



Waveconn response to ACCC RMI

29 September 2022

Waveconn welcomes the opportunity to provide comments on the ACCC's consultation paper Regional Mobile Infrastructure Inquiry of July 2022.

Background

Waveconn is a developer, owner and neutral host operator of wireless infrastructure assets across Australia. Through the acquisitions of TPG's passive mobile infrastructure assets and subsequent acquisition of Stilmark Holdings Pty Ltd (Stilmark), Waveconn owns ~1,400 tower and rooftop sites nationwide with hundreds more actively under development. Waveconn is 100% owned by OMERS. At present, Waveconn's portfolio is predominantly in more densely populated metro and outer metro areas.

Waveconn's core business is to deploy, own operate and manage mobile infrastructure. Waveconn's clients include the three national MNOs and a range of others including government radio networks (GRNs) and wireless internet service providers (WISPs). Waveconn is entirely independent, with no direct or indirect MNO ownership or funding.

Waveconn supports the sharing of both passive and active mobile infrastructure to provide superior outcomes for infrastructure tenants and consumers: greater coverage and performance at lower cost.

Summary

Deployment and management of mobile infrastructure is capital-intensive. MNOs are generally capital constrained for deployment of new sites, even in metro regions where commercial returns are more attractive. As a result, government funding is required to incentivise deployment in regional areas, and historically even with government funding, regional deployment has been a lower priority given business cases remain marginal. Specialist infrastructure owners and increased sharing have a role to play in bridging the gap.

Commercial arrangements between infrastructure providers and their tenants have evolved over time to become increasingly tenant friendly. Waveconn's view is that the trend towards tenant-friendly commercial arrangements will continue, with increased competition following the MNOs' divestiture of their infrastructure assets. Specialist infrastructure owners have a greater commercial incentive to provide more efficient access to infrastructure than when the infrastructure was owned by vertically integrated MNOs – tenants are customers first, rather than direct competitors.

Some minor updates to regulatory and government funding arrangements would be beneficial:

1. Updates to funding program requirements and awards would enable significantly greater investment in regional areas:
 - Infrastructure specialists should be able to participate in funding programs directly with government, noting direct participation has not been possible for passive infrastructure specialists without partnering with an MNO or other player that provides active carriage services. Infrastructure specialists have an incentive to maximise tenancies, whereas MNOs do not, as increased tenancies drive increased competition for operators.
 - Updated funding commitment terms (20+ years) and contributions to operating expenses would enable significantly greater investment in regional areas. Infrastructure specialists have a greater appetite and ability to make substantial capital investments for the long term. Business cases for infrastructure specialists are generally over the 20+ year contractual life of the investment (asset useful life is ~50 years), versus ~7 years useful for active network equipment, reducing the annual return required to invest. Direct government contributions to operating costs over the period would significantly benefit the investment case, particularly with an increased appetite from infrastructure specialists for capital investment.
2. Implement minimum service-level agreements (SLAs) for power utilities when dealing with telecommunications infrastructure owners. Power is a major challenge for regional deployment, as timelines for responses from utilities are frequently in excess of 6 months, with many exceeding 12 months, and costs are uncontrolled. Securing easements for power supply can also result in excessive delays and costs – securing easements on some black spot sites has taken ~3 years.

Waveconn has not provided comment on the Commission's questions regarding temporary roaming arrangements. This is a matter for the MNOs.

Waveconn has a strong appetite to invest in regional telecommunications infrastructure deployment and would welcome the opportunity to discuss its submission with the Commission.

1. TELECOMMUNICATIONS INFRASTRUCTURE COSTS

Site deployment

Deployment of new infrastructure is capital intensive. The below table outlines the range of costs incurred by deployment activity for sites that can accommodate multiple tenants. Some costs are incurred by the MNOs and do not fall within Waveconn's typical scope – estimates are not provided for these items. [c-i-c]



[c-i-c]

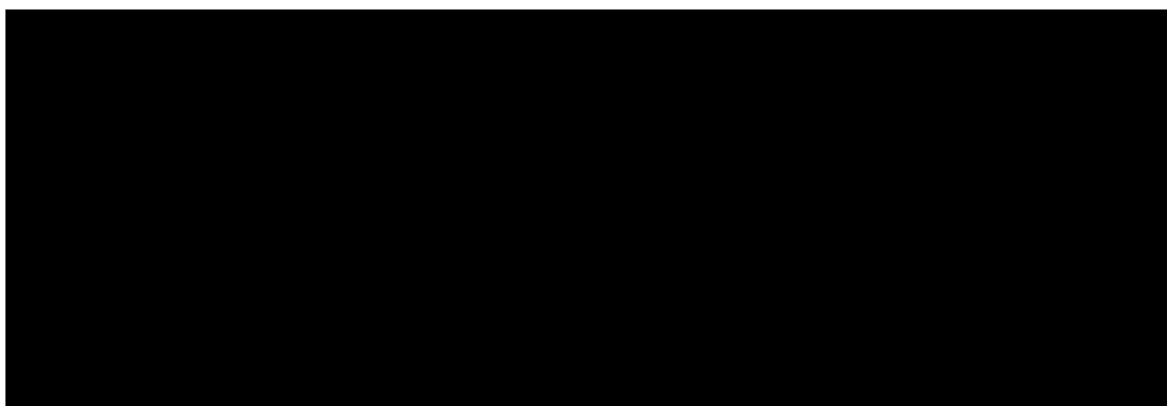
Factors that affect the cost of deployment

- **Power.** Creates the most uncertainty for deployment timelines and overall cost. Power frequently makes otherwise viable sites commercially infeasible. This can include significant costs associated with power network augmentation that are above what is required for the facility. As noted above, there is significant opportunity to improve the telecommunications industry's access to power infrastructure in a timely and cost-effective manner.
- **Transmission.** Fibre is the preferred transmission solution, but in regional areas can be cost prohibitive. Microwave is frequently used for remote sites due to its lower cost, but this has performance implications and may also require additional microwave-only site(s) to span long transmission distances.
- **Complexity of site acquisition.** Challenges accessing land due to unwilling or difficult landowners – including government – and challenges to planning approvals, can increase deployment costs, timelines and success rates. More favourable default arrangements for telecommunications infrastructure on government owned land would support increased investment.

- **Mobilisation and travel.** Costs increase with remoteness for all aspects of deployment. Mobilisation costs per site can be reduced with multi-site deployments in a given region.
- **Structure height and capacity.** Savings are possible where less structural capacity is required such as where stepped-back equipment configurations are proposed, or the site is designed for fewer tenants. Technology advancements have often resulted in larger and heavier active equipment. Additional investment in infrastructure can be warranted where multiple tenants can be secured.

Site opex

Ongoing site opex can be significant and is not generally considered in government funding arrangements for regional deployments. Ranges and averages for site opex are detailed in the table below. [c-i-c]



[c-i-c]

Factors that affect site opex

- **Ground rents vary significantly depending on the location and landlord.** Government-owned land tends to be more expensive than privately held land due to rent determinations. Other players such as land aggregators generally drive ground rent increases, reducing the viability of maintaining sites on-air.
- **Site maintenance.** Frequency, scope and cost of maintenance varies by structure type/height and location (e.g. coastal regions are more prone to corrosion due to salt water spray and remote sites are subject to increased mobilisation costs).

Overheads

Building the organisational resources, systems and processes required to operate mobile infrastructure requires significant investment. [c-i-c]

[c-i-c]. Overheads are, however, highly scalable to incremental sites, with relatively low marginal costs.

Co-locations on existing infrastructure

Co-locations on existing infrastructure can require significant capital investment, comprised of the following:

- **Passive infrastructure works / property (infrastructure owner scope).** Structural upgrades are frequently required to facilitate additional tenant installations. Historically, the MNOs have not invested in significant latent capacity for new structures, generally focussing on their own requirements. [c-i-c: ██████████
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██████████] Waveconn builds significant latent capacity into its sites at initial build, which is significantly cheaper than subsequently upgrading in situ structures to enable co-location tenancies. Costs may also be incurred in extending ground lease rights to accommodate additional tenants. This may create issues for regional sites that have become ‘network’ constrained and require additional/new equipment. If this has incremental structural costs, it could make the business case unviable. Infrastructure owners could play a role in funding these structural upgrades.
- **Installation of equipment and provision of power (MNO scope).** Scope is effectively the same as the ‘MNO typical scope’ for new sites, as outlined above – there are no material savings across these activities when installing on existing versus new infrastructure.

Factors affecting the decision to co-locate on existing infrastructure

- **Network outcome.** Co-locating tenants do not choose the location of the site as it has already been deployed. This means some available existing infrastructure may provide sub-optimal network outcomes or not suit the network needs of a given prospective tenant at all.
- **Revenue potential.** Regional sites generally have lower customer revenue, resulting in lower co-location demand as MNOs’ business cases cannot justify the cost of co-location.
- **Ease of co-location.** Whilst inter-MNO co-location arrangements and processes have improved over time, infrastructure specialists have more streamlined and customer-focussed processes to enable fast and easy co-location to maximise new tenancies.
- **Cost of co-location.** As described above – power, transmission and structural upgrades are the key drivers of cost variation.

2. COMMERCIAL ARRANGEMENTS

Current commercial arrangements between infrastructure owners and tenants are generally effective and broadly appropriate. Increased competition has pushed commercial arrangements to be more tenant-friendly over time, with specialised infrastructure owners having a greater incentive to maximise the utilisation of their assets relative to MNOs. Historical challenges associated with the commercial arrangements between MNOs to utilise each other's infrastructure should be resolved following the divestiture of the MNOs' infrastructure assets.

Waveconn's view is that commercial arrangements do not create an impediment to deploying and utilising infrastructure. As described above, the fundamental challenge is that deploying infrastructure is expensive and revenue potential is significantly lower in regional areas than in metro areas.

Infrastructure owners and their tenants generally enter into master agreements and/or standalone site licences:

- **Master agreements** govern the deployment and ongoing access to a portfolio of sites between an infrastructure owner and a tenant. Short-form site licences are issued for specific sites that are governed by the master agreement. Master agreements are used for both new site deployment (i.e. anchor tenancies) and co-locations on existing infrastructure.
- **Standalone site licences** are generally used for co-locations and where fewer tenancies are expected. Many of the same key operating provisions contained in master agreements also appear in standalone site licences.

Key terms commonly included in master agreements and site licences include:

- **Commercial structure**
 - Licence fees are typically paid annually, with escalation occurring over the duration of the licence
 - Licence terms are generally 20 years, but shorter terms for smaller co-locations exist
- **Drivers of variation in fees**
 - Site location/region
 - Structure height
 - Installation size, either using structural load or individual per apparatus pricing
 - Volume discounts
- **Operational governance:**
 - **Access rights and procedures** (e.g. reporting obligations, SLAs for access approvals)
 - **Deployment processes and approvals** for new sites (e.g. tenure requirements, location/RF outcomes, etc.)

- **Site availability.** Typically, master agreements provide an obligation to provide access under agreed commercial terms, subject to it being operationally viable (e.g. structural or EME constraints may prevent co-location)

Other considerations in entering commercial arrangements

- **Available structural capacity and/or apertures.** Depending on who is responsible for these costs, this may affect the willingness of additional tenants to co-locate.
- **Electromagnetic energy (EME) restrictions.** Applies more in metro areas where rooftops are utilised; will not commonly be a significant issue in regional areas.
- **Potential for co-locations.** Typically, infrastructure owners will prefer to deploy sites that will be required by multiple potential tenants. In some cases, returns to infrastructure owners for sites can be low without co-locations in addition to an anchor tenant.
- **Onerous lease / access terms** can result in uplifts in ground rents for additional tenancies (co-user fees) or challenging access terms (e.g. sites accessible only at specific times). This is less frequently a challenge in regional areas but does occur on government/crown land where rental uplifts are common. Note that for an MNO deploying a site under government funding, they would have limited incentive to negotiate out these terms, as it would only affect their competitors attempting to co-locate. Infrastructure owners, on the other hand, would want to make it as cheap and easy as possible for additional tenants.
- **Community sensitivity & planning support from local planning authorities.** Unsupportive and obstructive LGAs are a strong deterrent for new infrastructure deployment. Selection of appropriate locations, managing community engagement and consultation (and potential opposition) without government representatives willing to engage constructively creates areas where infrastructure cannot be deployed.

3. INDUSTRY DYNAMICS AND REGULATION

Impact of divestiture of tower assets

Waveconn believes that the shift to specialised infrastructure owners following asset divestiture by the MNOs will improve access to mobile infrastructure. Access regulations were introduced to ensure that MNOs make their infrastructure available to others for co-location, where they generally did not have a strong incentive to do so. Specialised infrastructure owners have a far greater incentive to maximise utilisation of their assets.

	MNO-owned infrastructure	Specialised infrastructure owner
Competitive dynamics	Incentive to maintain network advantage on some sites and restrict or frustrate competitors' access	No competitive implications of maximising access to infrastructure
Commercial arrangements	Increased complexity over time (e.g. pricing based on extensive lists of specific equipment combinations). Cross-subsidisation between MNOs reduces commercial incentive to maximise access	Simpler, fit for purpose arrangements based on utilisation of space and structural capacity. Technology agnostic pricing allows for equipment upgrades over time without onerous commercial implications
Operational priority	Low operational priority – co-location requests and associated obligations considered a distraction. This necessitated SLAs to ensure access was enabled	Core business model, with focus on ensuring access is as straightforward and efficient as possible

Waveconn expects the MNOs' divestiture of tower infrastructure to make access regulations no less effective, and if anything, less relevant. Waveconn does not see any issues that may arise that are not already covered by current access regulations.

Implications of 5G deployment

5G provides superior connectivity but has higher capital intensity per site and generally reduced geographic coverage. This means deployment of 5G to remote areas is likely to be even more challenging commercially than deployment of previous technologies to regional areas. More government support for both existing site upgrades and new deployments is likely to be required.