



Introduction

When I addressed the ATUG conference a year ago, I covered some emerging topics including the possible rollout of a fibre network, regulatory exemptions, the need for operational separation of Telstra, and the ACCC's responsibilities in setting access prices.

Clearly these issues are very much still alive in 2006. The difference is that developments of the past six months mean that we are now at a point where decisions on these issues must be made – they are no longer just looming concepts. This is evident from the major issues that the ACCC is currently dealing with.

There has been significant debate around these issues, much of it overloaded with rhetoric. But I think it is useful to first step back and taking a look at the where the industry is currently at.

The competitive environment in 2004-05

Generally speaking, the benefits of competition are most evident in areas where facilities-based competition or access-based competition is strongest. The benefits of full facilities-based competition, where there are a number of separate networks, are most clearly illustrated in the retail mobiles segment.

When compared with fixed-network telecommunications services, there were more signs of competition in retail mobiles, including falling prices, and increased market shares of Vodafone and Hutchison, perhaps due to increasing take-up of 3G services and the prevalence of 'bucket' pricing. Nevertheless, this assessment is qualified by the fact that there are high barriers to entry, the market is highly concentrated, and profit levels among the main operators are also still very high. These factors are even more significant at the wholesale level, where termination charges are more than double their cost. The issue of termination charges continues to be problematic, as evidenced by the large number of access disputes currently on foot.

In terms of broadband competition, there were some promising signs in 2004-05 that increased retail competition would enable competitors to increasingly move towards access-based competition. We have seen several players announce and commence DSLAM roll-outs – mainly in metropolitan areas - with a view to making greater use of ULL services.

To some extent, though, this reflects the fact that the market itself is growing, and early signs are that Telstra's telephony dominance could extend to broadband services. There is also a question mark as to how sustainable the retail competition offered by other key players is, given the considerable uncertainty around the implications of Telstra's network modernisation plans for those competitors currently putting their own DSLAM infrastructure into Telstra's exchanges.

So in one sense, it can be said that the competitive process is beginning to bear fruit – we have seen emerging competition, particularly in broadband and mobiles. But in spite of these positive signals, the ACCC remains concerned that threats to existing and future competition still exist.

The ACCC's concerns mainly involve the copper local access network. The ubiquity of Telstra's network, and the costs associated with competing infrastructure, mean that most competitors have at least some ongoing reliance on access to Telstra's copper network. Most competitors purchase at least some wholesale services from Telstra to participate in fixed-line retail markets, while at the same time competing against Telstra's retail business in those markets.

Alternatively, competitors can bypass some or all of Telstra's network by choosing to deploy their own competitive infrastructure, such as the DSLAMs I mentioned earlier. In most cases, competitors will combine access to parts of Telstra's network with their own infrastructure, in what could be termed "access-based infrastructure competition."

In the interests of encouraging investment in competitive infrastructure, the ACCC has generally been reluctant to regulate wholesale services end-to-end. Instead, the focus has been on more unbundled network services such as ULL, PSTN and transmission. To some extent, regulation of these services has been seen as a pre-cursor – a stepping-stone – from access-based to full facilities-based competition, as competitors progressively expand their networks closer to the customer.

That said, there are wholesale services provided over the PSTN – such as wholesale local calls - which have been regulated. This largely reflects the view that in certain limited cases, wholesale regulation has been necessary as there has been a lack of competitive alternatives. The ACCC is also close to finalising an initial view on whether wholesale basic access should be subject to regulation.

Technological developments assist the shift to this kind of infrastructure, but this does not mean that innovative service delivery platforms are immune from foreclosure as a result of the incumbent's actions and responses. While access-based infrastructure investments have the potential to lead to more sustainable competition, there is certainly also a risk that quasi infrastructure-based competition that is built around the copper access network can become stranded through changes to the network architecture which underpins many of those investments.

I will talk more about these issues shortly.

Two other trends from the past year are particularly notable.

The first is the decline in high-margin voice revenues across the industry. It appears that the underlying drivers were increased substitution between fixed and mobile networks as well as within fixed-networks, for example some migration from dial-up to broadband services. The ACCC is examining substitution issues in its review of fixed line services, but it is clear that all fixed network operators, not just Telstra, recorded declines in voice connections and call traffic made purely on fixed line networks. It should also be recognised that declining volumes may themselves raise questions for the pricing of key access services such as PSTN origination and termination.

On the other hand, the second notable trend is the continued strong growth of broadband, where annual volume growth of more than 100 per cent was observed in three consecutive quarters in 2004-05.

In Telstra's case, the declines in its fixed voice revenues – some \$313m in the latest half-year - should be balanced against the strong revenue growth (\$264m) associated with this uptake in fixed broadband and data services. In this respect, it seems the future of the fixed network is not nearly as dire as has been portrayed.

Evolving markets

The growth in broadband and evolution in the way it is delivered, shows the benefits to consumers of vigorous competition. As you would expect, though, incentives differ between newer competitors and the incumbent.

Throughout 2005, the increasing take-up of broadband - to more than 2.5 million services by September 2005 - helped to justify the transition by Telstra's competitors from heavy reliance on Telstra's wholesale DSL services to their own DSLAM infrastructure for the supply of broadband services. This is a good example of how the competitive process drives competitors to seek to increase margins by lowering their costs through more efficient service delivery.

There has also been increased interest in the impact of new technologies such as wireless broadband, fibre, and HFC networks, which are increasingly capable of offering an array of more advanced services to retail customers without needing access to the PSTN or traditional fixed network.

Telstra's response to the growth in competitor-led DSLAM rollouts has been to accelerate its own DSLAM program, and more notably, to propose a large-scale deployment of fibre-to-the-node (FTTN), although this is now on hold.

Nonetheless, this proposal can be looked upon as a response to emerging competition, including greater substitution between various telecommunications

services and the threats from competing DSLAM installations. It also highlights the fact that competition provides the strongest impetus for investment in innovative services. Again, this benefits consumers as the result is that higher-quality broadband services become more widely available.

In circumstances where markets are changing in this way, though, regulation needs to be adaptable to stay relevant. The nature of the existing regulatory framework, and the ACCC's application of it, means that regulation is and must remain targeted at the key bottlenecks. In the current environment, as quasi-infrastructure based competition starts to take shape, but threats remain, it is therefore timely to look forward and consider the interactions in an holistic way.

With this in mind, the ACCC recently launched a broad-ranging review of the regulation of fixed network services. Fundamental issues for consideration will be:

- To what extent can emerging competitive options break down the historical network bottlenecks?; and
- What, therefore, is the optimal combination of service declarations to best promote competition?

Addressing that first question necessitates a consideration of the alternatives technologies mentioned above – wireless, HFC and fibre in particular – with a view to seeing where regulation could be wound back. On this score, it seems that some technologies may provide only niche network offerings rather than wide-scale alternatives to the ubiquitous copper network.

For example, I note Telstra's comments to the Senate Estimates committee last month, where it explained that wireless technologies might constitute a substitute for voice services, but not for broadband offerings.

But the competitive environment could also differ on a geographic basis. By way of example, wireless broadband might be suitable for areas where population density is low, but may be less suitable in metropolitan areas because of spectrum capacity constraints. Differentiating regulation on a geographic basis is not without precedent – for instance, the ACCC has previously withdrawn from regulation of inter-city transmission capacity, and the local carriage service in CBD areas.

Ultimately, a key objective of the current review is to ensure that the overall regulatory environment does not hinder investment in innovative technologies whilst still providing competitive safeguards where they are necessary.

Impending regulatory issues

I mentioned at the beginning of this speech that the ACCC is currently involved in a number of substantial issues, where decisions taken now can have long-term implications in the industry. In this sense, intense scrutiny of the Government and regulator's decisions is understandable.

Operational separation

Firstly, the processes for the implementation of operational separation are under way. The fundamental objectives of operational separation are improving transparency and equivalence. To the extent those objectives are achieved, the ACCC's capacity to discharge its functions of protecting and promoting competition will be enhanced. In this regard, the ACCC will continue to assist the Government achieve these aims.

ULL pricing

One matter garnering enormous interest at the moment is pricing of the unconditioned local loop service (ULLS). There are two key aspects to this debate, both of which have been overloaded with rhetoric. First is the impact of de-averaged ULL pricing on line rental pricing parity – an issue of price *structure*. The ACCC is due to report to the Government on this issue at the end of the month. The second aspect is the *level* of ULL pricing.

With respect to the structure of ULL pricing, the ACCC's view is that as a general principle, prices should reflect costs – otherwise efficient investment and competition are less likely to materialise.

If costs in remote areas are much higher than in other bands, an averaged price will mask those costs and create inefficient investment signals. This might discourage investment in options that allow for more efficient supply of broadband in regional and rural areas, such as wireless and satellite. But an averaged price would not change the costs of supplying ULL in these remote areas. Instead, increased charges in metropolitan areas will increase the wholesale costs for competitors in those areas and reduce competition in the mass market.

This is important because all indications are that carriers are mostly interested in using other more cost-efficient technologies for providing broadband in the bush.

If we look at how competing carriers are delivering broadband in rural areas, it is clear that broadband delivered via Telstra's ULLS is not the only game in town. ACMA's Telecommunications Services Availability report¹ states that wireless broadband access accounts for the majority of regional broadband network operators.

There has also been steady growth in the take-up of satellite broadband, which is obviously another suitable option for delivering broadband to sparsely populated regional areas where distance or geography makes it either uneconomic or impractical to deliver DSL or cable services.

The technologies that work best in the cities are not necessarily appropriate in

¹ ACMA, *Telecommunications Services Availability in Australia 2004–05*.

the bush. In offering subsidies for a *range* of broadband technologies, the Government's Broadband Connect program recognises this. Clearly, the most profitable option for carriers under Broadband Connect will be to combine incentive payments with technologies that can be provided at the lowest cost.

With regard to the *level* of ULL pricing, there have been countless reports stating that the ACCC's preferred ULL price for metropolitan areas is \$13 and \$149 for remote areas. It would be fair to suggest there has been a bit of exaggeration here, because while the ACCC has suggested ULL prices in metropolitan areas should be lower, it has *not* suggested they should be set at \$13 in the foreseeable future. All that the ACCC has said on this issue is that there could be different approaches for allocating ULL-specific costs. Furthermore, the ACCC does not endorse Telstra's claim that efficient costs of remote areas are \$149 – this is a conservative upper bound estimate, based on Telstra's model and most of its inputs.

ULL pricing matters are currently the subject of arbitrations currently before the Commission, which are conducted confidentially, so I cannot make any further comment with respect to pricing at this point.

But the intensity of the debate about ULL pricing suggests that after 7 years of regulation, competition is finally gaining some traction. In the past year we have at last seen some players commit to taking up the ULLS to provide broadband services using their own DSLAMs.

In response, over the past the nine months or so, we have seen from Telstra:

- an aggressive campaign against regulation;
- arguments against the well-established and previously agreed principle of geographically de-averaged ULL prices;
- a strategic review announcement of a major FTTN rollout, which would have a major impact on Telstra's competitors using ULL - this was of course qualified on the basis that Telstra needed "reasonable regulatory outcomes";
- an announcement by Telstra one month later that its FTTN plans were "on hold", citing a lack of reasonable outcomes – notwithstanding the fact that Telstra had not approached the regulator to discuss what these outcomes would be.

We then saw:

- an appeal in the Tribunal over the Line Sharing Service undertaking, which most likely will not conclude until just prior to the expiry of that undertaking anyway; and finally,
- Telstra moving to a geographically-averaged ULL charge of \$30, notwithstanding the Government's outstanding request for the ACCC to examine the issue of de-averaged ULL prices.

These actions can have the effect of creating uncertainty on the part of Telstra's competitors, particularly in the context of their own investment plans to roll out competing infrastructure including DSLAMs and wireless. The drop in some competitors' share price since late last year is an example of what this kind of uncertainty can do to competitors who are seeking to provide an alternative to Telstra's ULL-based service.

Fibre-To-The-Node

I mentioned earlier that Telstra's on-again off-again FTTN proposal can be looked upon as a response to emerging competition. Competitors' roll-outs of DSLAMs capable of providing broadband speeds of more than 12 megabits per second are a response to increasing demand for very high speed services. Similarly, Telstra's FTTN would also offer very high speed broadband to metropolitan consumers.

However, if experiences in the US and Europe are anything to go by, in the medium term the main game for mass market broadband deployment still seems to be ADSL+ over copper. Moreover, an overview of the progress of fibre in Europe indicates that there is a big difference between announcements and implementation, with most fibre projects not yet developed far beyond the planning or 'strategic trial' stages, rather than actual rollouts.

Ultimately, network modernisation and investment is necessary over time for all incumbent telcos for various commercial reasons – to meet competition, to replace the existing voice revenues being competed away, and to reduce the costs of aging copper networks. The ACCC recognises this, and welcomes the potential offering of better, high quality services to consumers.

However, it is clear – from developments in Australia and internationally – that customer demand and competition are the key drivers of network modernisation initiatives. The conjunction of competition and technological change is a powerful recipe for innovation. And innovation ultimately drives the provision of higher-quality, lower cost services for consumers. But it is not the preserve of any one player in the market.

At the same time, it might be optimistic to expect that multiple fibre networks will compete with each other. Perhaps there is scope for the industry to invest jointly – although as the competition regulator the ACCC is conscious of the risks of trying to engineer structural outcomes.

If new fibre networks were to be regulated, though, there should be no presumption that the costs of access to such a network would be the same as access to a fully depreciated legacy copper network.

Australia needs competition regulation to promote future network upgrades, to allow Telstra to compete vigorously, and to allow new entrants to compete vigorously in return. Whether or not this requires regulatory exemptions is a

matter that should undergo a transparent, considered assessment. And the existing legal process for exemptions is the best channel to achieve this.

Conclusion

The regulatory regime that was introduced into telecommunications nine years ago has gradually brought widespread benefits to consumers. Competition is a major driver of innovation, and we now find ourselves at a point where the industry can make significant advancements in the way that services are delivered.

In an industry as dynamic as telecommunications, movement away from the established ways of doing things in favour of emerging technologies are to be expected. Of course, this will also involve some declines in traditional revenue sources, but competitors equally face the challenge to capitalise on growth in new services.

When the industry is at such a turning point, and given that decisions taken today can have long-term implications, it is important to ensure that we protect the gains achieved to date, and look to the gains that are yet to materialise. In this way, long term benefits to consumers will continue to grow.

This is a two-way process. The regulatory framework must be flexible and responsive to changes in the industry. Fortunately, a strength of the current legislation is that it allows for this evolution. At the same time, industry participants can aid the decision making process through dialogue that is transparent and focused on the pertinent issues.

Given the importance of telecommunications more broadly, these interactions and the subsequent decisions will have a profound impact on the wider economy. In that context, the ACCC will in 2006 do its utmost to ensure that the opportunity for effective, and importantly, sustainable, competition is realised.