

27 October 2016

Communications Group
Australian Competition and
Consumer Commission
Level 20, 175 Pitt Street
Sydney NSW 2000

Dear Sir/Madam

INQUIRY INTO COMPETITION IN EVOLVING COMMUNICATIONS MARKETS

Axicom appreciates the opportunity to make this submission in response to the ACCC's Competition in Evolving Communications Markets Issues Paper dated September 2016 (**Issues Paper**). The findings and recommendations following the market study will be significant to the telecommunications industry and the efficient deployment of telecommunications networks in Australia.

1 Axicom's Background

Axicom, formerly known as Crown Castle, is Australia's largest independent mobile infrastructure provider (**IMIP**). We own, operate, build and lease towers and rooftops across the country. Our portfolio consists of approximately 1900 tower and rooftop sites across Australia, most of which are leased from land/building owners. These sites are used by MNOs, NBN Co, government entities, including emergency service providers, and other communication service providers on a shared basis. The majority of our towers sites were purchased from Optus and Vodafone.

Over 20 million Australians obtain access to wireless services via our tower and rooftop network every day. Our macro value proposition is best illustrated with the below picture.



As an infrastructure supplier with no operating network presence, Axicom facilitates the maximum use of towers on a competitively neutral basis as between individual service providers. Our aim is to make infrastructure available to co-users for the environmentally and economically efficient deployment of communication networks throughout Australia.

Axicom also owns a tower structural engineering firm – Structel – with a particular expertise in facilitating the physical deployment of equipment on towers and lowering the cost of structural upgrades. Structel ensures that installations are undertaken in accordance with world’s best practice engineering design standards to avoid tower or installation failure.

2 Axicom’s Submission

Axicom has clearly demonstrated the success of an open access tower infrastructure model in Australia. There is far more colocation, network differentiation and ultimately consumer choice in Australia due to the outsourcing of passive tower infrastructure to an IMIP. This has removed a substantial barrier to market entry for new wireless network operators in Australia.

Axicom is in a position to provide specific responses in relation to the following questions. We would of course be delighted to provide further and broader input as your market study evolves.

Q41 *What are the benefits and risks associated with mobile network infrastructure sharing?*

A41 See table below:

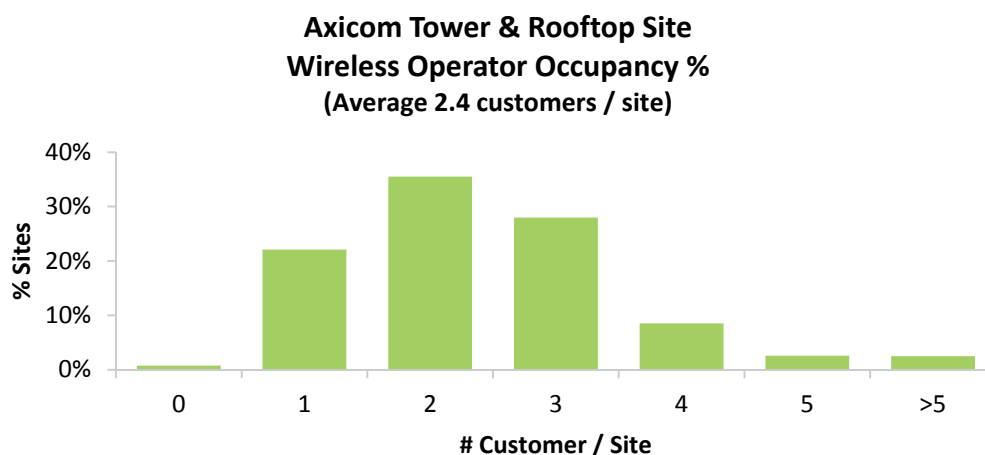
Benefits of tower sharing	Risks of network sharing
<ul style="list-style-type: none"> ▪ Non-proliferation of towers reducing duplication of resources, promoting dynamic efficiency in the market. ▪ IMIPs facilitate active network competition, innovation and consumer choice. ▪ IMIPs enable access for new entrants into the market. ▪ Government entities, such as emergency service providers, have access to existing infrastructure thereby reducing public expenditure. ▪ Reduced capital and operational expenditure for communication network service providers. ▪ Common infrastructure across jurisdictions, promoting a national network approach. ▪ Optimisation of existing infrastructure and less duplication of resources reduces environmental impact. ▪ Community preference – most community complaints arise in relation to the construction of new towers – not the deployment of new equipment on existing towers. 	<ul style="list-style-type: none"> ▪ “Active” network sharing may eliminate the ability of IMIPs to invest in those markets and generate the benefits associated with open access tower models. ▪ For MNO “owned” infrastructure - reduced ability to maintain confidentiality around mobile network coverage plans, especially for new market entrants. ▪ If the network strategy of an MNO changes over time – this may conflict with a network sharing “partner”. The MNO’s can provide greater commentary on this. ▪ Sharing between MNOs can drive consolidation in the supply chain and reduce choice for new entrants.

Q42a *What is the current level of mobile network infrastructure sharing and use of independent mobile infrastructure provider services in Australia and are there any impediments to the use of these arrangements and services?*

A42a Axicom has ~300 customers which utilise its infrastructure across Australia. This is largely due to the relatively low barriers to entry. For many of our customers, the only feasible deployment choice to achieve genuine scale is through Axicom. Axicom provides speed to market compared to the alternative of negotiating access with hundreds of individual site owners.

Optus and Vodafone have comprehensive access to Axicom’s tower portfolio –each licensing well over 65% of our sites. Telstra is colocated on 700+ Axicom sites and NBN Co makes extensive use of Axicom’s regional site portfolio for their fixed wireless network.

Axicom has on average 2.4 unique customers per site. We believe this to be substantially higher than any of the MNOs in the market.



There are 2 primary impediments to sharing on IMIP tower sites:

Impediment No 1 - Land Costs and Access

A key impediment to the use of IMIP infrastructure lies with third party land supplier rental demands and models. These models can make a site uneconomical for MNOs and other operators as, in some circumstances, they may be subject to multiple “rents.” These requests continue - despite the IMIP’s landlords making no investment nor sharing any of the risk associated with owning and operating tower infrastructure. In these circumstances the IMIP may have to consider decommissioning the site.

It is important for the ACCC to understand the impact of the Australian real estate market in its regulatory considerations. Real estate costs continue to increase at a greater rate than ARPU and we expect that trend to continue into the future. This is particularly so in metro areas of Australia. An IMIP may be required to fund these costs while also providing long term pricing certainty for its customers.

Impediment No 2 – Structural Capacity

The deployment of 3G technology involved the use of small panel antennas and limited ancillary equipment. The following picture shows the very substantial change to the equipment configuration associated with a typical LTE 4G deployment. This has a dramatic impact on the structural loading on the tower.



While Axicom has efficient design techniques to upgrade tower structures, this still constitutes a cost to the MNOs and others as they seek to upgrade their networks. This will be an ongoing and growing issue as we move forward to 5G.

Q42b *Are regulatory arrangements aimed at facilitating infrastructure sharing working effectively?*

A42b IMIP's have a self-regulated interest in facilitating sharing. "No access" = "no business" and, accordingly, that aspect of the market works efficiently without the need for further regulation.

We will leave commentary regarding the regulation of MNO and NBN Co towers to those entities.

Q42c *Why is infrastructure sharing used less widely in Australia than internationally?*

A42c We are not sure this proposition is correct. There is a significant reuse of infrastructure in metro and regional areas in Australia. Australia did not experience the duplication of towers that was particularly evident in the UK market. Indeed, Australia has fewer mobile towers per capita and more subscribers per base station than most international markets.

The ACCC will be aware that China has recently established the MNO owned China Tower Company to, among other things, address tower duplication. As far as we know, there is no national IMIP participant in the China market.

Australian IMIP and MNOs are also more dependent on the use of governmental land, particularly when compared to the US market. This drives up the total cost of site deployment and prevents an IMIP/MNO acquiring the underlying land to secure that site over the long term.

The ACCC should also note that Australia remains one of the few Western developed countries where the MNO's (together with NBN Co) retain ownership of the substantial majority of shareable towers in the market.

Q43 *Is there the potential for mobile infrastructure sharing to be used more extensively in Australia in the future? In particular, would infrastructure sharing help MNOs expand their mobile networks?*

A43 Yes and yes. IMIP's can help facilitate this in the market whilst also promoting innovation and competitive outcomes in the market. This could be achieved with an efficient and self-regulated sharing model.

Q81 *The Telco Act provides access to towers, tower sites and eligible underground facilities and is supported by the ACCC's Facilities Access Code. Have access seekers experienced difficulties in obtaining access? If so, please provide details. Are there any impediments to accessing other telecommunication facilities not covered by the Facilities Access Code that create barriers for the provision of telecommunications services?*

A81 Axicom is not an access seeker.

Axicom has, however, negotiated commercial terms with all of the MNOs, as well as NBN Co and most communication network service operators in Australia. Axicom also provides an important function in enabling new market entrants to deploy a network with speed and at the lowest cost, while also preserving the confidentiality of their network plans.

As evidence we refer the ACCC to Thinxtra's deployment of an internet of things network in Australia. Thinxtra is the exclusive SIGFOX network operator for Australia and New Zealand, and is a classic "new entrant" into the telecommunications market in Australia¹. Thinxtra has chosen Axicom towers (as an IMIP) as its first choice for its proposed rapid deployment of sites.

We suggest the ACCC talk directly to Thinxtra in relation to the underlying reasons why Thinxtra has made this go to market choice.

Q82 *Is access to telecommunication facilities provided on reasonable terms and conditions?*

A82 The commercial drivers in the market enable access to IMIP owned telecommunication facilities on reasonable terms and conditions. This is evidenced through the high level of co-location on Axicom facilities compared to that on facilities owned and operated by MNOs. Further, access costs (inclusive of rent and structural upgrade costs) associated with deployment on an IMIP tower present substantial savings when compared to a new tower build option for a MNO.

Axicom is able to provide efficient co-location and installation of equipment as a consequence of our specialisation as an open access infrastructure supplier. Optus also confirmed this proposition in its submission of 24 August 2012 to the ACCC on The Facilities Access Code 1999 Review. In its submission, Optus commented that:

"many of the sites on which Optus co-locates are owned by Crown Castle [now Axicom] – a non-carrier and not subject to the Facilities Access Code – and we have successfully negotiated commercial access"².

As mentioned above, Axicom was able to negotiate terms and conditions with Thinxtra that encouraged Thinxtra to make Axicom's facilities its first choice to achieve deployment scale in the Australian market.

Once again, thank you for the opportunity to make this submission. If you have any questions please do not hesitate to contact me at david.mckean@axicom.com.au.

Yours sincerely



David McKean
Director, Property & Investments

¹ For more information, please see the Thinxtra website at <<http://www.thinxtra.com/>>

² Optus Submission to the Facilities Access Code 1999 Review, dated 24 August 2012.