

Austar's submission to House of Representatives Standing Committee on Communications, Information Technology and the Arts on the current and potential use of wireless technologies to provide broadband communications services in Australia.

Background

Austar is a leading provider of integrated communications services in Australia. Since launching operations in 1995, Austar has grown to be the largest digital television operator in Australia and the sole operator in most of its market of regional Australia. It also spans the markets of interactive television, dial up internet and mobile telephony.

Austar holds licences for MMDS spectrum, described below, throughout all of Australia. Austar sought to use that spectrum for broadband internet access in regional Australia, commencing deployment in 2000. However, due to a number of factors, including lack of demand, limited suitable content and lack of capital in the wake of the end of the technology boom, Austar has been unable to continue to offer those services. To date we have invested between \$150 - \$200 million in acquisition of licences and deployment of infrastructure.

Austar has also conducted a trial in Newcastle of two way high speed internet with concurrent voice over IP telephony. Again, we have been unable to proceed with the commercialisation of these products due to lack of capital.

However, we continue to believe that fixed wireless technology is suitable for broadband deployment, especially in regional Australia and would encourage governments to look for ways to foster the deployment of such networks.

Comments

It is Austar's view that the government must ensure regulatory and other arrangements to promote an efficient and competitive environment which serves the interests of the Australian community.

We believe this can be achieved by ensuring that the regulatory framework supports new entrants and new technologies. The results will be a more competitive telecommunications access environment and the development and delivery of additional services and choice for consumers, particularly in regional and remote Australia.

Austar believes that fixed wireless technology provides an alternative access technology, especially for regional Australia. Fixed wireless is still in the early stages of development, however, there have been substantial advances which suggest that it is likely to be a realistic option within a reasonable timeframe.

Austar's view is underpinned by the following factors. First, while Australia is well served with access networks, most of this development has occurred in the metropolitan and higher population density corridors. Consumers in remote and regional areas still do not receive the same level of service offering and carrier choice as their metropolitan counterparts but would welcome opportunities for new entrants to even out this imbalance.

Secondly, while most of those access networks provide backbone capacity, there is still a lack of last mile connectivity to create competition in the local loop. The cost of duplication of fixed line customer access networks to compete with Telstra is prohibitive. Wireless technology offers a possible solution, at least for medium to large centres, including in regional Australia.

Thirdly, the current economic environment does not provide incentive for Telstra to invest in upgrades to its fixed line access network. ADSL technology could provide broadband access, however, in many places, including regional Australia, substantial upgrades of copper wire network would be required to permit consumers to benefit from this technology.

As stated above, Austar is the licensee of 2.302 GHz – 2.400 GHz spectrum for most of the populated areas of Australian (MMDS). Austar views the deployment of fixed wireless broadband in our customer franchise area of regional and rural Australia as a cost effective method for a new access network and as a logical competitive access network alternative. The capital investment is substantially less than would be required to duplicate or upgrade the current copper network and much lower than a HFC cable roll out. The ongoing operations costs are also lower.

An example of one of the benefits is a simple comparison of the existing broadband services such as wireline ADSL to a similar fixed wireless broadband offering. The ADSL service is available only to customers located near Telstra local access switches and only where these switches are pre-conditioned to offer the service. The addressable market of a fixed wireless access network solution is many times greater. It is not dependent on the quality and characteristics of the existing Telstra copper infrastructure.

Austar's experience with its MMDS spectrum is a practical example. It is well suited to line of sight, near line of sight and non line of sight broadband access. Our current studies show that fixed wireless broadband permits broadband access services with a similar throughput to the ADSL wireline offering with the following propagation characteristics:

- line of sight in excess of 50 km
- almost line of sight greater than 25 km, and
- non line of sight greater than 10 km.

Other business advantages include a highly variable capital cost in contrast to traditional copper and copper/fiber access networks. This is because, unlike wireline networks a wireless network does not have to be deployed past every home and business to connect any of them.

Austar has been testing a fixed wireless access technology solution for the last year in Newcastle, NSW. The primary purposes were to:

- test the performance of available vendor products and services,
- ensure that our spectrum was compatible with technologies used elsewhere in the world, and
- map and compare the theoretical to practical coverage in a typical market..

That test has demonstrated that our MMDS spectrum is well suited for small business and residential broadband connectivity and competitive voice telephony.

However, our original plan to launch a wireless access network in regional and rural Australia has been deferred. Austar's current plans for the future development of this spectrum are limited. While we have made significant investment in our MMDS spectrum limitations of capital and the structure of the telecommunications regulatory regime make it unlikely that we will be able to deploy a network.

We are currently investigating options for use of the spectrum, including selling wholesale access or finding a joint venture partner(s) to help develop the spectrum. Again, in the current climate, we are not confident of success.

Conclusion and Issues for Government

Fixed wireless technology provides a real option for an alternative broadband access network. It is especially attractive for regional centres which do not justify deployment of fibre systems or which may not have copper wire networks capable of supporting ADSL.

However, the current economic environment facing the telecommunications sector is such that few companies would have the capacity to deploy such a network.

The Government should examine ways in which it can assist in supporting the deployment of such networks. This could involve assistance with demand aggregation, the awarding of regional franchises (on the basis that no more than one alternate supplier will be supportable in any one region), through to direct subvention to help with start up capital costs. Such a subvention could be directed to customer premises equipment like the current digital data subsidy. We would suggest that such a payment scheme could be established out of the proceeds of the further privatisation of Telstra.

Appendix A: Austar MMDS cover areas

