

**Submission to the**

**2011-12 Regional Telecommunications Review**

**Submitted by:** **Anthony Houston M.B.A. Dip.Info.Tech. A.I.M.M.**



**North Ipswich Qld 4305**

**Date:** **12<sup>th</sup> December 2011**

## **Preface**

The rollout of the National Broadband Network and various associated discussions, committees and reviews to-date appear focussed on the benefits of high speed access to data services as a means of consumption of those services.

It appears that there is no discussion, let alone focus, on any opportunities for the service provider.

There are also opportunities outlined regarding high speed access to digital services and telecommuting and the associated benefits for rural communities that seem to ignore the issues of continuity of service.

## **Continuity of Service**

I put it to you that the biggest impediment to the take-up of, and provision of, digital services in Australia is the lack of guaranteed “Continuity of Service”. In the ICT industry this is also known as the provision of “Redundant Routes”.

At the present time anyone remotely connected with a business trying to access the internet for information research or email will be familiar with the typical response to a major network failure of “no response”. It is typical in this situation to be unable to contact the relevant Internet Service Supplier because their technical support system has gone into meltdown. It is also typical that failures of this scale can take several days to repair: I cite the destruction of one major ISP’s fibre optic links during tunnel construction in Brisbane and the consequent loss of service. Apparently this ISP did not have any available alternate route for the services it provided or if they did, they did not have a mechanism in place to utilise it (them) within the required timeframe.

Any home user is familiar with the failure of their local connection due to issues such as localised flooding in the streets cable pits and tunnels or exchange failure, and the consequent loss of internet connectivity for anything up to several days.

It is a strange quirk of fate that many home users actually have a better option in this scenario, particularly in those areas serviced by both a copper based and a cable based broadband network operated by competing service providers because these services originate either from different exchanges or from different equipment racks within the same exchange building. The user contracts with both service providers; at a high cost; and leaves one “off-line” in case the other fails. This option may be technically feasible but prohibitively expensive for the average home user.

A small business that found itself in a similar situation could misrepresent itself to both service providers to gain access to this home service in circumstances where continuous access to a remote service was mandatory; such as to an on-line accounting or business management system; however they do not have access to any ICT support from these service providers in the event of a communications failure, as the support contract is for a personal use only service.

A large business can address this need by contracting with two different service providers to provide independent connections from different exchanges and typically running connections from opposite ends of the street, to avoid what is known as “back-hoe attenuation”: having a cable dug up by a back-hoe. This option is obviously very expensive and not a financially viable option for the small business.

This problem extends from the user premises all the way to the ISP’s data centre where anywhere along the route there is a single point of failure. This becomes even more an issue in areas where there is only one pit (tunnel, electrical conduit) between major centres that is shared by all ISP’s, with their core cabling laying effectively side by side.

This problem severely limits the take-up of modern ICT services such as access to the “cloud” whether it is access to remote hardware or software provided as a service; or any other ICT service yet to be defined.

It fundamentally negates the opportunity for small business to provide remote ICT services because they cannot afford to create the redundant routes that are part of the stock in trade of the large ISP’s and their large formal data centres. This limits the list of available services to only those that the large ISP’s consider profitable and stifles creativity and business growth.

### **Telecommuting**

Telecommuting is the ability for an employee to work from a remote location as if they were physically located in the office. Modern ICT systems software makes this not only feasible but simple to setup and operate.

Communications bandwidth is generally not considered an issue at the client (employee) end as current generation ADSL 2+ technology provides more than adequate bandwidth. This is not the case in rural areas where this level of technology is not available due to distance from the local exchange. This is also a large problem in major regional centres. I have firsthand experience of not being able to get this service within areas of Brisbane and immediate surrounds.

In addition, the lack of continuity of service described above can make the employee “absent from work” through no fault of theirs; the metaphorical case of the bus breaking down on a country road 100Km’s from town.

### **Business Opportunities**

A small business cannot create any form of home based business without paying a larger ISP for the privilege of using their hardware and software to host its business; a situation akin to Hungry Jacks being forced to setup their restaurant inside a McDonalds’ store. The small business offering is limited to the services available from the ISP.

Without high speed data access that includes in its design the availability of redundant routes at low cost there is no opportunity for innovation in the provision of internet services by small business.