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# BROADBAND

Strong debate continues over the direction Australia's broadband networks might take, but the future remains anything but certain. Head of the ACCC's communications division Michael Cosgrave looks at some of the options currently being investigated by industry.

**THE PACE** at which broadband technology has become a standard service, both for business and home users, is quite remarkable.

Ten years ago the ACCC made only scant mention of internet services in its annual report on the state of competition in the industry. Today, that would be an unacceptable omission.

Debate about the state of broadband has occupied a lot of space in Australia for some time. Clearly, there is a strong feeling in many quarters that 'something must be done' to improve broadband availability and speeds.

While it is not the ACCC's place to comment one way or another on whether any proposal is 'best', it does have a role to play in the industry through its regulation of declared telecommunications services.

The ACCC's objective in regulating competition in the industry is to foster the competitive process and the long-term interests of end users.

This objective is quite different to that of individual firms, which is maximising their profits.

## A plethora of technology

The ACCC's strategy of opening up access to the incumbent's ubiquitous copper-wire phone network (which can also be used for data services) has led to substantial investment in competing infrastructure by a number of players in the industry.

At last count, 19 broadband providers were using mandated access to the copper network to install their own equipment in local exchanges, allowing them to offer fast ADSL2+ broadband services to customers. These investments have also prompted the incumbent, Telstra, to increase the quality and speed of its own services.

Consumers have been the winners from this process. Just over 50 per cent of Australian homes can now access ADSL2+ broadband. This number could increase dramatically (to almost 90 per cent) within just 48 hours if Telstra 'flicked the switch' and turned on more ADSL2+ services, as the ACCC has called on it to do.

Opportunities for non-DSL broadband services have also grown as innovation and competition increase. Wireless technology already accounts for the majority of regional

broadband networks and OPEL has announced a major role for wireless in its Broadband Connect network.

In addition, the potential upgrade paths touted by Australia's four 3G mobile network operators raise the possibility of these networks becoming a viable alternative broadband platform in the future.

There is ongoing debate over whether wireless broadband will be an effective substitute for, or whether it will complement, fixed-line access networks. Measuring fixed to mobile substitution is a difficult 'art', replete with the usual methodological debates. Time will tell, but it is likely that this will depend on a number of factors, including realistic technology upgrade paths as well as the availability and performance of fixed-line services in rural and remote areas.

Until recently, the role of HFC cable broadband—built principally to carry pay television—was probably understated in Australia. Despite a limited geographic footprint, HFC is actually the country's second most utilised broadband access network, accounting for 17 per cent of all connections. But it is significantly under-represented when compared to the Organisation of Economic Cooperation and Development average of 29 per cent. In the United States it is the

principal platform. Vibrant HFC competition also exists in other countries, such as South Korea, the United Kingdom and the Netherlands.

While Telstra's cable broadband subscription grew by only 1.2 per cent last financial year, this could pick up following Telstra's proposed HFC upgrade, which it claims will provide 30 Mbit/s shared speeds to 1.7 million homes. It will be interesting to see whether other HFC providers follow suit. Of course, unless there is some significant expansion in the HFC footprint, this will affect competition only in the major cities and a few regional centres.

Finally, there is the option of increasing the amount of fibre cable in the network. Aside from the national fibre-to-the-node plans flagged by Telstra and the G9 consortium of competitors, fibre-to-the-home networks are already being rolled out in greenfield sites. Some state governments have also supported fibre proposals.

The draft guidelines set out by the government's broadband Expert Taskforce also make clear that a range of technologies other than FTTN may meet the Expert Taskforce's criteria.

### **Competition regulation in a dynamic industry**

With so much choice and with these ongoing developments in the sector, it is difficult to know what options providers might focus on to improve network speeds.

Future change is also a certainty, given the Expert Taskforce process, Broadband Connect and, of course, the inevitable transition to a full IP world. The competitive environment itself will also promote continued innovation and investment in broadband services. The guarantee of ongoing change underlines the need for a dynamic approach to competition regulation.

The ACCC's longstanding view is that the best way to promote the long-term interest of the public is to foster facilities-based competition, where this is feasible and does not lead to inefficient duplication of infrastructure.

Competing forms of stand-alone infrastructure allow different providers greater control over their costs and supply chain as well as greater ability to improve services and differentiate service offerings. In turn, this is more likely to lead to sustainable competition and improved services over time.

In some cases, vigorous, full facilities-based competition between different network providers will not be economically efficient or feasible. All the loud debate about fibre has proceeded on the basis that there would be only one network because duplication would be inefficient. Commentators expressed similar views about the dual HFC rollout by Telstra and Optus in the 1990s. In these instances, access regulation can enable competitors to combine third party infrastructure with their own network infrastructure.

The evolution of internet services from niche to mainstream over the last 10 years underlines the tremendous rate of change in the industry and highlights the futility of trying to guess the future.

Keeping across developments is a key challenge for the ACCC and, no doubt, the industry as a whole. The ACCC is working hard to ensure that, despite these changes, regulation remains targeted and effective.

By fostering the competitive process, the ACCC plays an important role in ensuring consumers benefit from whatever technological improvements industry players ultimately decide to introduce. ●

