



Senate Submission: Inquiry into the Australian Telecommunications Network

1 Version info

Date	Author	Description
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2 Introduction

Please accept this submission to the Inquiry into the Australian Telecommunications Network. In particular in regards to the issue of:

... the capacity of the Australian telecommunications network, including the public switched telephone network, to provide all Australians with reasonable, comparable and equitable access to broadband services.

It is our contention from our research and direct experience that the Australian Telecommunications is unable to provide all Australians with reasonable, comparable or equitable access to broadband services due to inadequate infrastructure being in place.

3 Background

E4Results is a small business based on the Gold Coast. We specialise in Web Development and IT Project Management. The business consists of myself as the IT Manager and Steve Harsant as the Sales and Marketing Manager. We began trading in December of last year and have quickly grown to the point where we are currently in the process of managing 1 large IT project and 2 web development projects. These current projects have allowed us to employ 3 staff members on a contract basis to meet the projects needs. Our hope is to further develop the business to take on further projects and be able to employ more staff to assist us.

Due to the nature of the business I spend most of my time working from a home office. Depending on the nature of a project we may set up a temporary project office for project staff to work out of. Both the home office and temporary project offices consist of a small Local Area Network (LAN), which requires a connection to the Internet. This enables myself and staff to communicate via e-mail and to access documentation and other resources required for their job via the web.

Since the business has started I have had the goal of accessing the Internet via broadband as an essential means of carrying out business. Being able to access broadband would deliver the business the following advantages: -

- Easier handling of large project files.

Integral to the process of web and IT development is the need to pass electronic documents and resources to staff and clients via email. Website are often deployed using FTP via the Internet and this also involved uploading and downloading large amounts of information. Broadband increases the speed that this can be done in and thus the efficiency and reliability of these tasks. Numerous problems occur with normal dial-up connections that often make it *impossible* to send these sorts of files.

- Always on access without tying up a phone line.

Because a large proportion of communication is done via email the ability to have the Internet connection always on provides a great advantage. It allows email to be received shortly after they are sent and therefore increase the ability to respond in a timely manner. Using dial-up and a single phone line results in constant connecting and disconnecting to avoid missing either emails or phone calls.

- Ability to develop project in the emerging field of distributed applications.

Broadband enables the ability to utilise distributed applications using technology such as Microsoft's Dot NET Framework. We are currently working towards developing expertise in these technologies with a view to working in this field. Because broadband is a crucial infrastructure for



distributed applications it becomes very difficult to adequately test these applications as they are developed. This makes it impossible to become a serious player in this field without investing large sums of money that cannot be justified for a business of our size.

- Value for money.

The cost of broadband via cable or ADSL is comparable to dial-up (including call costs) when a reasonable amount of data is downloaded. ISDN is only minimally faster than dial-up and therefore offers no advantage for the vast increase in cost. Likewise, other broadband technologies such as satellite are also too expensive to be viable.

In summary broadband is not merely a useful tool for doing business, but is essential for the development of any IT business. The lack of equitable broadband access in Australia makes it difficult for small business to grow and will make it difficult for Australian businesses to compete in a global market.

4 My experience

Recently I began the process of researching and applying for broadband access to the Internet. This following briefly details the experience.

Step 1 was to begin researching the available broadband technologies and suppliers. Our home office is based in a residential complex on the Gold Coast. This complex is less than 4 years old and is built to a high standard of workmanship and facilities. Initial research found that neither Telstra nor Optus had any cable infrastructure within the complex, which ruled out broadband via cable. ADSL was therefore the preferred option.

Further research into suppliers identified Internode as an established player in the market that had a reputation for good customer service and value for money. An application was made for ADSL. Upon receipt of the application Internode requested Telstra begin the process of provisioning the line.

After approximately 2 weeks the response came back from Telstra that ADSL was unavailable because the line was connected to a Remote Integrated Multiplexer (RIM). With this infrastructure an optic fibre cable runs from the exchange to the RIM. The RIM then splits the optic fibre into a series of copper cables that run from the RIM to the house. This is incompatible with ADSL, which requires an unbroken copper line from the house to the exchange. The advice of Internode was to speak to Telstra to see if any copper lines were available and to connect a new line or get the existing line changed over to copper.

The next step was to speak to Telstra about the possibility of converting the existing line to a copper one. A call was made to a consultant at Telstra. Their response was that it was not possible to change the existing line and instead a new line would have to be put in and after that the old one could be disconnected. This would incur the full \$190 new line fee. No explanation was given for this.

I then enquired whether a copper line was available and the consultant contacted "Cabling" to seek advice. The advice she received and then passed on to me was that there no copper lines available and that there was no plans to put in any copper lines and it was unlikely that there would be any plans in the future. The only thing she could suggest was that I try Optus.

The basic message to my business is that there is no affordable broadband available in our current premises and it is unlikely that there ever will be. This is despite the fact that the premises are brand new and that, according to Telstra Wholesale, are currently 58 ADSL connections available at the local exchange.

5 Recommendations

Based on my recent experience and research I have the following comments/recommendations to make. My research has included material published by Telstra, ISP's such as Internode, public comment published in forums on www.whirlpool.net.au and private discussions with staff in the internet division at Austar.

5.1 Resolve inadequate infrastructure

The primary stumbling block for broadband uptake in this country appears to be a lack of compatible infrastructure. Mine is only one of many stories of individuals and businesses with a strong desire to utilise broadband who can't because the current telecommunications structure cannot provide it. This is despite Telstra's recent broadband advertising push as well as their and the Federal Government's claim that the slow uptake is due to a lack of compelling content.

A long term plan must be put in place to ensure adequate infrastructure for all Australians. Clearly this will require a large investment in the infrastructure. This is needed not only to "catch up", but also to maintain the



infrastructure and an adequate level and future-proof it against further developments in technology. The current legislative approach and the partial sale of Telstra has had the effect of eroding the adequacy of the network. Suggestions such as splitting wholesale and retail arms of Telstra and then retaining public ownership of the wholesale division need to be seriously considered in order to overcome the current crisis.

5.2 Short term broadband alternatives

Whilst, decisive action needs to be taken in the long term to resolve the inadequacies of the Australian Telecommunication Network, short term steps must be taken to provided disadvantaged customers with equitable broadband access. This could take the form of subsidies for alternative technologies (such as satellite) or special provisioning of infrastructure on a needs only basis. Whatever approach is taken, a plan must be put in place so that any individual or business that requires broadband, can access it on the same terms as everyone else. A failure to do this will severely disadvantage businesses, communities and the Australian economy.

5.3 Expand Universal Service Obligation to include data

The current Universal Service Obligations (USO) legislates that Telstra must provide certain services within reasonable time periods. Whilst this obligation includes voice services, it currently does not include data. This has the effect of not only allowing Telstra to rollout inadequate infrastructure, it also in many cases forces them to.

A search on the forums at www.whirlpool.net.au for "RIM" led me to a post from another person unable to access ADSL due to being connected to a RIM. This person posted correspondence that occurred between themselves and a Telstra consultant. In that correspondence the Telstra consultant indicated that the requirement to rollout voice services within a certain timeframe left Telstra with no option but to utilise technologies such as RIM's and pair-gain systems. This is especially true in newer developments where a large number of lines need to be made available in a short amount of time.

It is ironic that the legislation that is designed to improve the standard of the telecommunications network has actually lowered it. It is imperative that the USO is expanded to include data as well as voice.

5.4 Improve Telstra's systems to allow an existing line to be converted to a copper line

Currently, if a customer does not have a copper line and wishes to access ADSL, then they need to connect a new line and disconnect their old one. According to some posts from Telstra technicians at www.whirlpool.net.au, if a copper line is available it is simple a matter of disconnecting a pair of wires and reconnecting them to a different terminal. If this is the case it seems ridiculous to have to order a new line to achieve the same outcome. It is difficult to get an answer from Telstra as to why this is, but it seems it may be because Telstra's internal systems do not provide the means to order this to be done. Telstra consultants aren't allowed to talk directly to a technician and their only workaround is to order a new line and charge the customer the full price. There are also many horror stories of those who have ordered the new line and then found they were given an incompatible line, even though they clearly specified a copper line, and were still forced to pay for the new line.

If a customer wishes to access ADSL and can't because they are connected to inadequate infrastructure and adequate infrastructure is there, then they should be able to have their current line changed to this at no cost. Many customers would be prepared to pay a nominal amount to be able to access broadband, but I do not believe they should be penalised in any way for being unfortunate enough to be connected to the wrong type of line.

6 Conclusion

It is clear that the current Australian Telecommunications Network does not provide comparable and equitable access to broadband services due to inadequate infrastructure such as RIM's and pair gain systems. This is not only a problem for people in the "bush", but also for individuals and businesses in all parts of Australia including the Gold Coast.

Australia falls behind the rest of the world in our implementation of broadband services and this puts our economy at great risk, by preventing our businesses from being able to compete. Within Australia small businesses are prevented from being able to grow and to create new employment opportunities.

Decisive action needs to be taken by the Federal Government to resolve the problems surrounding this very important public infrastructure. It is clearly not good enough to just let market forces take their course and trust that they will result in positive outcomes for the public. A significant investment must be made in the



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telecommunications infrastructure and positive programs must be put in place in the meantime to allow people like myself to gain access to broadband services where they otherwise couldn't.

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