Networking Australia's future

The Prime Minister launched the final report of the Broadband Services Expert Group on 1 March. *ABA Update* talked to former ABA Chairman Brian Johns, who chaired the group, about its recommendations and the major issues canvassed by the report. Mr Johns took up his new position as Managing Director of the ABC in March.

How much will it cost to provide broadband networks to Australia? Who will provide the money?

In our final report we have used estimates prepared for us by the Bureau of Transport and Communications Economics (BTCE). The BTCE estimated that the cost of providing broadband networks to all Australians would be in the order of $25 to $40 billion - much of which (about 60 per cent) would be for rural and remote areas. There is no unanimity about the cost (the BTCE estimate has been criticised by some as being too high, and by others as being too low), but this estimate is the best researched we have seen. The important point is that the cost of providing broadband to everyone will be very large although uncertain. This is why in the final report we have stressed the importance of making the most of narrowband networks, which can provide many of the benefits that people think of when they talk about the so-called information superhighway. ISDN (which will provide the capacity for digital narrowband networks) is already being rolled out throughout Australia over the next four or five years.

(Photo: News Limited)

Won't broadband networks increase the risk of a division between the information haves and have nots?

Because broadband have the potential to transform our society, this is something we have to be very careful about. We can foresee circumstances in which people are denied access to sources of information and communication because they can't get access to broadband services - whether for economic, geographic reasons or perhaps through disability. What makes the task so difficult is the very high estimated cost of providing broadband services to everyone (perhaps $40 billion).

Our approach to this dilemma in the report is to recommend providing access to community centres like schools and libraries. This will be important in educating our children in using the new services and building information skills in our community, but will also be vital in providing access for the community. It is a keystone in our approach of 'universal reach' - that is although not everyone may have services in their homes, connections to community centres should put everyone in reach of them.

Why broadband networks? Won't narrowband networks provide most of the services people are talking about?

To some extent this is true, and a recognition of this fact represents a key feature of our final report, the evolutionary approach to network development. Many of the new communications services, even interactive ones, can be provided on narrowband networks. We need to make the most of the opportunities offered by narrowband networks now.

But in the longer run services requiring full ▷

two way interactivity and/or high quality video can only be provided on high capacity ('broadband') networks. And the existence of broadband networks will enable even some narrowband services to be provided more efficiently and in a more user friendly way (e.g. by using graphical interfaces). We don't want to be too prescriptive about this - the important thing is what services will be delivered, not the capacity of the pipe that delivers them.

What is the Group's attitude to the question of whether network operators should be required to provide open access to their networks to other service providers?

We have been very clear about this in the final report (as we were in our interim report). Nothing has led us to change the view expressed in our interim report that open access for service providers is vital to the broadband networks. We do recognise, however (as does the Government), the need for some transitional arrangements for pay television. We very much support the Government's decision of November last year on this.

I might add that open access is vital in the ownership and control debate. If we are concerned about concentration of media ownership, the most effective remedy in a broadband environment is an open access regime. In a sense who can gain access to networks is more important than who owns them. Open access would provide a great boost to the expression of diverse views.

Is there any evidence that anyone actually wants broadband services, and will be prepared to pay for them?

This is a difficult question - many trials are going on around the world about precisely this question. The major difficulty is that you can't do conventional market research, because people really have no conception about what the new communications services are. The Expert Group let some consultancies designed to gain a better appreciation of which services are likely to be demanded.

A key finding of the demand study was that within the next 10 years a number of services will enjoy reasonably high levels of take-up over broadband networks, including pay television, interactive television, video-on-demand, home shopping, electronic gambling, video conferencing (for training, education, medical consultation, business meetings, and so on), high-speed file transfer (for electronic commerce, CAD conferencing), remote monitoring and security, and government service delivery. A range of other services will be available but will not find wide acceptance within this time because existing services will continue to be used, because they will require significant skill changes or changes to organisational structures or work practices that will not occur quickly, or because network infrastructure capabilities and the cost of customer equipment will continue to constrain their adoption. Fully interactive telecommuting, video mail and home medical services fall into this category.

The uncertainty of demand is one of the reasons we have recommended an evolutionary approach, building on the infrastructure we already have in place. But its important not to get too hung up about this question - no one really understood the potential demand for a new service like the telephone when it was invented either.

Given the likelihood that, if left to the market, some areas of Australia are unlikely to have broadband cable in the foreseeable future, shouldn't the Government prevent duplication of cable infrastructure by Telecom and Optus who may compete to cable the same areas? Wouldn't a licensing system be better able to ensure that all areas have access to cable?

The Government expressed its views on this issue quite strongly in Minister Lee's statement on access and regional monopolies in November last year. The Expert Group supports the Government on that issue. One of the things that tends to get forgotten in this debate is that competition also brings with it advantages which need to be offset against any disadvantages from duplication of infrastructure.

Given the desirability of broadband and especially interactive services, shouldn't Australia be pursuing optical fibre networks rather than coaxial cable or ADSL?

The Group firmly believes that the services are more important than the types of technologies used to deliver them. The technological landscape is changing so rapidly that the long term answers on technology are very difficult to predict. We believe though that each of the competing technologies has a role to play depending on geography and costs.

Why do we want 500 channels of TV?

Nobody wants 500 channels of television. What people are talking about is only a theoretical or

notional number of channels. Much of the capacity might be used to deliver a video on demand service, for example, with only a relatively few number of actual programs. More importantly with a truly interactive network, capacity could be tailored to individuals, so that instead of 500 channels we would effectively each have our own channel with the sorts of things we are interested in. And capacity could be used for purposes other than entertainment - like access to information or education services.

Why should the Government be involved?

We believe that private sector investment and competition should be encouraged. But the Government does have a role, in providing an appropriate regulatory environment, in making sure that Australians have access, in a leadership role particularly as a user of broadband services for its own activities, and in encouraging Australian content. The Expert Group was particularly pleased to see that the Prime Minister has decided that he will chair a broadband services council. We see that as a clear sign that the Government is committed to providing leadership in this area.

What are the real benefits of a broadband network? In education? Health?

We are talking about services which could revolutionise the way we work and learn. Broadband services could mean that children have access to the best teachers no matter where they are. Health care could be improved as people living away from large hospitals could have access to specialist advice through sending X rays or CAT scans down the cable, for example. Businesses will need to adopt the latest technology if they are to keep up with world best practice. A lot of activity is already underway in Australia to develop these services, and we have talked about many of them in the 'snapshots' in the report.

Can Australia afford to connect all our schools and libraries to broadband networks?

A critical element of the report is the recommendation for connections to schools and libraries. There is no doubt that this would involve expenditure. We estimate in the report that it could cost $60 to $90 million to connect schools to narrowband ISDN networks; library connections might cost another $30 million. This could be spread over several years - moreover we are not proposing massive expenditures on connections to broadband networks where broadband infrastructure is not readily accessible. Broadband connections can be provided over time as the infrastructure becomes available.

We also have to ask the question whether Australia can afford not to make these connections. As the Prime Minister says, how well we play the information game will determine how well we prosper as a nation. Our competitors won't wait for us - we have to be ready for the communications age.

Won't broadband networks be a threat to privacy?

This is a question which many people around the world are looking at. We believe that the networks should be designed to enhance our control over information about ourselves - in many ways of course the problems will be the same as those we already face.

After discussions with the Office of the Privacy Commissioner, we have recommended a regulatory scheme to protect the privacy of network users within the framework of the Privacy Act. We believe that businesses which use the new networks to collect personal information will need to develop codes of practice which address these issues. The Privacy Commissioner should have a role in this process through the Privacy Act.

How can the Government be a leading edge user?

Governments are major uses of information and information technology. There are may areas, like in health and education where services can be delivered more efficiently or effectively using broadband services. Government is also a major holder and distributor of information eg statistical information, and this information can be distributed using networks. But there are also many other ways that governments can improve their own operations using modern communications infrastructure - in the same way as business.

Has the Expert Group placed less emphasis on content than it did in its interim report?

Not at all. We still regard the development of local content as being vital. Any perceived lesser emphasis is a result of the success of Group's interim report. Many of our ideas on developing multimedia content were in fact picked up by the Government in its Cultural Policy Statement, *Creative Nation*, last year.