

# Q & A

**ABA UPDATE TALKS TO PATRICIA GILLARD, ASSOCIATE PROFESSOR, DEPARTMENT OF COMMUNICATION STUDIES, FACULTY OF SOCIAL SCIENCES AND COMMUNICATIONS, RMIT AND MEMBER OF THE BROADBAND SERVICES EXPERT GROUP (BSEG), ABOUT THE IMPLICATIONS OF THE BSEG'S FINDINGS, AS DETAILED IN ITS REPORT, NETWORKING AUSTRALIA'S FUTURE.**

## **How much will it cost to provide broadband networks to Australia?**

That's not an answer that anyone's giving at the moment because it will depend on what technology is used. When they are provided could also make a difference as some technologies could be much cheaper in five year's time.

## **Who is most likely to bear the cost?**

There's no sense in anyone assuming that government will just fork out billions of dollars for infrastructure. I think the network will result from cooperation between industry and government. Some companies will want to see special things done in special areas for their own interests.

There will also be an opportunity for community groups to access other forms of government funding that are already available but to use them for these kinds of infrastructures. In Australia, I think we are actually looking to cooperative ventures in a number of different ways.

## **Is this broadband network separate from any network that's already in existence?**

It is in the sense that the existing networks would have to be updated. But Telecom already has an existing extensive optic fibre network which would form what is called the 'backbone' of a new broadband network. Of course, the cable being in the ground doesn't link it to people's premises and that's the expensive part.

## **The expectation is that most people will get access in order to get cable or pay TV?**

I think that's the assumption being publicised by Telecom and Optus and by the pay TV companies. I don't know that we can be sure that's actually the assumption being made by business—rather it's what the media have picked up on. It could be companies that use

a lot of high speed data transfer, for example, which might be financing a lot of the major business links. So we are hearing a lot about pay TV but I don't think we can assume that's actually the basis of the business decisions.

## **Are the broadband networks going to increase the risk of a division between the information haves and have-nots?**

Well again, and I guess this is where BSEG sees its work as fairly important, it actually depends on how the networks are implemented. If we said to industry—without any kind of government policy making—'look you just go ahead and invest where you want to', the market will prevail. What you would get is the things that have actually happened in places like England. You get a number of different companies cabelling and providing services next to each other into areas that are fairly affluent. You would get not only nothing going to other places, but you could get a decrease in services because there may not even be the maintenance of the normal phone lines. Under that market-driven system, if it's just left by itself, yes, you would start to get rich people having lots of communications resources and poor people having not only no new ones but probably less than they have now.

That is not the approach that we are taking in Australia, that's not the basis on which the government or BSEG is working. We are looking at cooperation between government, the community and business.

## **Does that mean equal access for all?**

No, you can't go that far. We don't have equity now, so I don't know how we can just assume that this is what it means. However, I think there is now an openness to redefining things, like what basic needs are and what universal access is. They have to be redefined in the light of a new kind of technological system. We're not doing what some

other countries are doing which is, 'look we'll just let it rip' and see what happens. We're saying this has to be planned development.

## **Will there be a need to develop a balance between the market forces and government policy?**

Yes, there may well be government policies that perhaps restrict the number of companies that can come into particular areas so we don't double up on infrastructure in some places and have none in others. We are also looking to government to provide leadership by becoming what we're calling 'leading-edge users'. In other words, that government looks at how it can do what it's doing better and more efficiently, using broadband services. So if government starts redirecting its dollars into broadband uses, they will service a wide group of people in the community. There are also many forms of government funding, particularly in terms of regional development, that already exist but can be used to develop a different kind of telecommunications infrastructure.

## **Is there likely to be much duplication in, for example, cable laying?**

We've probably got duplication now in some of the main trunks between Sydney and Melbourne. Optus has certainly cabled in areas where Telecom exists—removing a monopoly opens up that possibility. I suppose it's a matter of the government deciding when it is against the public interest to have over-development in some areas compared with no development in others. Competition may be more important between providers of on-line services at this stage, rather than infrastructure providers. That would mean that open access to broadband by content providers should be assured by government policy.

**What's the likelihood of connecting the remote areas?**

It depends on how you use the different technologies. It's very likely that some remote areas could be connected using current technologies, like twisted copper pairs. Digital compression makes it possible for those copper wires, once they get the switching right, to carry video for example, so some services will be available even using technologies we have in the ground right now. Some remote areas may go straight to satellite and mobile telecommunications. Development needs to be planned in terms of coverage of different groups. If it's done well and if people in remote areas also team up with their local industries for example, it's very possible that remote communities will have access to these kinds of services although they might not go to every home. In some remote areas it might make more sense to use some kind of central facility that people can link into, than have cables going to every remote outstation.

**Does the broadband network use both cable and satellite technologies?**

If we're wise we'll use the cheapest and most effective technology to do particular jobs in particular places. We'll have to be very wise to do that because businesses will, of course, prefer their own technologies if they've got links with technology companies. That's where the role of policy comes in—there needs to be a rational approach. A market driven approach isn't always rational in the sense of using the resources in the best way.

**Why do we need broadband networks, why don't narrowband networks provide most of the services?**

At the moment they do. We haven't answered that question convincingly yet. There are some services that certainly need broadband networks and some of those are the most needy ones. For example, health consultations with specialists in remote areas have to be done by two-way video link, which means broadband. We're talking broadband for anything that is on demand, interactive and has a visual channel.

Certainly broadband is needed for

distance education that is very much like a classroom. If you want interaction where you can see each other you're probably talking broadband, but for many services there's a lower level of technology that's needed. The difficult question is whether or not it's best to start off at a low grade and gradually update and make a network more sophisticated as people want it and allow for the possibility that this creates huge divisions. Or should we set a certain technological base line and bring everyone up to that. It's a major question and has implications for consumers either way.

**Is there any evidence that people actually want broadband services and are prepared to pay for them?**

People shy away from collecting that evidence. Certainly in the demand studies that the BSEG was able to do, there's been a preference for speaking to experts in the field rather than speaking to ordinary people. One of the difficulties in speaking to people is you're asking them about things that don't exist. The research group that I head is planning some research at the end of this year and next year which will survey people about what they would like. But there is not a lot of evidence either way, based on research on people.

**Given the desirability of broadband in the interactive services shouldn't Australia be pursuing optic fibre networks rather than coaxial or ADSL?**

Only if you've got a government, such as the Japanese, that is willing to plan until 2015 and directly subsidise billions of dollars or get their major telecommunications carrier to do that. In Australia that makes less sense because of our geography and our much lower population. It means we all pay a huge amount of money for an oversophisticated network.

**What sort of system or infrastructure do we need to have in place to deliver the service?**

We need an interactive capacity because we don't just want to have an information superhighway that goes



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one way so that a whole lot of people dump programs into our laps. We want to be able to get information in different forms and perhaps in different forms at the same time, which implies a broadband network because that's the best way to do it. It's much more like human communication. When you've got a choice between low tech and high tech systems, the thing that seems more 'natural' is what people will respond to. It's combinations of technologies that can deliver that in different areas, they each have their strengths and weaknesses.

**Why should the government be involved?**

There are many areas where the government already fosters change and supports cultural and social life. To abandon that in this new context would actually be to undermine the work that the government has done to date.

**What are the benefits of the broadband network?**

I can only answer that question in broad terms. I think it would be wonderful for grandparents who live at a distance from their families to actually be able to see them when they're talking to them. Really we don't know about the things that we can innovate until we get used to the technology itself, so the first step is having some of these applications in our lives. The next step is really transforming our lives and taking full advantage of the possibilities. In areas such as health and educa-

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tion, not having to travel the distance yourself physically will open up new possibilities both for conveying information and also for having human contact. I think we'll only see the benefits of it once we start.

**Is a broadband network likely to be a threat to privacy?**

The telephone is a threat to privacy now for some people. The broadband networks will be worse in that people will be frightened of others just being able to peer into their homes. As well as that there will be the possibility of huge data sets being collected on people in households and businesses, so government will need to define the limits of use of that type of data. So in both the person-to-person aspect and the information aspect, yes, it could be an invasion of privacy.

**How can the government be a leading edge user?**

By doing what they do now, but doing it differently. What that means is giving people access to information through an interactive and perhaps visual network, rather than just on the phone or across the counter. Some journalists have pointed out how little of government information is publicly available in some forms, say through the Australian Bureau of Statistics. People working in the information industries would like much greater access to that type of information.

**How does Australia fit into the international perspective?**

I think we've got a much more multi-layered and multi-disciplinary approach, looking at people's lives as well as the technologies and industries, trying to look at what new relationships are possible. We are mindful of the technology but we talk less and less about technology and more and more about industry possibilities, relationships as citizens, access and interaction. The Japanese approach is to lay down an optic fibre backbone and then people get on with doing what they do. The Singaporean approach has been to define it in terms of an information society.

We are looking particularly at the cultural issues which raise the question of what kinds of contents we will convey on broadband. We want to build a broadband infrastructure on the basis of who we are socially and culturally. We are not saying, 'look at all this equipment: how can we flog it to everybody?'. We're certainly not saying to the rest of the world: 'we want to build roads out to you so we can dump our movies on you'. We have an understanding that this is a transformation of cultural and human relationships and I think that we're one of the first countries to talk in these terms.

What we've done is raise questions in those terms. We might find the reason that other countries haven't even raised the questions is because they're very hard to answer. We have six months to come up with some answers. For example, if we want universal access to the broadband network but we don't want government directly funding it, we have to sort out what some of the funding mechanisms might be for everyone to have access. We have made a statement about cultural values but it must be related to the technological and economic ways of carrying it out. But even defining the problem is going further than we've seen in most of the other

approaches. The American one seems to be that they want pipes coming out of Hollywood, and other places where they create information, into schools and homes—it's a kind of sophisticated delivery system. I don't think that all people in America talk like this but some of their representatives do.

**Do you have any reservations?**

We've got to answer our own questions and of course they're not just ours. We've had wide consultation and a huge amount of input. Many people have put a lot of effort into the submissions they made, so we've had the benefit of the very best minds in Australia telling us what the problem is and what the situation is. We're very pleased that it's been a wide ranging process and the report, *Networking Australia's Future*, seems to touch on many things people with very different interests can identify with. Of course we've now got to come to grips with this and use a process which moves across the traditional divides of economics and social research, of policy and technology.

We've got some good people and, I think, good communication going within the group. In a sense, it's our human resources that might make it possible.

