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HOUSE OF REPRESENTATIVES

STANDING COMMITTEE ON COMMUNICATIONS, INFORMATION TECHNOLOGY AND THE ARTS

Reference: Wireless broadband technologies

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HOUSE OF REPRESENTATIVES

STANDING COMMITTEE ON COMMUNICATIONS, INFORMATION TECHNOLOGY AND THE

ARTS

Wednesday, 21 August 2002

Members: Mr Pyne (*Chair*), Mr Hatton (*Deputy Chair*), Mr Baldwin, Mr Ciobo, Ms Grierson, Mr Johnson, Mr Pearce, Mr Sercombe, Mr Tanner, Mr Ticehurst and Mrs May

Members in attendance: Mr Ciobo, Ms Grierson, Mr Hatton, Mr Johnson, Mr Pearce, Mr Pyne, Mr Sercombe and Mr Ticehurst

Terms of reference for the inquiry:

To inquire into and report on the current and potential use of wireless technologies to provide broadband communication services in Australia, including regional Australia, having particular regard to the following:

- The current rollout of wireless broadband technologies in Australia and overseas including wireless LAN (using the 802.11 standard), 3G (eg UMTS, W-CDMA), bluetooth, LMDS, MMDS, wireless local loop (WLL) and satellite;
- The inter-relationship between the various types of wireless broadband technologies;
- The benefits and limitations on the use of wireless broadband technologies compared with cable and copper based broadband delivery platforms;
- The potential for wireless broadband technologies to provide a 'last mile' broadband solution, particularly in rural and regional areas, and to encourage the development and use of broadband content applications;
- The effect of the telecommunications regulatory regime, including spectrum regulation, on the development and use of wireless broadband technologies, in particular the Radiocommunications Act (1992) the Telecommunications Act (1997), and Parts XIB and XIC of the Trade Practices Act:
- Whether Government should make any changes to the telecommunications regulatory regime to ensure that Australia extracts the maximum economic and social benefits from the use of wireless broadband technologies; and
- Likely future national and international trends in the development and use of wireless broadband technologies.

WITNESSES

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Committee met at 9.52 a.m.

GRACE, Ms Jane Roberta, Senior Legal Officer, Attorney-General's Department

SMITH, Ms Catherine Lucy, Principal Legal Officer, Attorney-General's Department

CHAIR—Is there anything that you can say on the record that you have outlined to us this morning that would be helpful for our inquiry? If you would like to explain why you wanted to appear, we will ask you some questions, if we have any—and we thank you for the opportunity to do so.

Ms Smith—Essentially we thought it was appropriate for Attorney-General's to appear because the Attorney-General's Department has a specific role under the regulatory regime in the Telecommunications Act in that the senior bureaucrat in the Attorney-General's Department is the agency coordinator who actually grants the exemptions that ASIO has spoken about, and also because we assist the Attorney-General in the administration of the Telecommunications Interception Act, which of course is the underlying basis of why there are particular regulatory regimes about interception in the Telecommunications Act. Essentially that is why we want to appear today. I was just going to make a very brief opening statement which explains what we do.

CHAIR—Thank you.

Ms Smith—The Telecommunications Interception Act provides for law enforcement agencies—not all law enforcement agencies; only those which are declared under the interception act and ASIO, as the national security agency—to obtain warrants to intercept communications. The interception act itself is actually technologically neutral and applies to all forms of communications which pass across any telecommunications system. So, in effect, communications which will be on these futuristic forms of broadband will fall within the Telecommunications Interception Act and agencies will be able to obtain warrants against them. The Telecommunications Interception Act then interacts with the Telecommunications Act, in that the Telecommunications Act provides the mechanism by which carriers or carrier service providers are required to provide interception capability to enable the execution of one of these aforementioned warrants.

The Telecommunications Act provides a regulatory regime to acquire interception capability on all services, regardless of their status and regardless of the status of the service provider. The Attorney-General's Department's role in relation to this regulatory regime is that of the agency coordinator. The agency coordinator is a position which was developed in December 1997 as part of the amendments to the Telecommunications Act. As I said, it is a senior bureaucrat within my department, and the agency coordinator holds this pivotal role between industry and intercepting agencies. In fact, as the support staff to the agency coordinator, we are normally the first point of contact. When a carrier obtains a licence they will come to us in relation to interception obligations and we will deal with them and then pass them on to the lead agency, being ASIO, to talk on a more technical basis, but it is we who will explain the legal obligations under the legislation.

We provide a lot of guidance on interception matters, and we have found that generally industry has been quite receptive to the obligations in relation to the specific parts 14 and 15 of the Telecommunications Act, which are about the assistance to law enforcement and national security. It is a very flexible approach to these obligations because we have this exemption regime and, I suppose, we are prepared to talk it through with every carrier and carrier service provider on a case by case basis to meet our needs and their needs.

The agency coordinator, after consultation with intercepting agencies, may grant a conditional or unconditional exemption from obligations to provide interception capability. There was a question, I believe, earlier about whether an exemption may actually be revoked. In all cases where we grant exemptions we tend to make them 12 months conditional. That is because the telecommunications industry is such a dynamic place, and it is our view that 12 months down the track we may be looking at a very different carrier or carrier service provider. So we like to have a look at the exemptions again and see whether the same grounds apply and whether it is appropriate to continue that particular exemption or whether the technology is now around to allow interception of a particular service.

As I said earlier, the current framework allows for a very flexible approach in dealing with carriers and carrier service providers. The exemption regime is flexible, in that all applications to the agency coordinator are considered on a case by case basis. We have had requests to look at blanket exemptions for particular classes of carriers—not carriers so much as services—however, we have never taken the particular view that it has been appropriate. We think that this approach we have in the consideration of exemptions demonstrates a balance we have with law enforcement and national security interests versus the need to be competitive in the industry. But more importantly we think that the system that exists within the Telecommunications Act has to be a balance with this very important tool for law enforcement and national security.

Essentially, as I said, the Telecommunications Interception Act is technologically neutral, so it is about intercepting a service. We have to ensure that any warrant that is actually issued—if there is a real risk to national security or a serious investigation from law enforcement—can be executed, because those warrants are only obtained as a matter of last resort; so it is only in the most serious of cases. We want to ensure that there is a regulatory regime that complements the Telecommunications Interception Act. That is all I wanted to say.

Ms Grace—The other point of dialogue between the agency coordinator and industry is through the lodgment of an annual interception capability plan. That is an opportunity for the carrier to outline the circumstances and then for the Attorney-General's Department, via the agency coordinator, to circulate those plans to intercepting agencies and to intelligence agencies for comment. Through that process the particular needs of the carrier and law enforcement agencies can be worked out and a solution found. I am aware of situations where there is a very short exemption granted—it might only be six months—with commitments to meet certain standards of interception capability, and then there is a review at that point to see that the interception capability plan is something that can be maintained and developed.

CHAIR—Are you comfortable that the regime is flexible enough to be able to cope with all the new technologies in the wireless broadband area and still maintain national security?

Ms Smith—So far, yes. We have had approaches already from broadband providers and wireless providers and even from some of these community networks to talk about how their systems will be set up and how we can maintain the level of interception that is required. I suppose it is an ongoing battle to ensure that we can keep up with the technology and that we can certainly keep up and come to solutions before perhaps a criminal element or targets of national security work out that they can use the system before we can access it. It is an ongoing battle, but I think we are keeping up with it at the moment.

CHAIR—So the Attorney-General's Department is not concerned that they would want to limit the proliferation of wireless broadband technologies or slow it down in order to be able to keep up with it or catch up to it?

Ms Smith—No, not at all. As I say, we have been talking to members of the industry for some months, and I think what is happening is there are some out there that are very aware. We have been getting a higher profile within some consulting firms and law firms that are aware of our role, so we are getting in there early and talking to people. We are looking at doing more in the future about raising the profile of this sort of stuff and getting in there early. But no, we certainly would not be looking at holding back any industry in any manner.

Mr JOHNSON—I have just one question. You mentioned that the warrants are executed as a matter of last resort. Would you be able to give me some idea of how many?

Ms Smith—The Attorney has not tabled this year's annual report—in fact, we have just done the survey on it—but for the year ended 30 June 2001 there were around 2,157 warrants issued. That is for law enforcement purposes. I cannot disclose national security. We are not made aware of the national security amount ourselves. Certainly, the amount of warrants has increased in the last 12 months—not this 12 months just gone, but the last reporting period—and in my understanding a lot of that is relevant to the kinds of offences that are being investigated. For example, with the most serious drug offences, when there are more resources going into the particular agencies investigating drugs, there will obviously be an increase in the amount of warrants obtained.

The other issue is that in the year ending 30 June 2001 a new form of warrant—a named person warrant, which allowed an interception based on a person where they were using multiple SIM cards—was able to be obtained, so quite obviously there were more warrants obtained. Where in the past an interception warrant was defeated because you would get it on one service and the person was constantly swapping their SIM cards, now agencies have a more effective tool, so they actually go to a named person warrant. But no, I am not actually sure—it may have been the year before that it was around 2,157 warrants issued. The Attorney has tabled and does table every year an annual report which lists the amount. At the moment there are 11 intercepting agencies, and the numbers obviously are quite different within those agencies as to how many they have. My understanding is probably the New South Wales police, the Victorian police and the Australian Federal Police would have the highest numbers, whereas with some of the smaller agencies—and we have corruption agencies—their amounts are very low.

Mr JOHNSON—I was more after a collective figure, I guess, from your department's perspective and to see if the trend was in fact growing or increasing.

Ms Smith—As I say, there was certainly an increase. Again, I am not commenting about the financial year just ended. The year before that there was an increase, and my understanding is that, for example, there was a massive increase in South Australia due to the Snowtown murders. It was based very much on telecommunications interception intelligence and my understanding with the AFP is that there were a lot more funds put into investigating drug matters. The other issue is that, I think in 2000, they brought in some migration offences under the Telecommunications Interception Act 1979, so that allowed warrants to be obtained for people-smuggling.

Mr JOHNSON—Yes, the scope seems to be getting larger.

Ms Smith—Yes, the scope of the basis to get a warrant has increased in that there have been a couple of additional class 2 and class 1 offences—in just the last session of parliament the child pornography and arson offences came in—but the stringent accountability regimes have increased as well. With named person warrants there are more hurdles to get across before they obtain one. The privacy aspects of the act have been strengthened, and the accountability reporting to the Attorney-General has been strengthened, so even though the number may have increased slightly the accountability mechanisms have been strengthened as well.

Mr SERCOMBE—Is AUSTRAC one of the 11 agencies?

Ms Smith—No.

Mr SERCOMBE—How does AUSTRAC fit into the regulatory regime you are talking about?

Ms Smith—Not at all; in terms of the Telecommunications Interception Act 1979, not at all. AUSTRAC has its own piece of legislation.

Mr SERCOMBE—Apart from the—

Ms Smith—Yes, the Financial Transactions Reports Act 1988. So in effect AUSTRAC cannot get access to telecommunications interception material at all.

Mr SERCOMBE—I thought that was the case, but I was not sure. What prompted my thought on that was one of the comments the director general made, I think, about the difficulty, and the utility, I suppose, of intercepting ATM data flows, for example. I just wondered how that slotted into the regime, but it is off-beam in terms of our focus.

Ms Smith—Yes. 'ATM' has numerous meanings. My understanding is that it is a particular type of wire.

Mr SERCOMBE—I see. He was not talking about automatic teller machines?

Ms Smith—No.

Mr CIOBO—With respect to the development of networks, I am just wondering whether the A-G's office, the ACA or the ABA have been out there doing things to advise community networks what their requirements are in terms of compliance.

Ms Smith—Certainly we have spoken to a lot of them by their approaches to us. At the moment we are looking at getting together with the ACA and doing some seminars and things like that, as these new forms of technology roll out, to make them quite aware.

Mr CIOBO—At this stage, though, it has been as groups have approached you rather than us?

Ms Smith—Yes, that is correct. Or alternatively, as they come to our notice—it is not unusual that we will read something about it in the computing pages or the technology pages, and we will actually give them a call and say, 'We'd just like to tell you what we are about,' and that sort of thing. I suppose it is a resources issue. As much as we can get out there, we do.

Mr CIOBO—So plans are afoot, I take it from your previous answer, to do that in future?

Ms Smith—Yes.

Mr CIOBO—What is the general reaction that you get from community groups?

Ms Smith—It is very positive, actually. I suppose a lot of people find it really intriguing—the cloak-and-dagger, the concept of interception—so they are very interested, and there is very much a view of wanting to do the right thing. I have had people approach me where it looked initially like a very closed network of groups and things like that, but then as we talked more it became apparent that they would be offering a service to the public—it would be like a niche group and hobbyists and things like that—so we worked through issues. What became clear was that we would not have to use our exemption regime in those cases. At the moment I have a few people who are going to put in writing an explanation of their structures, and we will go back to them with what we think would be the best approach to take. But generally, yes, they are quite receptive. As I say, people find this side of it very interesting.

CHAIR—Thank you very much for appearing today.

[10.10 a.m.]

CITA 472

NEEDHAM, Mr Mark, Policy Manager Telecommunications, National Farmers Federation

CHAIR—Thank you for appearing before us today, Mr Needham. We will ask you in a few moments to make an opening statement, if you have one. Although the committee does not require you to give evidence under oath, I have to advise you that the hearings are legal proceeding of the parliament and warrant the same respect as proceedings of the House. The giving of false or misleading evidence is therefore a serious matter and may be regarded as a contempt of parliament—not that we expect you to do any of those things, but we have to warn you just in case.

Mr Needham—I would like to make a brief opening statement. From the NFF's perspective, this issue is about enabling online services using technology to significantly improve service quality and to maximise the opportunities to facilitate both the supply and demand side of services. It is about the timely provision of affordable wireless so it can enable enhanced online content and service quality. It is about using wireless technologies, where appropriate, to address the current telecommunications inequities. Just as important as those is creating the appropriate environment that provides appropriate skills development and awareness raising to take full advantage of the opportunities offered. That is just a short opening statement, but to conclude that, obviously the NFF's comment is that Australia cannot afford to miss the opportunity to provide broadband services from a wireless perspective to offset a number of the telecommunications service inequities that exist at present.

CHAIR—One of the key features of our terms of reference is whether wireless broadband has the capacity to be the last mile solution in rural and remote areas. What is the NFF's view about that?

Mr Needham—The NFF would suggest that it can be a real opportunity to deliver affordable, quality services for the so-called last mile. Certainly at present the term I use is the ability to deliver broader band services—that is, services a little better than narrow but not real broadband—but in time it also gives the opportunity to deliver real broadband services at a far lower cost and in a far better time frame than current methods.

CHAIR—What is 'broader band' exactly?

Mr Needham—'Broader band', from my point of view, is the term that defines something in between narrow band, being dial-up, and some of the traditional definitions of broadband, being a megabit per second and above. As you are aware, and I am sure you have heard many definitions, broadband ranges from 200 and above. The 'broader band' term I use is to suggest something that is better than narrow band but not quite broadband.

CHAIR—Being the devil's advocate, wouldn't it be a better position to adopt for country Australia the same kind of access to broadband technology rather than taking something in between, because once it has taken something in between what would be the prospects of it ever being upgraded to broadband technology?

Mr Needham—There are opportunities that exist at present where putting in the infrastructure—and I can obviously use some examples where infrastructure exists at present—will enable a far lower cost upgrade in the future. As an example, there is infrastructure that exists at present that, as you can see from the paper, in other places is delivering broader band, and the costs involved in the future of upgrading that broader band to real broadband are very small compared to a total initial rollout if nothing had been done in the interim.

CHAIR—Some of the evidence that we have received has been very encouraging about what some of the carriers are doing in particular regional areas like, for example, northern New South Wales and the Northern Rivers area. In South Australia recently we launched the new 3G network between Whyalla and Adelaide to be able to carry video, telephone services et cetera. We have been very encouraged by the desire of carriers to provide services to rural and regional Australia, because it seems to indicate that they think they can make a profit, which is a big improvement, and it means that it will happen—of course, if there is no profit it will not happen. But there are some areas where it will be almost impossible to make a profit, particularly in rural areas where they are far from regional centres. Do you have a suggested proposal to try to get wireless broadband technology to those particular communities?

Mr Needham—As I am sure you are all aware, there are a number of wireless broader or broadband services that are available at present. These obviously include the satellite services that are there, and there are a number of companies suggesting that they may roll out in the near vicinity of communities. But we do have an opportunity at present where there is a technology that covers some 18 per cent of the land mass, 1.4 million square kilometres, that with the appropriate amount of commercial incentive could provide broader band services and then, in a short time frame, the possibility of providing broadband services, as the examples are using the same technology overseas. A combination of technologies that exist at present can deliver broadband services to 100 per cent of Australia's land mass.

CHAIR—Some of the evidence we have had suggests that it is quite possible, using 802.11 technology and a satellite, to deliver wireless broadband in really remote areas—I am not talking of towns, but particular places out in the bush—but it is tremendously expensive. It seems to be the only way of getting the infrastructure—for want of a better word, because it is not really the way we have thought of infrastructure in the past. But, the infrastructure in rural and remote areas being so expensive and, therefore, unlikely to be commercially viable for rural and remote users to pay for it, do you see a role for government in the provision of those sorts of services to rural and remote Australia?

Mr Needham—There are two points I would like to make there: I suppose I would question some of the issues about 'too expensive', in that delivering a satellite service is the same irrespective of where you are; 802.11 type services are very short range, and one would question their applicability in the middle of nowhere.

CHAIR—The idea for this, so that you understand what I am talking about, is that you could have a vehicle with 802.11 technology, and a person could walk within eight kilometres of the vehicle, as long as the vehicle was connected by satellite to that technology. So that is actually not bad.

Mr Needham—Yes, for that particular application. I suppose I was referencing more fixed type services.

CHAIR—We were told that was about \$10,000.

Mr Needham—Obviously I do see a role for government in relation to providing that minimum service standard for all Australians and the commercial opportunities for companies who are successful in winning the competitive tender process to build on that from a commercial perspective. So if there is a need for an incentive to provide those minimum standards—and I would suggest that is a good idea—there is also a need for a commercial opportunity for the successful provider to build on those minimum standards.

Mr TICEHURST—On your broader band, would you see a USO of 64k as being reasonable?

Mr Needham—The digital data service obligation at present provides 64 kilobits to all Australians, using at present only ISDN for the terrestrial service and one-way satellite for the zone that is outside 30 kilometres. It would be good to see the introduction of more technologies that provide that 64 kilobits that are covered under the current digital data service obligation.

Mr TICEHURST—In my area, for instance, we have a number of people who are on pair gain systems. I am on the Central Coast, which is more or less an outer metropolitan area; it is certainly not rural and remote. On pair gains there is no way of getting more than about 14k. Would you see that USO of 64k as being an acceptable minimum?

Mr Needham—That is from our point of view, and has been for a long time, our minimum standard requirement for an appropriate data service. It is in place at present; everyone is entitled to it. It is an issue of cost, given recent announcements that expanding the terrestrial service out to a nominal 30 kilometres from an exchange, including services or cables that have pair gain on them, and combining that with a satellite service, even today, can give you 400 kilobits downstream and up to a 128, or most likely a 64-kilobit, back channel. To me, that is the minimum standard that exists at present. It should definitely remain. There should not be any suggestion that it is not. The opportunities for different technologies to be used that attract the government subsidy at present should be increased,. Wireless broadband should be considered a part of that if the particular provider wants to include it and therefore get the government subsidy that exists at present.

Mr TICEHURST—In your paper you are suggesting that rural and remote areas should have the same level of service as in metropolitan areas, but really it is a return on investment situation. In the metropolitan areas, with more users, you are always going to be able to provide things like video on demand on a much easier, more affordable basis than you are ever going to get in rural areas.

Mr Needham—I would probably disagree with that. I would like to suggest that there are real opportunities that exist right now to provide larger pipes at lower costs to rural and regional locations, especially the ones that have existing mobile telephony coverage that can deliver those services you are talking about. They are being trialled and implemented overseas. The same technology can be or is in place here. There is a real opportunity to have the same level of

service in rural and regional locations as there is in metropolitan locations. You do not need the same amount of infrastructure to service a smaller number of customers.

Mr TICEHURST—If you get optical fibre delivered to a home, that is more likely to happen in metropolitan areas?

Mr Needham—Again, I am suggesting it does not have to be something that is buried in the ground. There is a significant cost attached to putting things in the ground. Wireless can deliver pipes where you do not have to dig up the ground—inherently a lower cost; inherently a very small delivery time frame.

You will notice in the paper that there are comments about the current six-month time frame to deliver new services. Obviously if there was an opportunity to use wireless services—that is, people had sufficient training and awareness of the benefits of them—those time frames could be reduced dramatically and the pipe that was delivered could also be larger.

Mr TICEHURST—In your paper you mentioned that you saw a role for government at all levels to be able to essentially educate users as to applications and improve skills so that they could make use of this technology. Where do you see the NFF fitting into that equation for informing its members of these services and new opportunities?

Mr Needham—NFF and its organisations attempt to inform the members of lots of opportunities in relation to developments in technology—farming practice et cetera. We have had a history of being able to deliver outcomes. You could mention some recent events where we facilitated the flow of government information to farmers and record numbers made themselves available et cetera. Obviously NFF and its organisation see their role as one of facilitating the flow of information rather than generating original information.

Mr TICEHURST—Fair enough. Turning to the skills level: obviously if we start introducing wireless broadband into regional areas we would certainly need skills to be able to support and maintain those systems. Again, do you see that as a dual role for government and NFF?

Mr Needham—And commercial organisations as well. One of the points I tried to make in the paper was: give people the opportunity to benefit from the services that are provided and they will use more of those services, because they are relevant and deliver an outcome for them; therefore they will pay more money back to the provider of those services; and therefore more people will consider the opportunity of making some money by offering a greater choice of service. It is not just awareness raising and training for the sake of it; it is awareness raising and training to help the business—or social family, bottom line, if you like—give the carrier or service providers the opportunity to make some money. They want a commercial outcome. Rural and regional people are prepared to spend money if there is a relevant service and it is of the appropriate quality.

Mr TICEHURST—I must say I have had some experience with rural ISPs. I was amazed at the level of technology and particularly the young fellas out there who are really right onto this technology. I can certainly see an easy upgrade path for these fellas to get involved with wireless situations.

Mr Needham—Obviously I do as well. That is why I think it is a real opportunity, but at present, as mentioned in the paper, there is too much of a negative perception about telecommunications in rural Australia. When you talk about telecommunications, people do not think of it positively. There is an opportunity to change that perception, to give people that quality service on the same equitable basis that it is not going to send anyone broke and it is actually going to improve the viability of farms, rural and regional communities et cetera. I can only see positive things coming from that.

Mr TICEHURST—You mentioned earlier that there was technology in Europe and overseas that provides these high-level services. What do you actually mean by that?

Mr Needham—There are some comments in the latter part of the paper under 'Rural wireless Internet service opportunities' that there are companies in other countries delivering services on CDMA networks right now that are of a broader band nature and there are companies trialling services, again on the CDMA network, that are delivering megabits per second et cetera.

Mr TICEHURST—CDMA 2000?

Mr Needham—I am sure you have heard about that from the appropriate vendors who have presented to you previously. Again, that is just one opportunity. Other people have spoken to you about their plans to roll out, hopefully, and deliver some choice in the marketplace. I think rural and regional people like a choice, but they like the security of actually having a quality service as the priority.

Ms GRIERSON—Some submissions to this committee would suggest that things are not equitable at all. You have said that the provision of these services should cost the same money, whether it be rural, regional or metropolitan. That might be so, but commercially when someone tries to access a service or request a service to be put into their region or their rural area, that is on a commercial basis and people will offer it, but at a price that is unaffordable for a small company setting up in a rural area. We had examples of that in the Hunter Valley, and that is not very far from a major regional city. They were absolutely convinced that it was inequitable and they were having to pay much too much to access broadband and therefore enhance their small businesses. There was a particular one that had made a choice to move from Sydney and set up his business in the Hunter Valley, thinking that he could rely on that sort of technology, and he was very much expressing that there were limits to his growth because the price was unaffordable for his business. Could you comment on that?

Mr Needham—I suppose that is why I am interested in the opportunities provided by wireless broadband to offset some of the costs that exist at present. I would like to suggest that if someone is after a service that offers, say, 400 kilobits—and again not knowing the particular requirements, that is not megabits per second but it is still very reasonable for the individual user or small business—the cost of that service is the same anywhere in the country.

Ms GRIERSON—But they are not provided at the same cost. Because the market size is smaller, people will only put the infrastructure in at the price of the infrastructure, but the cost is borne by fewer people.

Mr Needham—Certainly if the requirement was for some fibre cable or some real broadband service, I would agree, but if it was a small business or individual user that was happy with the present 400 kilobit style service, there is no difference. I can get that service in Blackall or somewhere around the Northern Rivers area at the same price. I do not know the specifics of the case, but certainly there are opportunities, and I am suggesting that using wireless to deliver those pipes does remove the inherent costs of digging things up and putting bits of copper or fibre in.

Ms GRIERSON—This request was for antenna structures that allow wireless, and obviously that was a limit. If you accept that those people are representing correctly and accurately some of the restraints on business growth, what would you suggest governments should do to make it easier for them to enhance their businesses at an affordable cost?

Mr Needham—I think the environment has to be put in place that allows for the use of existing infrastructure by current carriers and other service providers—access to infrastructure that allows broadband to be delivered, again via wireless. The infrastructure is there at present.

Ms GRIERSON—So who pays and in what proportions?

Mr Needham—I believe that it should be a commercial arrangement. The costs involved in delivering broader band at present are not large. Certainly there is an issue about delivering broadband by wireless that we need to address in the near time frame. I suggest in the paper that we should initiate appropriate planning to implement those bigger pipes using broadband, and the opportunity exists for us to do it for 18 per cent of the land mass—some 98 per cent of the population—because infrastructure has already been partially provided by government. But I do not want to emphasise too much the infrastructure side—

Ms GRIERSON—Yes, I have no difference with you in terms of the capacity. The capacity is there and the infrastructure is there. I am an east coast member and I know all of the east coast is well serviced. However, to access that service is not always affordable, depending on where you are located.

Mr Needham—I can only suggest that it needs to be affordable, and there is no reason why it should not be, in that if broadband DSL services delivered by cable—and there is an increase in rural and regional areas in the availability of that—are delivered at the same price in rural and regional areas as they are in downtown Sydney, and that is the case, there should not be any differentiation between the delivery of the same type of service using a different technology. I can get broadband services in Wagga for the same price that I can in Sydney, and I believe, at least from one provider, there are just some 250 locations in regional Australia. Certainly there needs to be more. If they can deliver cable broadband services at the same price anywhere, then wireless services should be delivered, as mentioned in the paper, at an even lower price because of the lower infrastructure costs.

Ms GRIERSON—So what do you think are the major concerns of the group you represent about the telecommunications and information needs of the future for them as people who obviously have to access information and as people who want to prosper their industry or businesses in some way? What do you think are the critical issues for them?

Mr Needham—The major issue is the timely availability of equitable telecommunications services—that is, voice and data delivered where people want to use it at a minimum standard and all the things that go underneath that, on an equitable basis. I am talking about minimum standard services. We spoke about 64 kilobits before; that is a good start. There are opportunities, as you aware, to build on that. Those services need to be available to everyone on the same basis, irrespective of where they are. We are moving towards that. Hopefully we will get there in the very near future.

Mr CIOBO—Mr Needham, can you explain or outline to the committee any models that currently work in rural Australia that you would highlight as being perhaps a benchmark in relation to broader band or indeed broadband?

Mr Needham—I am not aware, I suppose, of anything other than commercial activities where broadband services have been provided for some time. There are a number of initiatives that are being announced and are beginning, and we hope that those models will be successful. Some of the models have been partially funded, some are purely commercial activities.

Mr CIOBO—So in terms of community type activities, you are not aware of anything—they are just proposals at this stage?

Mr Needham—There are certainly things that have been put in place. I do not have the specifics of them, I am afraid, but I know they are a combination of commercial activities and some partially funded activities as well.

Mr CIOBO—Would you see a model where, if you had major industry, you could get communities piggybacking on the service that is provided as part of that?

Mr Needham—Very much so. Again, I tend towards the commercial model—that is, rural and regional people would really like to pay for quality services, and there are enough of them out there who are prepared to pay for a commercial service to be delivered, so I err on the side of that particular approach. But, as mentioned before, where there are obvious circumstances, where the minimum standards are not part of someone's business case, then it is a government responsibility—and I would suggest all three tiers of government—to ensure that those minimum service standards are provided, by whatever method.

CHAIR—Thank you very much, Mr Needham, for coming along. I think you are the last witness in the public hearings.

Mr Needham—I look forward to the report.

CHAIR—Yes. I am glad we got to hear from the NFF before we finished up.

Resolved (on motion by **Mr Sercombe**):

That, except for the in-camera evidence taken from the first group of witnesses, the committee authorises the publication of the evidence given before it at the hearings this day, including publication on the electronic parliamentary database of the proof transcript.

Committee adjourned at 10.36 a.m.