National Telecommunications Summit 2005
Melbourne

The state of competition in the telecommunications industry

30th May 2005
Ed Willett, Commissioner

The forthcoming move to sell the Commonwealth's remaining stake in Telstra means that telecommunications regulation is highly topical with both the Senate and Department of Communications currently conducting reviews.

The ACCC continues to be an active participant in those processes and its views on issues such as operational separation are a matter of public record. As I have spoken at length on these issues in recent fora I do not intend to cover that same ground today.

Instead I wish to concentrate on our assessment of the state of competition in telecommunications. Our view on the state of competition provides much of the essential background from which the ACCC has drawn its recent arguments for reform of the regulatory system and also has informed a good deal of the work undertaken by the ACCC. It is a significant component in a debate which so far has heard a lot of talk about competition but too little real analysis of the extent and nature of competition that is present, or even feasible.

Why is competition so important in the current debate?

Effective competition in telecommunications delivers cheaper and better products to all of us, a fact which will allow most of you listening today to stay in contact with your work, families or even the Wallabies without missing too much of what I have to say. I have no doubt that all of us appreciate these new options.

These small blessings are, however, simply the tip of the iceberg. The benefits of effective telecommunications competition go much deeper. Competition enables Australian business to provide better products and to increase our international competitiveness; it promises to provide better communications in the bush, bringing Australians closer together than ever before; and it allows us to communicate more effectively and thus make the most of our time and talents be they in our social, work or creative lives.

If I was standing in front of you making this speech eight years ago I would, perhaps, have argued that these things were just a moment away and that amazing new technologies such as wireless communications and HFC cable would provide all the benefits of competition as a matter of course.

Today, however, looking at the state of competition in Australian telecommunications markets as the ACCC sees them, I would not paint quite so rosy a picture. It's true the Australian market is characterised by healthy competition in at least some of the retail markets but this does not extend to full facilities based competition based on the costs and qualities of the underlying networks. Without regulation the move to this kind of sustainable competition is questionable. As a consequence, we are probably, at best, reaping only a small portion of the benefits of telecommunications competition.

There is, perhaps, one major reason for this. Eight years ago I may have predicted that alternative technologies would break the enduring local access bottle neck but today I am less certain.

Eight years ago I had no idea that the copper network would one day be capable of providing data transfer speeds of 25 Mbps on a routine basis. Those who saw the film 'Hackers' in 1995 will recall the cyber savvy young characters salivating over a 28.8 kbps dial-up connection. It was therefore not surprising few predicted then that in 2005 any sensible regulatory system would still be attempting to provide reasonable access to the 100 year old copper network.

The need to facilitate non-discriminatory access to the local access network is most likely here to stay. Regardless of whether that access network remains copper, is replaced by fibre or, more likely, moves towards an IP-based model, the natural monopoly could persist and need to be regulated accordingly.

Technologically neutral regulation requires that we provide access to these facilities, not just because there is a possibility they will continue their domination but also because despite all the talk of new technologies, they may still be the most efficient way of providing Australians with access to the telecommunications networks of the future.

Despite the emergence of a growing variety of wireless technologies which do not necessarily have the characteristics of a natural monopoly, no persuasive case has been made that these technologies will significantly threaten copper and fibre networks in their potential for data and broadband services in the foreseeable future.

Consequently the debate continues to be focussed on the current state of competition in the market, difficulties with the move towards infrastructure based competition and the options we have to address this difficulty. This implies that there continues to be a strong relationship between encouraging effective access based competition, and encouraging effective facilities based competition.

This in turn means that the path to effective competition involves the progressive focussing of the regulatory effort on to the areas which are least likely to be competitive and the progressive withdrawal of regulation from those areas which can support sustainable competition. Thus for example, the removal of retail price caps from the business market and the removal of local call regulation in CBD areas represent the progressive move toward a more focused form of regulation which concentrates only on those areas where strong competition has failed to emerge.

This, however, requires that the regulator have the information and powers to focus on the most important areas and to ensure that competition is entrenched in all other areas. If competition is not entrenched, removal of regulation prematurely will likely reduce the benefits we have already gained, and if the regulator is not given the information required to effectively regulate the naturally uncompetitive segments, otherwise healthy competition in other sections of the industry will be put at risk.

I now want to consider the state of competition in the market, beginning with a brief discussion of the ACCC's approach to this issue.

State of competition summary

Assessment of competition in a market such as telecommunications is inherently imperfect. Because of the complex nature of the networks and their underlying costs, we cannot, with total accuracy, determine whether prices are close to costs. Nor can we ascertain with total confidence whether consumers are being supplied with the best products for the price.

Nevertheless the ACCC believes that an attempt should be made to characterise competition in the market. I'm sure you will not be surprised to hear me declare that the effective operational separation of Telstra would improve significantly the information we rely on in making these judgments.

The ACCC is not dogmatic about the requirements for competition, and it does not apply a one size fits all test. Rather the ACCC takes a pragmatic approach. It observes each telecommunications market and asks: 'are these firms competing vigorously, pushing down prices and pushing up quality?' If the answer to this question is yes, the ACCC then asks whether this competition is at an appropriate level for that market and, finally is this competition here to stay or is it fleeting and fragile?

It is fair to say that since 1997 the industry has made reasonable progress toward answering the first question in the positive. Yes, there are signs of competition in the market and they are easily observed.

To take one example, it is now widely accepted that there is quite vigorous competition in the retail mobile market, although competition issues remain at the wholesale level. It is not possible to walk through any major town or suburb without being confronted by glossy advertisements offering discounts, deals and inducements to join the mobile revolution or update your existing contract. Mobile prices have fallen over the past 5 years and at the same time Australia seems to be making a transition to greater service quality through uptake of 2.5 and 3G services. This is the kind of evidence which led the ACCC to recommend that mobiles be removed from the retail price caps in 2001.

A second good example is that there appears to be a reasonable degree of competition in commercial markets. CBD areas are now served by an array of different service providers and network technologies and medium and large firms benefit from heavy contractual discounting. This led the ACCC to remove regulation of the local carriage service in CBD areas in 2002 and to recommend the removal of business customers from retail price caps in 2005.

When the Commission sees that kind of competition in a market, regulation is consequently decreased.

However, it is important not to rely on superficial evidence, or evidence from only one functional level of services supply, to conclude that all telecommunications markets are effectively competitive and that regulation should be further reduced to allow the free hand of the market.

First, not all industry commentators will agree that the evidence points to vigorous competition. JBWere, for example, recently stated that:

> *Conventional wisdom suggests that the Australian mobiles market is highly competitive, with revenues and margins under intense pressure. In our view nothing could be further from the truth.*

They suggest that a mobile operator with its own network could earn up to 300% return on investment and that revenue is on the rise. While JBWere argue that this situation is not sustainable, it highlights the divergence of views in the industry. It seems that there is a need to look at the underlying structure of the industry and consider its potential for ongoing competition rather than simply look at some superficial indicators of competition, such as discount deals or advertisements. Equally, however, the existence of high margins may also be a signal for viable new entry so that in itself is not necessarily suggestive of a long-term problem.

Second, it is possible that intense competition exists, but not where it is most beneficial. Most Australian telecommunications markets have many more retail competitors than wholesale competitors. For example, hundreds of ISPs compete for our custom while only a handful of operators provide network access and there is only really one which can provide an ADSL connection. The vibrant competition observed by most home and small business internet customers is little more than competition between a large number of retail competitors buying and reselling access on monopoly infrastructure. As yet, only very small inroads have been into the underlying networks. This situation contrasts, for example, with the infrastructure-based competition which exists for the transmission fibre links between capital cities.

Finally, the sort of evidence given above is not sufficient to answer the final question – is the competition that we see sustainable? To answer that question it is necessary to look at the underlying structure of the industry and to identify whether the competition which exists is sufficiently mature, whether there are any significant barriers to entry or threats to the ongoing survival of competition.

Critical analysis of these issues needs to look at the underlying market dynamics of entire supply chains and, simply put, our analysis does not paint the same rosy picture as the superficial analyses which are the mainstay of the current public debate.

The ACCC's assessment is that Telstra's ongoing dominance of the fixed line network, and the CAN in particular constitutes a continuing threat to the emergence of effective competition across a range of telecommunications markets. Vigorous competition is, in general, confined to retail competition and, while there may be infrastructure competition in the capitals and larger cities, it has not spread far beyond the confines of the CBD. The combination of these factors indicates that in the absence of appropriate regulation, the substantial gains which have been made to this point would be in jeopardy. Further, the lack of infrastructure based competition means there are currently limited incentives for telecommunications innovation in Australia.

It is worth highlighting the divergence between the ACCC's findings and current market wisdom. The market paints a positive picture of competition and a negative picture of Telstra's fixed-line future. The ACCC, however, believes that it is impossible to rule out the opposite i.e. little competition and a bright future for Telstra's fixed-line business. While recent market analyses have tended to show a decline in Telstra's PSTN revenues, these results include only a portion of the revenues which may be attributed to the ownership of the fixed network and particularly the CAN. Including these revenues shows that Telstra's revenues are at worst plateauing, with very little change to the share of fixed network services in the last few years. Further, the relevant question is not really whether Telstra's revenues are falling; it may be that the restructuring toward IP telephony will erode revenues (and margins) while maintaining Telstra's dominance. The real question is whether there will be significant changes which will erode the importance of the fixed line bottleneck.

Against this background I now want to outline the reasoning behind the Commission's findings and what would have to occur for these findings to change. In doing so it is useful to divide telecommunications in to three important sectors—fixed-line communications, broadband internet and mobile communications.

Fixed-line markets

In fixed line communications I want to focus on full service providers, that is, those competitors that provide line rental, local, long distance and fixed to mobile calls.

The ACA estimates that 88 per cent of Australian phone lines continue to be provided by Telstra through the copper CAN. At the very least this means that all but 12 per cent of Australians continue to rely on Telstra for the maintenance and upkeep of their telephone service and, perhaps more importantly, receive a telephone service, the quality of which is determined by Telstra. Since 2002-03 the percentage of Australians supplied using the CAN has fallen only 1 per cent, a fact which highlights how slow movement is in this area.

Combining Telstra and Optus the picture seems even less optimistic. Currently 98 per cent of all connections are supplied by either Telstra or Optus, leaving only 2 per cent to be supplied by others.

The vast majority of this competitive infrastructure is to be found in CBD and inner metropolitan areas where it largely competes for the custom of large businesses.

Even taking in to account reselling by Telstra wholesale, competitive supply of telephone lines by companies other than Telstra and Optus is limited to less than 15 per cent of the market and this small market segment is shared by no less than 10 companies. When confronted by these sorts of statistics the ACCC justifiably wishes to know: is this competition sustainable and why is there not greater growth in the competitive supply?

The question of sustainability is a difficult one to judge but, in an industry which by all accounts exhibits increasing returns to scale, the Commission would feel more comfortable if competitive supply was on a larger scale. However, given that most of these suppliers rely on resale of Telstra's products it seems that they will rely heavily on the continued support of regulatory agencies. This seems to be an unsatisfactory situation if the aim of the current telecommunications specific regime is to ultimately reduce the amount of regulation.

The slow growth of the competitive supply is, perhaps, more straight-forward. Consumers need a good reason to move away from the incumbent supplier. In the absence of an inducement there is no reason to make the effort to seek out an alternative to Telstra. Consequently, the slow growth in competition in the fixed line market can be attributed to the fact that competitors do not have the flexibility in price and in quality which will allow them to lure customers away.

Price flexibility is low because the majority of competitors are simply reselling Telstra's products. Consequently, they do not have access to the underlying costs of the network, but rather to the higher averaged costs which are arranged through the wholesale pricing regime. Inevitably, given the Commission's limited knowledge of Telstra's true underlying costs and the imperatives of the current legislation to balance the interests of all parties, access prices will err on the side of caution and access seekers will face higher, less flexible, costs over which they have limited control.

Adding to this, current arrangements mean that competitors who choose to resell Telstra's basic access and local call service make a loss in the local call market. While this is compensated by higher returns on the sale of long-distance and fixed to mobile calls, it reduces the pricing flexibility open to competitors. This is of concern because local call and basic access pricing is likely to be a major factor for consumers considering changing providers. The Commission is currently reviewing this situation as part of its Local Services

Review and will investigate the extent to which Telstra makes a similar loss and whether the current market prices are reasonable.

Competitors which resell Telstra’s products also lack control over the product which they are selling. Access to greater services is one of the strongest inducements to change to a new product but resellers have little flexibility as the services they sell are limited to what Telstra wholesales to them. In some cases these wholesale services do not even include the same functionality as Telstra’s retail services.

The reseller also has very limited ability to develop new functionality and to market to consumer need. Thus the reseller is limited to the use of marketing and its consumer image to provide any level of product differentiation.
A company’s choice of animal mascot hardly provides a compelling inducement to shift telephony suppliers.

Consequently a retailer of fixed line telecommunications is limited in the strategy it can employ to lure customers away from Telstra. Only two options seem readily available. One is undercutting Telstra’s pricing, a strategy which raises considerable risk that entry capital will not be returned. The other is to use related markets such as mobiles and broadband to provide differentiation. This strategy is equally risky as it implies a greater initial outlay to enter much broader telecommunications markets.

Thus we have competition only at the fringes. Firms compete vigorously in retail competition but this is not sufficient to push down prices and improve quality because of limited access to the underlying costs of the network and limited ability to differentiate their products and provide greater quality.

Further progress therefore relies on a move to more infrastructure based competition. This is not a new conclusion; the ACCC has stood by this contention since 1997 when the current regulatory regime began.

Movement toward infrastructure competition could occur in many ways. Wireless, fibre to the home, broadband over power cable or even broadband over gas pipe (as we have recently heard) are all technologies which may provide a new entrant with the price and quality flexibility which it needs to compete with Telstra on its own terms.

The ACCC, however, is not in the business of picking winners—regulation cannot be technology specific and it is quite possible, if not likely, that the most appropriate technology continues to be the copper network provided by Telstra.

If this is the case - and recent improvements in DSL speeds certainly support such a contention - then technologically neutral regulation requires that competitors must have access to such an essential input. Thus the ACCC, along with its European counterparts, recognises that products such as the unbundled local loop or ULLS are essential inputs in to a facilities-based competition model.

It is fair to say, however, that the ACCC has been disappointed with the take up of ULLS to this point. By December last year only around 30,000 of the ULLS had been taken up and while the ACCC accepts that there will be a substantial increase in this figure over this calendar year, there are some appreciable difficulties with the movement to ULLS, a few of which I will mention here.

Building the infrastructure required to use the ULLS is inherently risky, which creates a significant barrier to its use. This risk can be mitigated if entrants can build market share and gather market information before building infrastructure – which some are doing. In fact, the ACCC believes that without such an option, the move to ULLS on a large scale would be almost impossible. But the same factors discussed above have acted to reduce the amount of market share which competitors can gain in the fixed line market, and consequently delay take up of ULLS.

Further, a ULLS competitor still relies on Telstra for many services. Beyond the ongoing rental of the line, a competitor must pay a connection charge, arrange for access to Telstra exchanges, pay electricity charges, arrange for service qualification and arrange for alternative telephone services while the customers is being churned.

Telstra, of course does not explicitly provide these services to itself and it is therefore difficult to ensure that they are supplied on a non-discriminatory basis. Only if Telstra retail were also required to purchase ULLS from its wholesale division would it be possible to define such a standard, which brings us back to the argument for why operational separation is such an important step toward creating a truly non-discriminatory regime where it is possible to say that the services used by Telstra's competitors are *equivalent* to the ones used by Telstra.

In the absence of operational separation it is in no way clear that the ULLS provides a sufficient means to compete with an integrated Telstra on its own terms.

Thus the ULLS does not yet seem to be doing its job and there is significant ground to be covered before it can be said that the regulatory regime facilitates technologically neutral take up of alternative infrastructure and the efficient use of the current infrastructure.

Having made these points I want to stress that it is not all doom and gloom and that there is real growth in competition in some areas of fixed-line telecommunications. Competitors wishing only to provide long-distance telecommunications may opt to do so through several options which are not open to full-service providers. For example they may operate through preselection, override codes or calling cards. There is growing evidence that these forms of competition are providing an increasingly competitive environment in the long-distance telecommunications markets. Further, as the use of IP based telephony grows we can be more optimistic that these alternative models will provide a more robust competitive model beyond the niche market of high value users they are currently targeting. But even with the use of VoIP type services, for these to become viable and sustainable models, access to the underlying infrastructure must be protected.

Broadband

I now want to turn discuss the broadband market which has been a recent focus for the Commission.   I will discuss the ADSL market in particular because it has close ties to fixed-line competition in general.

Broadband take up has been the success story area of telecommunications in this financial year. The number of broadband users increased from half a million in 2002–03 to nearly 1.1 million in 2003–04, a 102 per cent increase. Current figures show a further increase to over 1.5 million users.

Further there seems to be significant potential for competition in the market. Telstra stated in its *Annual report* of 2004 that it continues to lose market share in both dial-up and broadband markets. Telstra's broadband market share currently hovers around 40-42 per cent while in 2002 it was around 62 per cent. This fall in market share is despite Telstra's aggressive pricing and highlights the competitive outcomes that may be available with more reasonable pricing.

Recent work by the OECD confirms that DSL is the source of the majority of growth in broadband markets, accounting for an average of 60% of the market. Again, the copper CAN continues to show its dominance. This work also ranks Australia 21st out of the OECD countries in terms of broadband uptake. While it may be argued that broadband in Australia is difficult due to low population densities, Canada ranks 5th in the OECD despite its similar geography. Significantly, it is competition between cable and DSL that seems to drive broadband uptake in Canada. While service based competition will take us some way, especially if fuelled by the incumbents wishes to maintain market share, infrastructure based competition seems to provide more rapid and sustainable development.

The Australian market is, however, still in its nascent state and it is difficult to assess whether it is developing into a truly sustainable competitive market. The Commission, however, has focussed on whether the broadband market is having the maximum possible impact on the competitive development of the industry.

In addition to being an important market in its own right offering a plethora of benefits to Australian consumers and business, the importance of broadband to the broader telecommunications market should not be underestimated.

The decision to take up broadband plays an important role in encouraging customers to move to new service providers. Consumers that decide to investigate a broadband connection are likely to take that opportunity to reassess all of their telecommunications purchases. Further, it is increasingly possible for new competitors to enter the fixed-line market by providing broadband and moving to VoIP. Aggressive, and perhaps anti-competitive, pricing by Telstra in the ADSL market will therefore not only slow the move to alternative broadband providers, but also reduce the movement of customers to alternative fixed line providers and effectively stifle the take-up of ULLS. Faced with the inevitable loss of retail market share, Telstra naturally prefers to move customers from retail to wholesale rather than from retail to ULLS. Lowering wholesale ADSL prices may increase the number of resale competitors, but it also weakens the business case for ULLS uptake.

Consequently the ADSL market can be seen to have a deep impact across many telecommunications markets.

The importance of this market is a clear justification for the ACCC's vigorous efforts in enforcing its recent broadband competition notice. It is also worth noting that competition enforcement of this kind is a symptom of the sharpening focus for the Commission. Telstra's position in the ADSL market is supported by its ongoing control of the fixed network. A narrower, more focussed, regulatory model involves policing Telstra's pricing and use of this asset more fully, while giving more latitude those other markets which show healthier competition.

The ACCC believes that it is essential that competitors are able to compete on the price and quality of broadband services. However, price and quality flexibility is best achieved where new competitors have access to the underlying network elements through ULLS and LSS. The ACCC is currently placing considerable focus on ensuring that this is the case by considering in more detail provisioning and pricing aspects of the ULLS and LSS. However, there is somewhat of a chicken and egg problem here. ULLS and LSS are unlikely to thrive unless wholesale ADSL and fixed line resale provides an effective stepping stone for greater infrastructure competition. Getting the pricing of these services right is therefore the essential first step to the removal of regulation from most areas.

Mobiles

I want to wind up this discussion today with some brief comments on the state of competition in mobiles markets.

As noted before, the average person on the street will note signs of high levels of competition in mobiles.

However, again it is necessary to ask whether the competition is at the appropriate functional level to ensure that Australian benefits to the maximum extent. With Optus and Telstra having a combined market share of 80 per cent it is far from clear that this is the case.

Considering again the recent comments of JBwere, they speak of a 'conventional wisdom' which suggests that the market is competitive. From the ACCC's perspective, this 'conventional wisdom' concentrates on the vigorous competition in the retail level of the market and does not necessarily consider whether this competition is giving consumers access to prices that are more reflective of the efficient costs of the underlying networks.

At the heart of this problem, there are currently four network owners in Australia and key to the prices which they charge in the wholesale and retail markets are the prices which they charge each other for mobile termination. It is well established that raising these prices can provide an effective mechanism to allow price coordination in a market which is limited to a small number of competitors. The ACCC does not, therefore, believe that competition is effectively disciplining these prices and ensuring the efficient supply of mobile services.

This difficulty is created because the high fixed costs of mobile technology mean that only a limited number of competitors can enter the market as a network service provider. That there are significant barriers to entry is highlighted by the recent decisions of the largest mobile carriers to enter the 3G market on the basis of joint ventures for physical build-out of the networks. In this context, while mobile infrastructure is scalable to some extent, the market structure may be one that is naturally limited to a few large suppliers. In such a market there will always be concerns that competition is not as fierce as it may be and the concerns related to mobile termination may be one symptom of this.

In general it is clear that with Optus and Telstra having four-fifths of the market between them, there is potential for less than competitive outcomes. This observation is particularly strong in a year when the combined market share of Telstra and Optus has actually increased. That this dominance is continuing to lead to less than competitive outcomes is further demonstrated by margins in excess of 40 per cent which the ACCC found while conducting its review of the Mobile Terminating Access Service.

Following its review, the ACCC also has also issued a pricing principle for termination rates which suggests a reduction over time to achieve a closer association between price and costs. This issue is currently being played out in the form of undertakings and arbitrations before the Commission and I won’t pretend that this is not proving to be a rather frustrating exercise.

This is not the limit of the ACCC’s concerns in mobile markets. The ACCC notes that the growth of 3G mobile services poses both opportunities and challenges for competition. At one level, the growth of 3G offers a host of new value-added services to consumers and provides a strong new competitor to 2G networks in the form of Hutchison. However, 3G also creates potential for growth in market power through the control of content services.

As was evident with pay television, 3G relies to a great extent on the availability of compelling content to make full use of its high bandwidth and justify its premium pricing. Should individual competitors be able to fully control the availability of key content, it is possible that they will wield substantial market power. Such a strategy is only likely to be successful if it is pursued by one of those companies which control the upstream service. Consequently this adds to the ACCC’s emphasis on ensuring competition in the underlying network

Conclusion

Sustainable competition in telecommunications is critical to making Australia an internationally competitive economy. There is virtually no area of Australian business and social life that is not impacted by the cost and service standards in telecommunications.

It's clear that since deregulation we have come a long way – we have much better services, cheaper prices, and in some areas such as mobile and business services, there are strong signs of effective competition emerging.

But what is also clear that in many other areas of telecommunications, such as fixed line services, competition has not emerged to the extent we had hoped even just a few years ago.

With the increasing dependence on the fixed copper line for high speed broadband, and the slow roll out of facilities based competition in many areas, it is clear that effective and appropriately focussed regulation will continue to be necessary to ensure competition develops in telecommunications.