbitrated pricing.
 - (b) for new builds, Amplitel expects tower companies to strongly compete to be first to market in new areas. The separation and divestment of both Amplitel and Australia Tower Network (**ATN**), included the sale of large-scale future growth programs (build to suit). Where companies offer attractive discounts for multi-tenancies Amplitel expects carriers to choose co-location prior to new build therefore concentrating competitive activity for new towers in growth zones.
- 13.4 In the absence of vertical integration, the need for access regulation has diminished. Rather, commercial incentives on both sides should drive appropriate access outcomes through competition. There is clearly a greater enthusiasm for increased access to infrastructure than previously, but the industry is still in an adjustment phase. These changed commercial incentives should be permitted to play out with reduced regulatory access provisions which impose cost and burden on tower operators.
- 13.5 Taking Amplitel as an example, it has a clear commercial incentive to provide open and non-discriminatory access for all customers. It aims to deliver strong returns to shareholders from its network infrastructure assets through achieving its mission to be Australia's leading provider of towers infrastructure to support customers to deliver wireless communications.

Following from the separation of Amplitel's business from Telstra, Amplitel is an independent company, which is 49% owned by a consortium. Amplitel is committed to maximising utilisation of its network infrastructure assets.

- 13.6 Amplitel has the opportunity and incentive to increase returns on its assets through an increase in, and a widening of the diversity of, its customer base, including by reducing barriers to access.
- 13.7 There is a promising opportunity and commercial incentive for Amplitel to deliver on its plans to increase tenancies. Amplitel, and other tower operators, will be vigorously pursuing growth and seeking to drive asset efficiency in the coming period, in order to justify the multiples paid by their new stakeholders. In these circumstances, Amplitel considers that there is workable competition for access to tower infrastructure, and that the current regulatory access regime could potentially be reduced.

14. **Section 14: The costs of providing mobile towers and associated infrastructure can impact upon infill densification demand and therefore the provision of greater mobile coverage**

Key points:

- Extension of 5G coverage will require further network investment, both to upgrade existing infrastructure as well as to invest in new sites to deliver infill coverage

Extension of 5G coverage will require further network investment, both to upgrade existing infrastructure as well as to invest in new sites to deliver infill coverage

- 14.1 As more site acquisitions are needed to support a 5G performance level, higher levels of network investment will be required and Amplitel expects that government funding will remain key
- 14.2 For 5G network deployment to occur, substantial infill in existing coverage areas and more wireless infrastructure in network expansion areas is required for two main reasons:
- (c) 5G mmWave requires smaller cell sizes and therefore wireless infrastructure densification to ensure propagation; and
 - (d) higher speeds require an increase in bandwidth capacity, as more data is being carried to and from users and users shift to more data intensive use cases as the network capacity increases.
- 14.3 The extension of 5G coverage will give rise to denser cellular networks - more cells will be required to support a 5G performance level. Very dense architecture is needed with smaller cells capable of carrying increased levels of data. In terms of RF planning, this means that more site acquisitions are needed, and a further deployment of passive infrastructure is required to allow mobile equipment to be installed. This will be a continuing process as mobile technology keeps progressing. Densification of networks will be a necessity, and these requirements will continue to grow.
- 14.4 As the Consultation Paper notes, significant ongoing investment in mobile infrastructure is required in order to achieve better mobile connectivity in regional, rural, remote and peri-urban areas within Australia. The extension of 5G coverage will mean that, even with the same number of end users, higher level of network investment will be required. End users in such areas will expect that their devices will be able to deliver the same types of content and applications as end users in densely populated urban areas.
- 14.5 As the costs of building telecommunications infrastructure in rural, regional and remote areas are high, and the commercial returns from sparsely populated areas are generally low, government funding will remain key, particularly with the extension of 5G coverage where denser cellular networks are required.

ACCC's questions

Number	Question	Reference to section of Amplitel's response
1	What are the typical costs incurred in providing telecommunications towers and associated infrastructure? Can you quantify these costs by providing examples?	Section 3, Section 4, Section 5, Section 6, Section 7
2	What costs are involved (for example, in setting up and maintaining) business practices and systems needed to support the provision of access to towers and associated infrastructure?	Section 8
3	What costs are involved in accessing land required for the establishment and operation of telecommunications tower infrastructure? Do these fees differ depending on the owner of the land (for example, public v private ownership)?	Section 4, Section 7
4	What are the typical commercial arrangements for access to towers and associated infrastructure?	Sections 10 - 11
5	What role do specialist entities such as land aggregators, both commercial and government, play in acquiring access to land or the sites of towers?	Section 12
6	Are there any other considerations that contribute to/determine these commercial and other fee arrangements for access to towers and other infrastructure?	Sections 10 - 12
7	What other matters do providers of towers and associated infrastructure consider in deciding to provide towers and/or provide access to towers?	Section 9
8	Are current commercial arrangements for access to mobile towers and associated infrastructure effective? If not, why and what could be done to improve their effectiveness?	Section 13
9	Are current regulatory arrangements for access effective? If not, why and what could be done to improve their effectiveness?	Section 13
10	Has the recent divestiture of tower infrastructure by MNOs impacted on the effectiveness of current commercial and regulatory arrangements? Please provide details and examples.	Section 10, Section 13
11	What costs do providers of towers and associated infrastructure incur in providing active and/or passive mobile infrastructure? Can you quantify these costs?	Sections 3-8
12	How does the cost of providing new, or upgrading existing, mobile tower (both active and passive) infrastructure impact the decision to invest in infrastructure that can be used to supply mobile telecommunications and other radiocommunications services?	Section 9, Section 12, Section 14
14	Are there additional costs specific to rural, regional, remote or peri-urban areas?	Section 5
15	What are the implications of MNOs divesting their tower assets on the commercial and other fee arrangements for access to towers? How have these changed as a result of the divestment of tower	Section 10, Section 13

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Number	Question	Reference to section of Amptitel's response
	assets by MNOs? Do you expect these to further change in the future and why?	
16	How has the recent divestment of tower infrastructure by MNOs impacted: (i) the scope of access offered (ii) the terms and conditions of access, and (iii) the commercial and other fee arrangements for access.	Section 10, Section 13
17	How does the cost of providing mobile towers and associated infrastructure affect the provision of greater mobile coverage?	Section 9, Section 12, Section 14
19	To what extent will the matters raised in the consultation paper impact, or be impacted by, the extension of 5G coverage?	Section 14

[c-i-c] [REDACTED]

[REDACTED]

[c-i-c]