Thanks for the opportunity - here are my point forms and I hope that they shed the necessary light:

# **Australian Telecommunications Future**

## **Understanding Infrastructure**

Appendix A (Understanding Infrastructure Business) in my response to the Regulation Regime gives a brief outline of the 'poles apart' differences between Infrastructure Business and Competitive Business. The reference is pages 17-18 of: http://www.aph.gov.au/Senate/committee/ecita\_ctte/trr/submissions/sub06.pdf

Professor Sharon Beder (Wollongong University) in the recent book/thesis "Powerplay..." (ISBN 0 908011 97 0) 2003 provided highly referenced proof that Infrastructure Businesses run along Competitive Business lines is irrefutably the most cost-inefficient strategy, and that the international forces behind this are primarily USA based multinationals.

I believe that efficient management of Infrastructure Businesses is not taught in schools or universities, in Australia. This needs urgent rectification as this omission has seriously biased balanced and rational thinking that Infrastructure Businesses are not efficient and that Competitive Businesses are, when in fact the converse is true.

### Government Management

I believe that the Federal Governments and Oppositions was and still are under intense pressure from Merchant Bankers to sell off Telstra and all other infrastructures (essential services) for the prime reason that these can be traded on the stock exchanges.

This fascial situation of privatising infrastructure should be shouting to all shades of politicians that Merchant Bankers pushing to privatise infrastructures is the cause of this problem and not a panacea.

The Governments at all levels have an imperative priority to be the 'Board of Directors' for all essential services (infrastructures) which unlike the USA, have been paid for by Australian's taxes – these are not sale or 'privatisation' items.

The total failure of Optus as the Australian Privatisation Experiment actually showed that competition drives prices up, has been carefully avoided – and now Optus/Singtel is foreign owned. This is a grim warning for the proposed sale of Telstra.

#### Telecommunications Efficiencies

It was advancing technologies that have brought down telecommunications costs and not competitive business practices. This is outlined in Appendix B pages 19-20 of the reference:

http://www.aph.gov.au/Senate/committee/ecita\_ctte/trr/submissions/sub06.pdf

The very recent Telstra report card showing a high number line faults and the running down of internal infrastructure *totally aligns with world class competitive business efficient practices* to minimise overheads, minimally train staff, or outsource them

(removing responsibility), and the Board of Directors should be commended for drawing off funds to provide dividends to shareholders.

It is obvious that Telstra (Wholesale) is an Infrastructure Business and not a Competitive Business. This places the ACCC outside their field of expertise, and the ACCC should be focussed on the Bigpond (Retail) end of the business. This would remove a large amount of competitively based regulatory restrictions that impinge on infrastructure efficiencies.

I believe that the ACCC document "Telecommunications Infrastructure in Australia 2004/5"

http://www.accc.gov.au/content/item.phtml?itemId=610432&nodeId=file42ae708289350&fn=Telecommunications%20infrastructure%20in%20Australia%202004%20(released%20Jun%2005).pdf is far too superficial and misses out on about almost half the backhaul network infrastructure as it fails to mention any switching infrastructure. In that light, I believe that this document may have inadvertently seriously mislead government bodies to think that the backhaul/core network telecommunications infrastructure is far simpler than it really is.

#### Backhaul/Core Network Structure

Experience tells me that the current (tiered star) architecture of this network has been optimised for telephony, and the fingers on these stars have been 'compressed' to fit an overlay of IP within the transmission grid.

I believe that the current structure is totally unsuitable for true Broadband Internet to the home, as the bandwidth requirements will well exceed 10 times currently provided for those already on 'Broadband', and including those not yet connected, the network if not radically changed in structure will operate in total congestion.

My paper (submission 6c) provides a national concept of providing a large number of intersecting high capacity optical fibre/radio 'regional rings' to carry the IP beyond metropolitan limits. The reference is

http://www.aph.gov.au/Senate/committee/ecita\_ctte/trr/submissions/sub06c.pdf

The Page Research Centre (National Party think tank) in their paper "Future Proofing Telecommunications in Non-Metropolitan Australia" reference: <a href="http://www.page.org.au/downloads/PRC">http://www.page.org.au/downloads/PRC</a> Telecomms Paper.pdf used the ACCC reference and that explains why this report (to me) was found so wanting and so seriously flawed.

With this in mind, the \$2 Bn "Future Fund" should be at least doubled or quadrupled to about \$8 Bn to cater for this apparent oversimplification of the core/backhaul network necessary for true Broadband Internet throughout all Australia – including some metropolitan areas.

If other engineering/merchant banking companies have used the ACCC document as a reference, (for example installing FTTH) then their engineering estimates may be skewed on the very cheap side, as the core/backhaul structure could be severely underestimated.

## **Access Network Structure**

ADSL, xDSL etc is being 'rated' by its maximum short-term downstream speed (which is far greater than the average upstream speed). With imminent (bi-directional) video conferencing using Broadband Internet, *the bottleneck will be the average upstream speed*. So xDSL modem products need to be 'rated' by their slowest (upstream) speed, not their fastest (downstream) speed.

Fibre To The Home (FTTH) is the access technology of today and the future, and therefore ADSL, xDSL, copper pair, HFC etc. are now outdated technologies, and it is imperative that these older technologies be phased out as a very high priority. This requires separate/additional funding - ie no dividends for several years.

Regards

Malcolm Moore