

REPORT OF PROCEEDINGS BEFORE

STANDING COMMITTEE ON BROADBAND IN RURAL AND REGIONAL COMMUNITIES

INQUIRY INTO

At Sydney on Monday, 19 April 2010

The Committee met at 10 a.m.

PRESENT

Ms S. K. Hornery (Chair)

Mr P. E. Besseling
Mr A. J. Constance
Mr D. R. Harris
Mr G. F. Martin
Mr G. K. Provest
Mr A. P. Stewart

Transcript prepared by Pacific Solutions

PETER DAVID CAMERON ADAMS, Adjunct Researcher, Centre For Research in Complex Systems, Charles Sturt University, 27 Flinders Street, Wagga Wagga 2650 New South Wales, sworn and examined:

CHAIR: I am advised that you have been issued with the Committee's terms of reference?

Mr ADAMS: That is correct.

CHAIR: Would you state your occupation?

Mr ADAMS: I run my own company. I am a company director of an organisation called abmg Advisory and I do research with the university. I started my own company about a year ago. Before that I was an academic with Charles Sturt for seven years. That is mainly why I was invited to appear today, based on the research that I am still continuing with the university.

CHAIR: I need to draw your attention to the fact that your evidence is given under parliamentary privilege and you are generally protected from legal or administrative action that might otherwise result in relation to the information that you provide. I need also point out that any evidence that is deliberately misleading of the Committee may constitute a contempt of Parliament and an offence under the Parliamentary Evidence Act 1901.

Would you like to make a brief opening statement before we proceed to questions?

Mr ADAMS: Yes, thank you. Thank you for asking me here today to have a chat about broadband in rural and regional areas. It is actually a topic I have been passionate about for a long time now and it is nice to know that somebody was actually reading all those papers that go out there. I was not one hundred percent sure what it was that you wanted to do today, so the presentation that you have got the slides of is really just me trying to get my thoughts in order about maybe some of the key points. I am more than happy for you to ask me my opinion on anything to do with broadband in rural and regional areas. I will leave it up to you as to how you would like to proceed, whether you want me to run through the slides quickly or whether you want to have a discussion first.

CHAIR: We will have the slides first, if we may, and the presentation and then we will ask some questions.

Mr ADAMS: No worries. Just to give you some background, because I do not believe you have probably been given any background on what I do, I have had a pretty varied career over the last 20 years, mainly involved in telecommunications in one form or another. I was the IT manager for Kendall Airlines before Ansett collapsed, for example. So I have done a lot of work in lots of rural and regional areas around Australia, because we were the biggest regional airline in Australia before Ansett collapse. I worked as a research academic for Charles Sturt University for seven years after the Ansett collapse and about a year ago I set up my own advisory company to advise small to medium businesses on how to best use technology and the media, internet marketing and those sorts of things, but I still maintain my link to the university through the research centre, and I am writing up a PhD in household technology adoption, specifically looking at why households adopt broadband. That is actually the research that I have been working on for the last seven years now, hence my interest in this topic.

The little presentation that you have got, I thought I would take you through maybe the big picture as I see it, focussing on ultimately what New South Wales can do as a State and what we can use it for, as opposed to I think what is the other part of this inquiry, which is about people not having access. I am not going to talk too much about the access issues, because I believe that is a different strand of inquiry, so I will steer clear of those.

The first slide, which has lots of nice lines on it, I put in just to show you that in OECD countries over the last twelve years communications, health and education have had proportionately the fastest increase in household expenditure. So the terms of reference for this Committee were quite interesting, the fact that you have identified health, education and justice as three key areas for broadband. Household expenditure in all OECD countries has seen a proportional increase. Of course, that is not real dollar terms. What that is saying is that the amount of money that households are

spending on communication, the amount of money that they are spending on health and the amount of money they are spending on education over the last 12 years has seen the largest proportional increase. I just put that in for your interest to reinforce the fact that your terms of reference are right on the money as far as why broadband is important.

Mr BESSELING: That first slide it is not really clear. We do not have the colours. Just the top three.

Mr ADAMS: The top one is communications, the second one is health and the dotted line is education. Your secretariat does have the slides in colour, so they would be able to provide you with the colour printout if you need it. One, two, three are communications, health and education.

It is probably important to realise when households or small business or anyone else are looking at taking up any sort of innovation, and in this case we are talking of broadband, it might not appear to people that it is something innovative. To have internet faster you might not think is innovative or a mobile phone might not appear innovative, but an innovation in a theoretical sense, if it is new to someone it is an innovation. Just to give you two classic examples of that, there was an attempt to educate Peruvian villagers to boil water so it would kill germs in the water and they would not get dysentery and die. That was an innovation in their village, the idea that you would boil water to kill bugs, because they had not done it before. What actually happened was, because of cultural reasons to do with hot and cold food it was not adopted, so it was a health issue that did not work. None of us here would think boiling water is an innovation to kill bugs, but innovation broadly is relative to the people. Some of the things I will talk about later on to do with indigenous communities and pensioners, for example, broadband to them is a big innovation because currently they do not use it. Another quick example is that it was known for 120 years that lime juice would prevent scurvy in the British navy before it actually got implemented. That is just astounding.

I am trying to put it in the context that innovations do not sell themselves. Part of what we can do as a State is to help the process of selling the roll-out of innovation. One view of how people think about innovation is this innovation decision process, which is promoted by a gentleman by the name Everett Rogers, who is quite well known in the diffusion area because he has published five books called *Diffusion of Innovations*. The key part is that knowledge is the first step. People need to be given the knowledge before they move in the persuasion phase, before they make the decision. So the dissemination of knowledge is a critical starting point in people taking up any sort of innovation, particularly those who are not aware of what the benefits may be. That does not matter whether we are talking about individuals, households or other sorts of adopting units, like businesses.

Moving to the next slide, one of the other key things that I wanted to communicate today is that it is not the perception of the object itself that is important; it is actually the perception of what you are going to use it for. When we think of broadband, we probably think of cables and towers and all those sorts of things, but the reason that households and businesses and other sorts of adopting units take up innovations is because of what they think they are going to do with it. It is their perception of how it is going to be useful to them. Some other research done by a gentlemen by the name of Moore and Benbasat has given us this idea that it is not the potential adopter's perceptions of the innovation, but rather their perceptions of using the innovation that is the key to whether it takes off. There are lots of good ideas, but if people do not have in their mind what they might use it for, it will sit there and might be a six lane highway between here and Wagga Wagga and no-one is ever going to drive on it because they have not thought about how they are going to use it. I guess in the political context, nobody is going to support expenditure if they cannot see some potential for it being used.

The next slide is titled "What Drives Adoption in Australian Households". This actually comes from my research. Of all the factors that I looked at, these four things were the top four that turned out to be statistically significant, in that order. The reasons that households thought they might adopt a higher speed broadband connection in the future: the main issue was not in fact cost; it was how they thought it was going to help with their lifestyle and be compatible with their lifestyle. That is looking at areas like how it might help their family, what it might do for their career and whether they might use it for entertainment purposes. That was the most significant predictor or influence on deciding whether households might adopt in the future. As you would expect, the perception of the cost was also important to them. Cost is a relative thing. How one person perceives \$50 a month is different from how someone else perceives \$50 a month. So it is the perception of cost relative to their base income.

Innovations of all sorts are a very social process, so we do a lot things whether it is in an individual sense, a household sense or a business sense, because people in our communities, our friends, our families, our professional networks. The influence of those key communicators is also important. The complexity of actually making a purchase decision is a barrier to adoption. I do not know if any of you find that if you try and buy a mobile phone or pay TV, even for people like me who think they know a little bit about this, it is just confusing. It is the complexity of making that purchase decision.

A lot of the statistical analysis of the demographic data from my research and others shows that the people most likely to gain the biggest social benefit from broadband, people like pensioners, indigenous communities and single person households, are the ones who are least likely to have it. So when we talk about a broad percentage of 60 or 70 percentage of households having broadband, there is a huge difference between say a single person household and pensioners, who might have a very low percentage, up to families of five or more. So there is a direct correlation between the number of people in your household and whether you have got broadband or not. That is because families think the kids need it for education.

There is another gentleman by the name of Peter Radoll from the Australian National University, who has done some really good research on indigenous take-up. It shows that the indigenous population in New South Wales, and Australia for that matter, has a much lower adoption of broadband generally, but the more remote the indigenous family, it is even lower again. Even within the indigenous community, even though it is lower across the board, the further you move away from the city the worse they are off.

Why is all this important? If pensioners and indigenous communities and other sectors of our society who do not have access, do not physically have access in their households for example, there is no incentive for small business or anyone else to offer innovative services, because if I was a small business operator, why am I going to develop an in-home monitoring system for pensioners to monitor their diabetes, for example, when I clearly know they do not have it. From an access point of view, so crossing back to the access issue, physical access is important for those in low socio-economic groups, because if they do not have it, no-one is ever going to develop applications which can make use of it.

The next slide is titled Utilisation of Broadband, not that Donald Rumsfeld has actually got anything to do with my research. I just love that quote about known unknowns and unknown knowns. I just thought you would want to read that again. You can never read that too often. The underlying message in all of that is that if people do not know anything about broadband, do not know what they are going to use it for, of course they do not know what the benefits are going to be. Nobody is going to utilise something that they perceive gaining no benefit from. Just a few examples in the areas that I have worked in: How do school teachers know how to utilise the new smart boards and the laptops in every classroom? The teachers who were trained anywhere up to last year, who graduated this week, what do they know about teaching with these technologies? So who is it that is going to train the teachers to actually teach with the technology? It is a whole pedagogical change in the way you deliver education. How is an organic farmer who grows produce in western New South Wales going to know how to sell it online? That is not what they do for a living.

Once again, indigenous communities, a lot of the social infrastructure of indigenous communities - and I do some pro bono work with some guys who are trying to help Walgett out at the moment - how do you create that sense of place and sense of culture using on-line means when nobody knows anything about the technology? And why does a pensioner think broadband is going to improve their life? It has had nothing to do with their life, so they would not see the connection between monitoring their health in home and being able to stay out of hospital for a day or two or being able to go home early and having a broadband connection in their house. This all comes down to the political aspect. If people do not see the perception, they are not going to vote for the ideas and hence we are not going to put any money into it.

That was a long way of getting to the main point of what I wanted to say today. I was thinking before I came, because of course, as you know better than me, communication is a Commonwealth initiative, not a State initiative, so what is it that we can do as New South Wales? What we can do is focus on how we are going to use broadband and we can focus on funding the development of

innovation. If we funded the development of innovation, then small business will go out there and innovate and create what they call disruptive technologies. For example, in Wagga where I live there is a guy by the name of Damian Candusso and he is a sound engineer. He has worked on films like *Australia* and *Happy Feet*, which I am sure you have all heard of. He lives in Wagga. Where he lives, the best he can get is 1.5Mb downloads and 512k uploads. That works if he is doing some small little sound files - he needs to send things back to the studio - but he still uses fast post bags to get the big stuff back and forth. The reality is with better broadband access he could live literally anywhere. He could live on the south coast, he could live at the back of Bourke and do his job. So innovation happens when people have the infrastructure to do it and people are trying to do it now.

Just some statistics, and these are national statistics, I do not know the State statistics, but small business provides 50 per cent of private sector employment and 68 percent of those small businesses are either run or based from homes. When people say why should we run fibre in every home, the reality is most small businesses are either based at homes or run out of homes. It may be a plumber who stores all his gear and goes out on the job every day. It is not just households we are talking about. A lot of people run their small business from home. As I said earlier, if low socio-economic groups do not have the access, then nobody is going to develop solutions for them.

The politics of selling are that it costs money and there is always the economic rationalists' argument of why would we put money into things, but I think we need to look at the big picture about the economic benefits to New South Wales. Having universal broadband access will mean that small business will innovate and create those in-home monitoring things for health care. I do not know if any of you are involved in the hospital system, I am certainly not, but a hospital bed I think costs somewhere around \$500 a day or \$600 a day. That is free broadband access for a pensioner for a year. So if we could get that pensioner out of hospital a day quicker or stop going them from going into hospital for a day, essentially the system as a whole saves. It is a much harder argument to run than the direct connection, but the reality is we can assist them overall, it is not actually going to cost us money, and of course the increase in economic activity from all those small businesses innovating if we roll it out, you would hope that there would be more taxes coming to the State coffers, so increased economic activity should pay for it.

On the next slide, the first point, create a broadband innovations partnership, once again, when I was thinking about what we could do as a State, if we created a program, with whatever name, I just called it the broadband innovations partnership program, and we fund it in a similar way to the co-operative research centres, which you may be aware of, which are a big partnership, but at a lower level, I think innovation happens from small businesses who can see a need and they would be willing to share the risk, but I think the State through Industry & Investment or somewhere needs to share the risk with them, but base it on that CRC model where the small business will say, well, we will get 50 per cent of our labour for free, but they might need some funding for the equipment to create the innovation. The CRC model is a good one. It has that medium term view. Once again, funding is pretty much tied to the political cycle these days, so nobody funds anything for more than three years and innovation does not happen in such a short period of time.

There is a gentleman by the name of Clayton Christensen, who is quite well known, who published a book called *The Innovator's Dilemma*, which was pretty big in the business circle, but he talks about this idea of disruptive innovations and sustaining innovations. Big organisations create sustaining innovations; they listen to their customers; they improve; and we have that standard trajectory; but if we want real innovation to happen, it has to be somebody from outside the market or an entrant coming in. The reality is a lot of time those entrants actually jump out of the big organisations and go off and create. In the IT industry the history of that has repeated itself over and over. The same thing happened in the excavation industry, for example, over the years going from steam powered excavators to petrol powered to hydraulic.

In Wagga only last week we had the State Minister for Regional Development down, talking about how we create jobs in regional areas. A lot of the feed back from the floor came back to the same thing about this idea of flexibility in funding. If you want innovation, you cannot prescribe innovation, you need to create the framework and give people the opportunity, but innovation is innovation, so the flexibility and the funding is something that came back on lots of levels, because an entrepreneur is not going to come and publicly give their idea out because they would be worried that the big guys would steal it off them.

On the next slide, what can New South Wales do, of course the terms of reference of this Committee are education, health and justice, so I thought I would create a couple of dot points around those areas. As already alluded to, Charles Sturt University at the moment is working on how to train teachers with new technologies. I think they have invested \$3 million plus in terms of funding to do that. That is the sort of thing that we need, people saying, Okay, how are we going to utilise the technology, it is fine to roll out the network to schools and their smart boards and give every kid a laptop, but if teachers do not know how to teach to it, the investment would be wasted. I actually do some work through my business with the TAFE system and out of the Riverina Institute they have got a model called Pathways to Business. That is all about taking people who have got these innovative ideas and helping them on the path. Once again, they are good at whatever they do, they are good at growing organic vegetables, but they do not know anything about how to sell it on line or run a business. There is a gentleman by the name of Ernesto Sirolli who gets around and promotes a lot of these ideas on how to capture the passion essentially of people, and that is something that the Riverina Institute of TAFE is doing.

On the health side of things, the in home care for an ageing population is a relatively obvious one that gets rolled out quite regularly. Another area of innovation is electronic medical records. There is a huge benefit. If I turn up to hospital unconscious now, they do not know anything about me. The medical system just about entirely relies on self reporting, and even articulate people have trouble self reporting their own medical health. And, of course, indigenous health, it goes without saying it is a huge area of need for our community.

I have not done a lot of work in the justice area. As I said, I am doing some work with some guys trying to get some cultural and environmental restoration going in Walgett, just helping them out once again with some ideas, but I think there is a lot of opportunity to give indigenous communities that ability to create that sense of place through on line means.

I guess the most important, given that you are all politicians, in the last slide is how do we sell it politically. I have spent a lot of time, because I have always lived and worked in regional areas and the businesses and organisations that I have worked for are based in regional areas, thinking about how is it we can sell to the people who have got the votes, and I think the way we can do it is we have to convince the people in the cities that strong regions will make their lives better, because they have got the votes basically. If we can sell that idea that ultimately there will be reduced congestion, your housing prices will not go up as quickly if we have strong regional areas because people want to live in the regions, and of course once we talk about something like broadband, we cannot put an international airport, a rail head, gas fired plants in every regional and rural town, but we can put broadband, fibre based broadband in every regional and rural town, so that there is a quality of access whether I am sitting here or whether I am sitting in Port Stephens or whether I am sitting Wagga or anywhere else. So broadband is something that we can do to make a difference, and of course once we do that, we are not limited by geography or time anywhere in the State. The reality is that people who live in the city have the same benefits as those people who are living in Walgett.

Everyone in the State will benefit, because if the State is making more money, then hopefully there is more money to spend on all sorts of services. Luckily I am under the parliamentary privilege so I can bag out the other States that call themselves the smart States. New South Wales I think can be the smart State by focussing on how we are going to use broadband. If we focus on the use of broadband and what can be done with it, that will make us the smart State, because there are plenty of people out there who have ideas, they just need the opportunity to put them into practice, and the role of governments, whether it is local, State or Federal, really is to provide infrastructure and the opportunity and let the market take care of the rest of it.

I know you have been in your previous inquiries out to regional areas, but I would invite you to come and have a sitting in my area. I am more than happy to organise that. With the university and the local council we can put on all the facilities that you need. I organised a conference a number of years ago called The Future of Regional Telecommunications. So we can do that and I would be more than happy for you to come out and I would help you as much as I can. Thank you for your time and I am happy to take any questions.

CHAIR: Thank you, Peter. That was really interesting. We only have about five minutes for

questions but I will open it up to the Committee to ask questions.

Mr MARTIN: In the paper that you gave us you are talking about the fact that little has been done by governments to understand how people react who are going to want to use it. So you are really saying that we make a huge investment like the National Broadband Network of umpteen billions of dollars, but really the market research has not been done to see what sort of take up there has been. Is it as simple as that?

Mr ADAMS: Whether there is the market research or not, you are asking people to have a perception about something that they do not know anything about. You have to almost back the fact that it is infrastructure. It is like the Snowy Mountain scheme. We are putting in infrastructure. What we have not done - everyone is focussed on the supply side; we need to focus on the demand side and create a demand and the way we create demand is paralleled through education about what it can be used for. Every small business in New South Wales could benefit from using the internet; they just do not know how to. A small business is rarely going to come to my business and ask me to look at what they can do, because they cannot afford to. What we can do from places like Industry & Investment is fund an education program and people like me could run seminars where you educate a room, but then we also go to the populace and say what ideas have you got and fund the development of innovations through those small businesses.

Mr BESSELING: You talk about what drives adoption in Australian households. What opportunities for adoption do you see, particularly given that you spoke about the target areas of pensioners and of indigenous communities benefiting mostly from getting broadband and the access to it? How would you see that take-up being driven?

Mr ADAMS: I think we have to recognise that low socio-economic groups do not make a priority with spending, for obvious reasons, they do not have the resources, but it is where the system and the State as a whole can benefit most. Law, education and health are presumably the three biggest expenses of the State and everywhere else. My argument would be that the State as a whole would be better off giving every pensioner free broadband access, and, sticking with health, if there were innovations developed for in-home health monitoring, if we could keep every person out of hospital for one day, you have paid for it, and hopefully it is not just one day, hopefully keeping them in their home for a week or a month, and that way the system benefits. Indigenous populations, pensioners, the ageing population, we cannot just rely on it being rolled out to the middle-class and small businesses that have an economic reason to do it. We need to have ubiquitous access because then the innovations will be developed for those areas if there is a role for the State to play in making sure that we do have broad based access and from that hopefully business will then innovate and create the solutions, whether they sell those solutions back to the State. The health system clearly is not working according to people in a different level of government.

Mr PROVEST: Where you refer to your broadband innovation partnerships, on this Committee continually when we go out to rural areas we get told by the major players it is uneconomical to supply services. Then we also have a raft of smaller ones saying if we had a bit more funds we could supply the markets that you fellows do not want. How do you see it all coming together with big players, small players, particularly in regional New South Wales?

Mr ADAMS: You would probably be aware of the back haul arrangements that have already started with the National Broadband Network. The key is once the fibre goes out, even their mobile phone towers, the key to any telecommunication solution in fibre is this idea of back haul, and if we can run the back haul through the National Broadband Network, then from there the smaller players can - it is always the smaller players who can figure out how to make money out of a diverse market, going back to Clayton Christensen's *disruptive innovations*, because a company the size of Optus or Telstra or any of those other big players, they just have too many overheads and they cannot change and adapt. The way that we can do it is making sure that we have the back haul to every regional and rural town in Australia and then let the small players come in, whether that is through partnerships.

Mr PROVEST: Is that not going to over-regulate the market? I am trying to hone down to the government's role in that.

Mr ADAMS: I guess the government's role is by providing the back haul. So Peter Adams

Telecommunications could not afford to run back haul from Walgett to Sydney, but through the NBN we could because we would hang a lot of people off. If it is the government's role to provide that service, and I realise that is a Federal not a State Government responsibility, once we get to a smaller centre, then the smaller organisations can fund it from their end. The role of government is I guess to provide the core infrastructure, a bit like the Hume Highway, and then allow people to run their own driveways or paths.

Mr PROVEST: There has been talk in our Committee about the Soul network going into public things now, like schools hospitals and that, and for example a school shuts down at three or four in the afternoon, whether there would be a role there to open up that network after that time for the general population.

Mr ADAMS: The physical access from a regulatory point of view is not my area of expertise, but one of the great things, the reason that fibre is so important is you can fit so many fibres in the same physical pit. What a lot of people do not understand is that once the fibre is in the ground, as generations of technology improve, you can actually make that fibre more useful by just plugging smarter devices in each end of it. It is not a like a water pipe where you can only get so much water through your hose and that is all you will ever get. Once you put fibre in the ground, as generations of technology improve, you just change the bits you plug into each end and all of a sudden that same bit of fibre can carry twice the capacity.

Mr HARRIS: You are talking about how you get people to take up adoption. Do you see any role for libraries or council chambers where they actually set up models that demonstrate how the technologies can be used so that people can go along and have a look? For example, we went to Queanbeyan to the Country Energy thing, and there is also the Telstra experience centre where you can walk in and see it in operation. It is all right telling people, but until they can actually see how you can use it, that gives them the impetus to go out and experiment.

Mr ADAMS: And the ability to try something is another one of the key drivers. According to Everett Rogers, if we can try something we are more likely to adopt it. Sometimes it is a little bit hard to try something in your home, but certainly, any forward facing community communication, depending on who we are talking about - if it is medicos, it might be the general practice networks; if it is small communities, it might be the local council or libraries. Any of those places are where the community can go and experience it. That will drive adoption, but, once again, if they cannot afford it, they are not going to do it. The libraries that I have seen are doing a pretty good job now of providing access in their communities, but the extension is once we get it in homes, then we can drive these other innovations. We are putting a lot of money into the digital education revolution; we are putting a lot of money into health. If we want to get those things utilised, we really need it in homes where people can use it in the household and we can benefit collectively.

CHAIR: I strongly support what you said about Walgett, because that was my first permanent teaching job and I know how poor and isolated the town is. Despite the fact that I grew up in a commission house, I was astounded to see, when I went out to visit one of my mates on an Aboriginal reserve, how primitive the resources were there. So if we can help towns like Walgett, I think that we are doing a good job.

Just one final point: I am not going to interpret how to say the experiment because it is a bit like trying to interpret how to say the Icelandic volcano--

Mr ADAMS: Kenniswijk.

CHAIR: Yes. Could you tell us a little bit about that please?

Mr ADAMS: Yes. Probably the best work being done in Australia is by a gentleman by the name of Professor Trevor Barr from Swinburne. He has looked at a number of countries, Canada and the Netherlands amongst them. In Kenniswijk they took the local ownership. They went to locals and said we will give you free fibre access for - I cannot remember the period now - for three years or whatever it was, and essentially in a co-operative sense you will own it and, by the way, what do you want to do with it. What they found, a bit like my findings as far as lifestyle being the key driver, were not things that the telecommunication companies had thought of. Some of the most popular sites were

people being able to video the kids' soccer and then the soccer community could watch the kids' game or the grandparents could watch it on line. So Kenniswijk was all about organisations engaging with the end users about what they might want to use it for and backing experiments.

I cannot remember the exact figures that are in that paper, but they had a number of proposals, for example maybe a thousand proposals, and a bit like the innovation I was talking about earlier, they financially backed, filtered through and backed a couple of hundred of those. Of course that drove adoption because people had a use for it. It was being used for areas that they could see and the organisations had the financial support to develop those innovations.

CHAIR: It is a very interesting report and it has given the Committee lots of things to think about. So thank you for your good work and thank you for spending the time with us this morning.

Mr ADAMS: Thank you for inviting me, and if there is anything I can do to help if the secretariat contacts me I will do whatever I can.

(The witness withdrew)

DAVID PETER ANTHONY, Communications Planning and Development, Regional Development Australia Southern Inland, Currajuggle Creek, via Braidwood NSW 2622, affirmed and examined:

CHAIR: Would you State your occupation and in what capacity you are appearing before this Committee?

Mr ANTHONY: I am employed both as a strategic planner for local government and I am also a consultant for Regional Development Australia Southern Inland and I have done a lot of work in the broadband area for them.

CHAIR: Your evidence is given under parliamentary privilege and you are generally protected from legal or administrative action that might otherwise result in relation to the information you provide. I should also point out that any deliberative misleading of the Committee may constitute a contempt of the Parliament and an offence under the Parliamentary Evidence Act 1901.

Before we open it up to the group, I would wonder if you would like to make a statement about what you would like to talk to us about today?

Mr ANTHONY: I have been involved in broadband and telecommunications, especially for rural and remote areas, for something like 18 years now, working variously as an academic and as a consultant and have written a number of papers. For the last three years I have been working in south eastern New South Wales. I have probably undertaken up to 60 community consultations in small communities, looking at the whole gamut of their communication needs, including broadband, it is just one of them. So I have a fairly good understanding of what the situation is, what their characteristics are as users, what the problems are as far as infrastructure and also some of the regulatory constraints that perhaps are impeding their access to the technology. Anything to do with broadband in rural and remote areas in the south east of New South Wales I feel fairly confident to speak about. I am quite happy to answer any questions in that regard.

Before working in this area, south eastern New South Wales, I worked in western Queensland from Charleville to Birdsville, Mount Isa to the gulf country, and I put out a lot of infrastructure and community development programs around information technologies in that area as well. That is a different sort of remote to down here but it is still pretty remote down here.

CHAIR: We would like to have a general discussion about what your findings have resulted in and then we will ask some questions.

Mr ANTHONY: Sure. I do not know if you have read this report. I tendered two reports. One was quite a detailed one with lots of different findings. I probably will not go through all of those today.

There is a very simple idea that has come out of all of this work. Through all my experience of rural and remote telecommunications, it is the same idea that seems to persist. That is that one of the basic infrastructure problems for a certain demographic out there is that they will never get metropolitan equivalent access. They are the people outside of ADSL enabled exchanges, outside those small towns that have the exchanges enabled. They will not get NBN, they will not get anything and they never have. It has always been the touchstone of government policy to some extent, that we must look after rural and remote communities, but rural sort of ends at regional centres and big towns up to 2000, unless they have got some savvy to get their exchange to uptake it. This particular group of people, who are outside the limit of ADSL 1 and 2, whether we have amplifiers in the ground or whatever, that group of people continually miss out, all the time, and they still will, I think, under NBN unless something is done.

The solution to that problem I think is quite easy, and remarkably cheap. It is just provide towers for them. It is all they really need, just towers. We have mapped out all the strategic locations of those towers. It would be a very cheap option. There is no business case out there to provide these sorts of communications to these people. For the last ten years people have laboured and laboured to say where is the business case and we will work out how we can get telecommunications to these people. There is none; it is just not there. The population densities are not high enough to be able to support

that.

That is not to say that it is not economic to provide these towers and to provide these services. There is no business case if you look at Telstra's rate of return model. They usually say we have to have this much custom here, we have to have this much annual return on it. None of these communities will ever fit that. Before Telstra was doing networks in the nation, there was the NTN program, where the government would come in and bump it up so they would get the business case over the line. I have negotiated and found mystery shearers to get population numbers up in small communities and all sorts of things. Really it is quite a cheap option. It is about \$50,000 to put a tower in. If you look at the total communication needs of that community, it is not just broadband or mobile or digital television or digital radio, but the whole lot, the economies of scale of wrapping all of those services that that community needs to be part of modern New South Wales, with all that government service delivery and health and applications.

I will digress for a bit. My first job was with Broadband Services Expert Group in 1994 doing health, tele-medicine, electronic records. The applications are always there. It is just the means of delivering them to rural and remote communities that is not there.

You could build a community tower. It could be run by the local council. They have experience in doing this with television retransmission; they also have UHF and microwave towers that they have been running for years and years and years. Also, they know how to manage those towers to gain section 355 committees, and they are all quite happy to do it, especially given that they have got the digital television changeover at the moment and they are looking to provide those services to their ratepayers. They used to do television retransmission services for their communities. This is just an extension of that. It is pretty much the same thing. So institutionally there is a background for it. It is nothing new. It is just a different sort of suite of communication goods coming off it.

The back haul for regional and remote areas, because they are rural and remote by definition, would be by microwave. The CSIRO - I think I have the figures in this paper - have done a lot of work on this, on how much it would take to provide a certain amount of adequate back haul, time spanned with times distance times population. You could do the figures on that and it is not too bad. You could do microwave back haul and you could get away with it because the population density is not too high. The contention rates on the actual infrastructure rule out an adequate service. Even though you are not getting the higher premium band width that you would perhaps with fibre or cable, you would still be able to provide those high band width services because your contention rates would be a lot less.

It is all do-able. Probably the biggest driver I would see - other than the health, education, economic development, which is something I am very interested in - is safety and that is a real concern at the moment, especially after the Victorian fires. It is okay to have all these text warning systems, but if you do not have a mobile phone, what is the point of it. These Rural Fire Service Brigades out there, their biggest problem, their biggest inefficiency is how do we contact our members and say that there is a fire over the hill? Some have pagers, but there is not enough money to give every volunteer fire fighter a pager. There is no mobile phone access. Mobile phones are a very critical device.

I think at the moment it is quite silly to differentiate between broadband, mobile phone, digital television. They are all converging. It is all the same really. I think now with the data services, Next G data services, it is a step along that line. Eventually they will all converge fully. I do not think it is an efficient way of looking at the problem to look at each different technology as a separate thing. It is really the whole total communication needs of that community. So yes, safety I think is a big driver, especially when most of the economic activity there is off farm income. Most people are commuting up to an hour, which seems to be about the average. Every small community has somebody commuting to an office job about an hour away. Very few people are getting their total income off the farm. Driving home late at night on those dirt roads, there are kangaroos and wombats. It is not a very nice thing to do and safety is a very big concern.

I will throw it open to you. There are lots of issues in there.

CHAIR: Thank you very much, David. I might open it up to questions.

Mr MARTIN: In relation to spectrum as such, do you think that with the fibre connection

being the driver, that is the best way to do it, that somewhere along the line the wireless connections have got lost in importance? We had evidence from a company based in the Bungendore area, a company called Yless4U. I am sure you know the gentlemen.

Mr ANTHONY: Yes, I know.

Mr MARTIN: He put a fairly passionate case to us, and your opening comments were along those lines, that small operators like them can really fill the void if they had a bit more assistance in terms of getting that coverage out to those more remote and less populated areas, but he saw bureaucratic obstacles and some cost implications that he did not think were warranted.

Mr ANTHONY: I have spoken to Anthony. He is advancing his own business. I am really looking at the community's needs and the cheapest most efficient ways of dealing with that. I would see a model where a local community, Numeralla for instance, could access \$50,000, put up a tower, have a microwave link back to Cooma, which by the crow flies and on the particular hills that we have selected it is only 28 kilometres away, 26 kilometres away, that then could hook into the Soul government network, which is already existing - problem solved. Then you could invite off that tower various companies, perhaps this gentleman's company, or television companies, mobile phone companies to provide a service on it. If they do not have to build the tower and provide the back haul, it is very cheap for them to provide a service. All they are doing is putting up their transformers on the top. That is all they are really doing. Everything is there for them. That would be the cheapest way to provide a service.

Where I differ with Anthony is it is again perpetuating this infrastructure monopoly model of the one service provider going in there and he is only providing broadband access really. You are going to end up with the same problem. What do you end up with? You end up with five towers there from each provider. Whereas, if you put all that money into one tower, one back haul, it would be a cheaper solution. That is where I differ to Anthony.

Mr MARTIN: I thought he was quite happy to share access on towers and such. He gave us a couple of examples where he was having trouble with - that might have been just access to sites for towers.

Mr ANTHONY: That is exactly right. There is nothing stopping someone like Anthony using that tower to provide a broadband wireless service for people in that community and it would be a very cheap option for him. He could then also use the back haul back to Cooma. It would be aggregated, so it would be cheaper again. You would not have five microwaves pointing back to Cooma; you would only have the one. It would be a lot cheaper way of doing it.

Mr BESSELING: I was interested in what you say, first of all, looking beyond the business case for these smaller and more remote communities. How do you see the New South Wales Government rolling this out? Obviously, we have got the NBN roll-out and that would be looking at providing infrastructure, but do you see the State providing towers? Do you see them aggregating all those opportunities for digital television, digital radio, mobile phones and broadband all together in the one lot? How does that co-operation work between companies who are providing the service and government?

Mr ANTHONY: The State Government has a number of assets out there. There is the Soul network for instance, the government network. That could definitely be used as a bit of a back haul solution. I have spoken to Telstra quite a bit, both in Melbourne and the local Canberra people. They would not mind this idea, because they would not go into these areas to put up a tower, there would be no distance case for it, but if they could just walk in, strap their mobile service on there and work out their own back haul, they would be happy to do that. The tower is a separate thing to the companies providing a service over it. Really, the only place where the company would negotiate would be with access to the tower, and all the rest would just be a private build done on behalf of the councils, or you could even aggregate it at a regional level to make it cheaper. That is what we did in Queensland. We put in 40 towers up there. Just did a whole big tender and got semi-trailer loads of towers shipped up from Adelaide and got a very cheap price for them and it worked a treat.

It is probably best if the State Government stays out of it and lets the market decide. You do

not want councils doing builds. Councils do not want to know about anything like that. They can build a tower and they can manage the basic access to the tower. That is all they need to do really. I think it is beyond probably their skill level and also they are so stretched at the moment. I work for local government, so I know where they are at there.

You have got a tower and basically you are just leasing a spot on the tower for each service provider. It might be Anthony Goonan's YLess4U, it might be Telstra puts a mobile phone service up there; the council itself might put in some digital television retransmission services, all on the same tower.

Mr BESSELING: So you see local government as being the optimum level of government to be providing those towers?

Mr ANTHONY: Yes, I think it is the community, each community. They have had a lot of experience doing this. If you look at not the government radio network, but the UHF network that the Rural Fire Service has got in place, which is sometimes the only communication out there and they have been maintaining towers for years, but I would say it is beyond each community to do that and probably local government can own the land, regulate the land. They are used to doing stuff like that.

In a lot situations these telecommunication companies do not own the land that they have got their towers on. They are leasing it. In fact, that is a very big constraint to provision of services, especially national parks sites.

Mr BESSELING: There could be a role for the State there in terms of leasing of the land?

Mr ANTHONY: Yes, Crown lands, national parks, and most Crown land is actually de facto managed by councils anyway. Yes, there is a relationship there of just managing the site. The build could be done, to get economies of scale, as I said, at either a regional or a State level, and also arranging access to the back haul would be a curious thing. Places like Cooma are going to get the NBN fibre. Places like Numeralla are never going to get it. If they do, it will be another 15 years, after all of that original build has been done. The regional centres and probably the same areas that have got ADSL now will be the people that get the fibre, because anywhere further it is a lot per kilometre to put the glass in the ground. So these communities are just going to continually miss out.

I heard the previous speaker talk about the political aspect of this. These communities just think that this is the most sensible thing, why did it not happened 15 years ago. They would just think that: God, the penny has finally dropped; we need communication services improved; it is the cheapest way to do it; someone has done it.

Mr PROVEST: What happened in Queensland? You said Queensland bought 40 towers or something?

Mr ANTHONY: Yes.

Mr PROVEST: What was the involvement of the Queensland Government in it?

Mr ANTHONY: State Emergency Services there controls rural fire. It is a bit of a different structure than up there. They just became a partner. They provided access to their radio technicians, to their field officers and then the rest of it was through councils.

Mr PROVEST: So the State Government in Queensland bought 40 towers?

Mr ANTHONY: The councils actually went through the NTN program to the Federal government and we got the money that way. The States contribution was in part - actually I think they did put up some money for some.

Mr PROVEST: Because we have got a community one here in New South Wales?

Mr ANTHONY: I was going to mention that.

Mr PROVEST: What do you think of that?

Mr ANTHONY: That is a fantastic idea. I have helped one of the consultants that was working on it with a couple of towns down there, Delegate and Dalgety. She came to me and said, "I have got to try and get this business case together to improve the telecommunications" - no business case. All you are really doing, it is not a business case, it is a social inclusion case.

Mr PROVEST: So if you rolled that out further, that could be a way to go in your mind?

Mr ANTHONY: That is perfect.

Mr PROVEST: You have got the structure there already, but a little bit less on the business case, more on the social inclusion case.

Mr ANTHONY: Yes. I think that that is a great model, what Fran has done, I think that is great. I discuss that in my report, that particular program. It is a great program.

Mr PROVEST: But it could go a lot further?

Mr ANTHONY: Yes. I think under the circumstances it was wonderful that it even got a show and it demonstrated what is possible. They are looking at two towers in the south east, and that area runs from south of Bathurst to the Victorian border, probably as west as Adelong, Tumbarumba, Gundagai, Young and all the coast. I would see in that area probably a need for 40 towers all up, that is the whole area. That program only managed to look at trying to construct a business case for two towers. There is a need there for about 40. I think 40 at \$50,000 or \$60,000 and you would have a lot of very happy people in rural and remote South East New South Wales.

Mr PROVEST: There needs to be more work done though. I know up my way, northern New South Wales, every time someone comes along and wants to put a tower somewhere, there is always a great deal of discussion in the local community. You cannot put them in national parks and Crown land and no-one wants it next door to them, but everyone complains that there is no service.

Mr ANTHONY: Yes.

Mr PROVEST: It is such a nightmare.

Mr ANTHONY: It is and it is not. I think what is really good about having a community approach to it, and this is one reason that I said before when we are talking about the councils, if it is community owned and they are part of that process, they will work out the location. In all the towns that I have mentioned in here, the RFS guys went out in their trucks, GPS'd locations and said this is where we have got towers, this is where we can get coverage, these are our black spots, the whole community is on board.

Around Bungendore we have got a problem at the moment, rural residential fringe to Canberra, two mobile phone towers there, a lot of heated debate in the local council, as they are in the middle of rural residential lifestyle areas. I think it depends on the population density and the real need. A lot of these communities I have been referring to, there would be no problem whatsoever with them. There would be a couple where you would say yes, there is going to be a problem, but then it is solving a community need. So that is something for the community to say do we want digital television, and if we want that we need a tower on the hill, whereas I think when you are looking at competing telephony companies putting multiple towers on prominent landmarks in high population areas, obviously there is a loss of amenity or perceived loss of amenity by those people. It is horses for courses maybe. I do not know.

Mr MARTIN: You mentioned Bungendore. We actually visited there in the middle of the debate about the tower. Has it been resolved yet?

Mr ANTHONY: It has gone ahead. The one in the town or the one in Carwoola?

Mr MARTIN: Yes, the one in the town.

Mr ANTHONY: Yes, it is up, it is going. It is a hard thing there. You have got people that make a choice to live out of Canberra for that rural amenity.

Mr MARTIN: It is not a big city.

Mr ANTHONY: Yes.

(The witness withdrew)

(Morning tea adjournment)

MICHAEL CULLEN, Executive Director, Enterprise, Small Business and Regional Development, Department of Industry and Development, sworn and examined:

CHAIR: You have you have been issued with a copy of the Committee's terms of reference?

Mr CULLEN: Yes.

CHAIR: Would you state your occupation and in what capacity you appear?

Mr CULLEN: I am the senior person within Industry and Investment New South Wales that is responsible for managing the delivery of the Government's regional business and small business programs across the State.

CHAIR: I will just let you know that your evidence is given under parliamentary privilege and you are generally protected from legal or administrative action that might otherwise result in relation to the information you provide. I also point out that any deliberative misleading of the Committee may constitute a contempt of the Parliament and in effect an offence under the Parliamentary Evidence Act 1901.

Before we get started, would you like to give us a brief statement or overview?

Mr CULLEN: Thanks, Chair. Industry and Investment NSW small business and regional programs are very much about helping small businesses, and larger businesses for that matter, grow their operations right across the State. The particular focus that the area my part looks after is the small business end, and there are 650,000 small businesses, but then on top of that the geographic spread. We have 19 offices across the State to essentially help small businesses try to progress growth.

It might be better, Chair, to ask particular questions. Some of the things I would like to touch on, if it is helpful to the Committee, are our small business web site and our Small Business September events, because I think they are relevant in terms of getting the message out about how you use broadband to improve your business, but also I think the relationship with the Commonwealth Government and their new Small Business On Line program is important. Rather than me go ahead and talk about those, it would probably be better if you ask questions and I can cover those in the responses to the questions.

CHAIR: Let's start with opening it up to questions then.

Mr MARTIN: Our first witness was Peter Adams. You are probably aware of Peter. His argument or case to the Committee was that if people out there do not understand it, they will not use it, and looking not so much only at business but right down the ladder to people such as pensioners who might be able to, from a health point of view, get advantages from it. Through our Governments Building the Country program there is a communications fund for regional areas that you would be aware of.

Mr CULLEN: Yes.

Mr MARTIN: We have also heard evidence today that we could be more pro-active in the roll-out of that. Could you give us an update on how that fund is going, what is its penetration to date and how much is left out of the original \$11 million?

Mr CULLEN: Sure. The program is actually operated by the Office of Rural Affairs. In terms of the precise details it would be best to talk to the Office of Rural Affairs about how it rolls out. However, Industry and Investment New South Wales holds that money. There is an \$85 million Building the Country package overall, of which this is a component. We expect to have the Office of Rural Affairs draw down about \$3 million this year. Like all of these programs, there is a bit of a ramp up period. The focus of it is very much about consulting with communities, so they actually own the solution, rather than just say here is the best thing for you and then find there is no take-up of it, and that has been the process that the Office of Rural Affairs has actually been going through with some

selected communities. They get some expertise in to work with them to get the right technology solution for their particular location. That is where it is at the moment.

In terms of the mechanical part of it, the expectation is that the \$3 million that has been allocated this year will be drawn down, and there is a small amount of money, around the hundreds of thousands mark, that was drawn down last year to get consulting expertise to help those communities get their cases together. That is where it stands at the moment.

The important part about this particular program is it is going to places that really will not be picked up by NBN. It is small places where there is not a business case where that is being developed.

In terms of further detail about that, it is better to hear from the Office of Rural Affairs, because they actually run the program, but obviously because it is part of the Building the Country package we have got a role with them in terms of developing the program at the front end of the process.

Mr STEWART: There has been some discussion during the previous two presentations about the application of rural and regional opportunity for businesses for broadband access. I think it is important for us to ascertain from yourself how important you think it is for rural and regional businesses to utilise the internet as a business tool in that context?

Mr CULLEN: It is actually very important point. When it comes down to it, when we deal with small business, what they are all after is building their markets, being able to grow their businesses. If they are not using the internet as a tool, if they do not have a web site that they can use as a point of presence, then eventually their business is likely to go backwards. We really think that particularly in terms of a web presence it is an important thing that basically companies are committed to. There is no point in having a program that gives everybody a web site, unless they understand what it does for them.

Just to maybe talk about some of the things that I mentioned before, the small business web site that we put in place last September during Small Business Month, the features of that are that it was actually set up in the way businesses describe themselves, which was “start” businesses, “run” businesses or “grow” businesses. In terms of the information that we provide, the really powerful part of the web site is the on-line training portal that we have developed with the University of Western Sydney, or to be fair they have developed in partnership with us, rather than us developing it. What that does is provide you with access to information 24 hours a day, because when we talk to small business they tell us three things. They tell us: We get information from our accountants, but we might only do that once a year when we get our tax returns done; we get advice from our industry associations or our chambers of commerce, but we might only do that a couple of times a year; we are time poor, so something that is available to us 24 hours a day that we can access for the information we need outside of work hours is really critical. So not only is it important for businesses to be able to market their products and have a good quality web site, but equally when they are looking for information the web is a resource for that information the web provides access to information quickly. So to me it is a really critical thing.

There are still some businesses that do not embrace the web as a resource, and some of those businesses in the short-term will continue to operate okay. If you are a corner store retail store, it is about customers and regular customers, but ultimately even those sort of businesses will need to have a web presence that allows them to grow. So from a marketing point of view, which is a critical thing for any small business, but also from an information point of view, the web is a really important resource.

Just to diverge a little bit, during Small Business September we had a speaker called [Iggy Pintado]. Basically his theme, and it was a very popular one that was taken up, was about how you use social networking to draw business. I would have to say when some of us hard-heads went in there we thought how is this going to be relevant, but basically his message was that you can actually draw business through Twitter, through Linked In and through Facebook, if you think about it and you spend the time in following up your customers, the same as anything else you do. The feedback on that was really strong. We will run some of those types of themes again during Small Business September this year, because it is a popular area of interest. Equally, what we then did on our web site was there was a webinar that people who could not come to that event were able to then pick up the information. Again,

it is being savvy about how you can access that sort of resource that is quite critical.

We also had one of the senior executives from Google from Australia New Zealand and what he was talking about is how technology affects the way you do business. One of the things they demonstrated was that with your I phone you can go into a store, bar code an item, compare the price in other stores that are around that location, so it changes the whole nature of how consumers might shop. It is not only using the web as a marketing tool; it is also realising the internet actually changes the nature of competition going forward. this was not software that was about to be designed; that was software that was already in place.

Mr PROVEST: I cannot get it to work.

Mr CULLEN: I think it works in the US pretty well, but it is really powerful in terms of comparing prices. That was, again, the reason why in terms of embracing some of these technologies is important, because if you are a business and you do not realise how that changes the way your customers think, you are going to be left behind as well.

I probably just covered a little bit there in terms of the small business web site and Small Business September. We also run something called Micro Biz Week, which will be from 31 May to 4 June. Basically that is for businesses who are home based, the home office type operation, and, again, that is a growing part of business, quite a rapidly growing part of business and that sector of the business community depends on the internet and a web presence to be able to exist and grow. There is a whole set of reasons for growth in the sector.

From the point of view of the department, of the 650,000 small businesses, we might reach 20,000-25,000 face to face during Small Business September, but if we have got a message that people are accessing through a webinar, we can reach a much bigger set of those businesses through the web. It is not only a tool for the businesses themselves; it is actually a tool for us to reach businesses with the messages and the information they need.

Mr MARTIN: What sort of access are you having to your web site?

Mr CULLEN: At the moment it is escalating, but we have about 40-45,000 hits a month. The most important part of it is that compared to our previous web site - everyone talks about having a better web site but this one, because it is interactive, genuinely is. That is the feedback from customers. What people are doing is actually spending more time on the various educational pages. For instance, if you want a marketing plan, it asks you questions and it fills out your marketing plan behind that. It just does not give you a template for it. It asks you questions which you fill in. So it is quite a powerful tool and people are staying on the web site for much longer durations.

Mr MARTIN: You were at the Federal Government's Small Business On-Line?

Mr CULLEN: Yes.

Mr MARTIN: Are there any similarities there or any links?

Mr CULLEN: It is actually a very important link that we are looking to develop there for Small Business On Line, there are about 12 providers of that service in New South Wales. About a quarter of those are service providers that we contract as Business Advisory Services. So there is a link directly to those people. What we are also doing is with Aus Industry, which is the Commonwealth area that is delivering the program, we are going to get those 12 groups together and talk about how we cross promote Small Business September, the small business web site and what they are doing, because that works for everybody to get out the message about the web as a tool for business.

Mr PROVEST: With regional development, do you assist businesses to relocate into New South Wales?

Mr CULLEN: We do.

Mr PROVEST: And do you run the tech men over and look at their requirements and say

certain areas have got broadband, others have not and labour forces? Does that information you gather then go to the department, rural affairs or back?

Mr CULLEN: To set the context, about 80 per cent of what we deal with is an existing business growing. That is the reality of what we do. About 20 percent might be establishing a new operation or relocating from somewhere else, just to give you a sense of the size of what we deal with. Generally, a business will give us some specifications around what sort of utilities they need, and in some cases clearly broadband speed is a key requirement, but equally businesses that we deal with who are looking at growing their businesses increasingly need better broadband. Whether that is gathered in a way that is probably as analytical as you are talking about, the truth is it probably is not, but anecdotally what we do with those cases is we look to resolve the problems. It might involve working with the telecommunication firm to try and resolve an issue. We had a problem, for instance, with a company that was in New England, New South Wales, where their head office would not further invest in their operation. Their headquarters was in Brisbane and the financial reporting requirements were coming through too slowly and put at risk the actual growth of that business. So lots of anecdotes. Whether it is captured in that—

Mr PROVEST: So you acted as a broker?

Mr CULLEN: We acted as a broker to try and solve that, yes. In that particular case the telecommunications firm, god bless them, were able to find a resolution to the problem. Generally, that is what we find. Sometimes it is a local issue; sometimes it is a firm issue. You need to differentiate between those. We play that sort of role.

The telecommunications requirements for the larger firms, I would not say there has been a high degree of people saying to us we do not have what we want. For some of the smaller firms in more remote locations it is more of an issue.

Mr PROVEST: When the Committee went to Griffith, there was a firm there that actually put in its own fibre optic and put in the loop, but they were in the financial position to do that.

Just one final question. There have often been reports given here of under utilisation. For example, the Soul net was going to do schools. Do you see a role for the Government to say they are under-utilising some of our existing requirements and perhaps we could tap into private enterprise or the community as a whole?

Mr CULLEN: I think there are probably a couple. The way I think about this is if one is to have a telecommunication service of a certain standard you need to have the demand aggregated in a way that makes commercial sense by and large. Secondly, what you then need is enough customers prepared to take up that service. The third bit is actually about providing people with information on how they can use the internet, the broadband to improve their business.

One of the things that we will be working on with Small Business On-Line, but also in our own right, is running some workshops for businesses about outlining the opportunities, because a lot of businesses see some value but they do not necessarily see all of these other opportunities as well. There is certainly a role in terms of education. We play some of that, but in terms of the capacity that is available locally there is certainly an ability to ramp that up. Particularly with the NBN coming on board, it becomes a really critical thing to do.

Mr HARRIS: Does Industry & Investment have any specific programs where they, say, work with the Department of Planning to identify sites for business parks or technology hubs, where there is biotechnology, that sort of thing, to encourage, particularly in regional areas, new industry to be able to congregate and use the existing infrastructure for growth?

Mr CULLEN: I would not say there is a specific strategy around it, but we are working with some of those opportunities. For instance, at the moment one of the programs we have is called the Local Infrastructure Support Fund. What that is meant to be is a program that allows a piece of infrastructure to be put in place where there is a genuine business that will not invest unless that infrastructure is in place. For instance, just outside of Port Macquarie on the Sancrox industrial estate there is a project we are working on with council about not only having the road issues sorted out but a

high level of broadband access being available so that it can deliberately target the sort of businesses that need the broadband. There is some work in terms of the Central Coast - I am not precisely across the detail - the home office type business, there was a look at whether the broadband requirement can be met there. Equally, if you look at some of the new residential estates which are branded as a Telstra broadband estate, those sorts of areas, you will notice that some of the homes in those locations are looking at an office being with those homes. I do not think there is necessarily a deliberate planning policy. There are certainly examples of things that we are working with to look to promote the opportunity.

Mr HARRIS: Do you see any future role in supporting business where you set up a situation where you put in the infrastructure to attract business in the first place, so that you actually start to socially engineer where certain companies locate? In terms of the city and the population growth forecast, it is going to struggle. Regional areas seem really well set up with work force to, as I said, socially engineer companies to maybe want to locate there. Do you see any role for a strategy like that to assist the growth of Sydney by moving people out of Sydney?

Mr CULLEN: I think most of the programs that we operate are very much looking to that sort of focus where those things are commercially attractive to go to assist that. The local infrastructure support fund is something along those lines. The differentiation we make though is that we need to have a genuine business investment on the hook to allow that to happen, as distinct from it being more speculative infrastructure built.

Certainly, with some of the other programs that we operate what we are trying to do is work with local councils. If you go back to what I said before in terms of 80 per cent of growth comes from existing firms with new investments, it is not about attracting new businesses, it is actually about growing those businesses as well. In terms of the pro-active infrastructure, where there is something real on the hook, we certainly have some tools to do that. If it is something that is putting in infrastructure without that sort of demonstrated interest, that is not something we do currently.

Mr BESSELING: With regard to business development in regional communities, what role, if any, do you play in getting government departments out into the regional areas and rural areas to drive some of these infrastructure changes as well?

Mr CULLEN: Our role is very much dealing with business. The actual relocation of government agencies is something that has generally sat with the Department of Premier and Cabinet. Things like the Lithgow police Call Centre, the Tweed Heads firearms registry, those types of things, there has not been basically a role for us to play. However, what we will often be called upon in those instances, in the same way we would work with a firm, is that if there is information they need about the local location and what skills are available, what sites are available, et cetera, we will sometimes be asked to provide some advice in relation to that.

One of the opportunities being looked at at the moment, for instance, is with some of these really large data centres, which require electricity and high order telecommunications, we have been asked by the Department of Services, Technology and Administration for some information on where those locations exist and the sorts of skilled people, but we do not have a direct role in relocating those operations.

CHAIR: I was going to ask you about small business week and what that involves.

Mr CULLEN: Small business month - I would be really happy if it was a week. It is a very intensive period of time. We hold that in September each year and we run basically over 300 events with our partner organisations, for instance, in terms of the local Business Advisory Services but we also have sponsors like Australia Post and the ANZ bank and others. We put a whole set of events together during that period. The key thing that businesses always tell us is how do we market our products better, which is why I think the whole idea of using the web and marketing using the internet has been a popular theme. We will continue to run that type of thing this year. We also think that with Small Business On-Line at the Commonwealth end, that is probably an advantage for them to run some of their events during that period too, because it all drives it to the one point of contact.

Small Business September is a really important one for us. We run events all the way through

the year, but the month allows a particular focus on small business. Last year was its tenth anniversary. Something that lasts 10 years has to be doing something right. Certainly, the feedback we get from both our sponsors and from our clients is that it hits the mark.

The challenge for us is what we were talking about before. We get maybe 25,000 people come to events, which is a good number, but there are 650,000 small businesses. So how we actually use the web and our web site to reach those 650,000 firms is a challenge that we continue to look at in terms of our reach.

Mr MARTIN: Do you develop a particular theme each year or is it just generally across the board?

Mr CULLEN: We do develop a particular theme each year. Last year, with the global financial crisis being on everyone's mind, there was a fair bit around thinking how you sustain and remain profitable, but the key things that people always ask us about are marketing, business planning, how do I get finance. Last year the connection thing was a strong one, which was why the use of social media was quite an attention grabber. Marketing will always be a very strong part of what we do but there is a new theme that we have each year.

(The witness withdrew)

MICHAEL HARDING TALBOT, Assistant Director-General Court and Tribunal Services, NSW Department of Justice and Attorney General, sworn and examined:

CHAIR: I am advised that you have been issued with a copy of the Committee's terms of reference.

Mr TALBOT: Yes.

CHAIR: I draw your attention to the fact that your evidence is given under parliamentary privilege and you are generally protected from legal or administrative action that might otherwise result in relation to the information you provide. I should also point out that any deliberative misleading of the Committee may constitute a contempt of the Parliament and an offence under the Parliamentary Evidence Act 1901.

Would you like to make a brief opening statement before we proceed?

Mr TALBOT: Thank you, Chair. I will just make some brief introductory remarks.

As you may have gathered from my mouthful of a title, I manage the courts and tribunal services in this State. They are all the major jurisdictions, the Supreme, District and local courts and the tribunals such as the ADT, the Industrial Relations Commission and so on. It is a big court network, certainly the largest jurisdiction in Australia and some aspects of the world.

We have been using technology for some time now and the elements that I would like to share with you today are what those initiatives and strategies are, and indeed where we want to take the organisation in terms of responding to community needs across a fairly large State with its population spread fairly widely.

There are three key areas that we are involved in at the moment. One is providing information to clients and members of the community who are looking to resolve a legal issue that is going on in their lives. That is not only matters where they might be involved with the police because they have been charged with some crime, but also a large number of people who are seeking the protection of the courts to enforce their rights, either small business people or families seeking protection from other members of the family that might be abusing them and so on.

There is quite a lot of research now starting to happen around what it is that people do to try and find this information and, sadly, a lot of them go to all manner of members of the community, their family, doctors seem to be high on the list. They do not get access to information they need to resolve their legal issues and our challenge is to make sure the breadth and depth of that access is available to them.

The second element of it is managing cases that do come before the courts. Our system of justice often initiates a matter in one jurisdiction but it evolves to another jurisdiction. You could be charged and the matter heard in a magistrates court, but depending on the severity of the offence, you could either be dealt with there or the District or Supreme Court. So we are introducing an electronic case management system that deals with that information across all of those jurisdictions and enables the process to operate sufficiently, especially compared with the past now that the volume of business in those courts is quite high.

Then there is the third element of it, which is conducting the court process. Our main element there is in video conferencing, particularly for those people who are classed as vulnerable witnesses, where prosecuting authorities do not wish them to confront the accused in the court itself, and for those people trying to get evidence who are in custody, so hearing a bail matter in custody while their case is being dealt with. It is those areas that we have been particularly focussing on in the last few years and which we wish to go further with.

Mr PROVEST: The acceptance of the players, from magistrates, to solicitors, to the accused people in general, what has that been like with video conferencing?

Mr TALBOT: In the early days, it was a fairly conservative response. I must say though that most of the heads of the jurisdictions, and particularly in the local court, the Chief Magistrate has now issued practice notes directing his magistrates that in most circumstances the default circumstance is that if a video conferencing facility is available they should use it.

Mr PROVEST: So they actually make the decision. If I was in Tweed Heads and something was on at Lismore, the magistrate makes the decision?

Mr TALBOT: The magistrate should case management that element of it. He or she will listen to the arguments of the legal counsel in the matter and there may be some reasonable argument for the accused to be physically present as opposed to appearing by video conferencing, but more and more of those are denied unless there are exceptional circumstances.

There were some conservative elements in the legal profession about it, only segments of it, and there were a number of articles in law journals and the like indicating that it was not really justice and that people deserved their day in court.

Mr PROVEST: If I was in Tweed Heads and my case was being heard in Lismore, does my legal representation physically have to appear in the court or can they do it by video?

Mr TALBOT: They would normally be in the court in front of the magistrate, but the accused, if they were in custody, or witnesses, would come in remotely.

Mr PROVEST: Do you ever see a day when the legal guys are doing it?

Mr TALBOT: Yes, absolutely. We have experimented with some of that, for civil matters, insurance claims and the like, where they sit in their chambers and give evidence to a magistrate via a video link and deal with preliminary matters or to deal with matters to finality in front of a magistrate or whoever the appropriate judicial officer is. Not all of those happen with a video link. Some of them just deal with the bulletin board. We have pilots going on in the District Court, Supreme Court and local court where matters are dealt with, mostly to finality, by legal practitioners arguing on civil matters. Once they are registered, they get email advice that a defence has been filed or a statement of claim has been updated, and then a judicial officer will deal with the matter. That has proved very successful and useful to the legal profession. You do not have to leave your chambers to come to the court. Our argument is that their costs are reduced.

Mr MARTIN: In recent years we have seen the cessation of a lot of passenger air services to country centres, more and more companies withdrawing those services. Has there been any investigation by your department to delivering maybe not the court services but other services by way of technology, advice as such? Is that something that you—

Mr TALBOT: Yes, if I get the gist of your question correctly, we have a Law Link site. Like a lot of early web sites, it is more about information. It is an electronic brochure. Where the development is going is that those sites will increasingly become interactive. That matches not only the circumstances that you talk about, but a lot more people want to represent themselves, particularly on smaller matters, both on the civil side of the equation and on the crime if they have been charged with something. On these sites, as we develop them to make them more interactive, you will be able to enter in your detail and that will progressively inform you as to what the circumstances are and how you are going to deal with this matter, whether you want to plead guilty or file a defence, those sorts of things.

On the Law Link site we have over 4.5 million hits a year already. So certainly in the legal area, justice area, people want to do business with the web. Now the challenge is to take it to the next step.

Mr MARTIN: Is that open to legal practitioners as well as lay people?

Mr TALBOT: Yes, and the developments as we are taking them, we are bringing better and better discipline. I am sure it will not come as a surprise to you, there are a lot of complexities that the history of the law has built in over a period of time, so what we are doing is taking new disciplines to reduce that complexity so that ordinary citizens, and particularly vulnerable people, can use this channel

to get the type of help they need.

Mr HARRIS: Just so I get the context of how it works in my head, I assume you would still have to attend a court house in order to do the video conferencing. How does it work in terms of booking, for example, between Tweed Heads and Lismore? Obviously, there would be a trial type setting in Lismore, then you would have to go to Tweed Heads and book in to be able to access at a particular time. If you have people doing it all over the place, how does that system work?

Mr TALBOT: It is not so bad in the rural areas because there is usually one area where the prisoners or people in custody are held, but in the metropolitan area you certainly do get a lot more complexity around that. We have now a video conferencing scheduling system. We schedule slots into the court for people to appear and they can appear from a number of different custodial places, including police cells. If you are the legal practitioner, you might have somebody at Silverwater, somebody at the remand centre there, somebody at Parramatta, somebody at Parklea. You could appear before the magistrate and each of your clients would in turn appear via video conferencing, because we have scheduled that in ahead of time. If you wanted to speak with your client and take instructions from them, there is a secure phone that would take you directly to that client, which closes down the video conferencing so you can have confidential discussions, and when you have completed those, again you appear back before the court and the matter is dealt with.

It moves through those things very quickly. Very often legal practitioners find it difficult going to correctional institutions, which are often at the periphery of places. They are obviously not in the residential areas of the community. This gives them access to that client in a reasonably effective way, particularly for legally aided clients, who often have their lawyer assigned to them pretty close to when they have to appear in the court. So you and the magistrate are in the court but your client would appear by the video conference.

Mr HARRIS: If you were a witness, say it was a rape case or something and the person was in Dubbo or Broken Hill, Sydney or whatever, would they still have to go to a court house with a video conferencing facility to be able to appear?

Mr TALBOT: Yes, we have suites which are either remote in the court house or remote from the court house and you would go to that and you often need a support person as you are giving evidence. You would give your evidence and be cross-examined on your evidence sitting in that remote area. You would see the court and the judge and the jury, if there was a jury, and your evidence would be recorded. So if there was any subsequent retrial or contested appeal, you would not need to go through the trauma of presenting that evidence again. That is all in the legislative framework now.

Mr HARRIS: I assume then that all the regional rural court houses have that set up?

Mr TALBOT: Yes. I could give you a list of all the court houses. Not every court house has them, but we have portable equipment as well, so if we do need to put it in and it is not warranted on a full-time basis, then we can bring the portable stuff there.

Mr BESSELING: Two questions, Michael. What has been the impact on the efficiency of the justice operations from this sort of technology?

Mr TALBOT: From the video conferencing technology?

Mr BESSELING: Yes, within the court house and the whole operation?

Mr TALBOT: It has had a remarkable impact in that the court can process matters, particularly ones that need just brief dealings with, like bail applications, are all dealt with by video conferencing now. You can probably deal with ten of those in the space of 30 minutes, compared to just a small handful. Very often prisoners have to be taken down to the cells below the court, brought back up again, so you are waiting for all that process, whereas a magistrate - you are welcome to come and have a look at central if you wish - a magistrate can deal with the clients one after another, a new one is appearing on the screen, they are dealing with the matter and they are being dealt with quite quickly.

It has also had big benefits for the correctional organisations, Juvenile Justice and Corrective

Services NSW, not having to bring prisoners to court. There is the risk of escape and occupational health and safety issues. A lot of the cells in the courts would need to be upgraded substantially. All of those sorts of costs and investments are avoided because of the technology, which is increasingly less expensive, and it is part of the way we do business now.

Mr CONSTANCE: Is there a dollar figure attached in terms of those costs savings?

Mr TALBOT: There is. I cannot tell you just off hand but I am happy to supply it. We had somebody independent come in and evaluate those costs, the savings. There are a lot of humanity issues associated with it too. If you are a prisoner and you have to appear at court, it is not unusual for you to be taken out of your cell at five o'clock in the morning, miss breakfast, be on a truck to court, wait around from 10 o'clock on, you might appear at five o'clock in the afternoon and you might not get back to your cell until nine o'clock at night. I know prisoner comfort is not necessarily the most popular topic, but in terms of keeping everybody calm and less agitated and properly managed and so on, it obviously contributes to that.

Mr BESSELING: Just beyond the court house, relationships with institutions like the community legal centres and the like, how are you using that technology to be pro-active out in the community apart from the link?

Mr TALBOT: They are often the first referral points for people seeking answers to their problems. So we work with them and let them know what it is that we can do to support them, and dealing with particularly vulnerable clients. There are some members of the community that have multiple legal events going on in their lives. They are much more likely to be involved in those sorts of things, and those sort of community groups help us reach to them. We have outreach services that go into the hearts of those communities. There are a lot of people who feel reserved or fearful about going to a court house to get information or do not have access to the internet or are unfamiliar with it, and working with these agencies helps us get that better reach.

CHAIR: Can we get a list of court houses that have access to the video conferencing facilities?

Mr TALBOT: Yes.

Mr MARTIN: Who actually initiates and makes the decision that this case will be done by video conferencing, is it the judge, the defence, the prosecution or can any party make the request?

Mr TALBOT: There are certain elements of the case that would be dealt by default by video conferencing, so bail, committal matters or sentencing. The only reason why that would not happen is if there is not a facility there or there is a persuasive argument against it.

Mr MARTIN: So it is not an automatic right of refusal by the prisoner or the accused?

Mr TALBOT: No.

Mr PROVEST: Do you ever see down the track that the general public will be able to log on and watch proceedings in court houses? You can turn up in the public gallery now just to watch. You can go into the court house now and sit and watch.

Mr TALBOT: We are looking at video screening some of the Supreme Court matters as a step in that direction. There are quite a lot of elements around that which need significant support for it to be delivered on a consistent basis, but we are examining it at the moment for the Supreme Court.

Mr PROVEST: Your future timetable, are you just going to have more video conferencing in court houses or what does the future hold?

Mr TALBOT: Yes, we have more video conferences in court houses but we also have them in legal aid offices, in Corrective Services facilities, in police stations. The law was changed at the beginning of last year so that government witnesses, primarily police, can give their evidence via video link from the police station to avoid the police officers being out of the system for the whole day when

they are giving their evidence.

Mr MARTIN: That could be a huge disadvantage for country police in smaller police stations where they have to come to Sydney for a trial and they could be away for a week or three or four days.

Mr TALBOT: And especially if the matter does not go ahead as they planned and all of those sorts of things. Especially in rural remote areas, it is very difficult getting prisoners and/or witnesses to attend. Video conferencing helps deal with that.

(The witness withdrew)

(Luncheon adjournment)

WAYNE ALLEN RUCKLEY, Executive Director IC and T, Corrective Services NSW, Henry Deane Building, 20 Lee Street, Sydney, affirmed and examined:

CHAIR: I am advised that you have been issued with a copy of the Committee's terms of reference.

Mr RUCKLEY: Yes.

CHAIR: I need to draw your attention to the fact that your evidence is given under parliamentary privilege and you are generally protected from legal or administrative action that might otherwise result in relation to the information you provide. I also point out that any deliberate misleading of the Committee may constitute a contempt of the Parliament and an offence under the Parliamentary Evidence Act 1901.

Would you like to just give us a brief overview of our discussion today and then I will invite questions from the Committee?

Mr RUCKLEY: Sure. Thanks very much for having me along today on behalf of Corrective Services. Over quite a number of years the adequacy of telecommunication services for our organisation has been an issue in terms of our responsibility to manage correctional centres and to supervise offenders in the community. Over the last four or five years in particular, as the reliance of the organisation upon technology has intensified, the criticality of telecommunication services has become even more important in terms of voice, data, video and in particular security.

Our organisation was one of the first to take up the State Broadband Initiative four or five years ago, and I suspect that we were the only State Government agency that actually took it up with quite a deal of gusto and in terms of a full implementation. That certainly at the time, about four years ago, provided some relief to the telecommunication inadequacies that we experienced.

The uniqueness of our organisation in this telecommunications area is that a significant number of our key sites, particularly correctional centre sites, are in what might be regarded as remote areas, and going through our location index last night I noted that about 50 per cent or 15 out of 34 correctional centres are located in remote areas. Certainly, over the years those areas have experienced severe hardship in inadequate connectivity. Our concern is that even under the National Broadband Network, and in terms of the NBN catchment areas within these areas, our position will not necessarily improve.

Quite often in these sorts of situations it is easy to get caught up in the technology, but I remember early last year I was out at our correctional centre at Ivanhoe and had a yarn to the manager of security. He mentioned to me that when he arrived each morning he sought to log on, went off to organise some people and get a cup of coffee and if he was lucky, when he returned 25 minutes later, he would have computer connectivity.

It is very easy in these things to lose the practicality of the business sense. In fact, we did a fairly broad and abbreviated analysis last week, and my sense is that if you look across the organisation at the extent to which staff access technology and the time they actually look at a computer screen as distinct from looking in the eyes of offenders, it probably equates to a loss of efficiency to us of about \$7 to 8 million per annum.

The significant issue in all of that is that the reliance that we have on technology in 2010 is not just about efficiency, it is the ability of our staff throughout the State at all locations, both within correctional centres and in the community, to have access to the information they need to make proper and appropriate decisions on behalf of the community in the first part, and in particular, given the increasing complexity of our organisation and environment, to ensure that in relation to the management of offenders the information is available to staff when and as required.

The other part of this as well that does not necessarily relate to the broadband initiative but forms part of the broad telecommunications space is our progressive reliance upon mobile technology,

because gone are the days of course where the technology needs of an organisation are provided just by slapping a PC on someone's desk. Increasingly now, the role of our organisation and the role of staff is dependent upon the level of ability for connectivity when they are in the field. Certainly, the issues that I mentioned in relation to broad remote access are in essence intensified when you move to that mobile environment.

If I could just say lastly, certainly our experience over recent years has been that apart from the structure and the framework of telecommunication services, the role and performance of telecommunication providers is absolutely fundamental. I have come into the IT environment from the business. One of the first things I realised when I got involved with this whole area of telecommunication services was the arrogance and the lack of a service orientation on the part of telecommunication providers. In fact, I very quickly believed that they had an inverse view over the supplier and customer relationship that people would normally expect in business. In moving forward in this area there has to be a whole rethink of what we expect from telecommunication providers and there has to be a mindset change within these organisations if they are to realistically and reasonably deliver the service they are expected to on behalf of the community.

The comment has been made, I think the Prime Minister might have even made it in announcing the NBN, that in fact these technology initiatives are the highways of the present and the future and they can never take on that substance and that importance, I think, if the current mindset and performance of telecommunication service providers is allowed to prevail.

Mr PROVEST: When you build a new facility, I would have thought you would have fibre to the front door. Is that not the case?

Mr RUCKLEY: The selection of sites for new correctional centre facilities is not necessarily, in fact I suggest probably the last thing that has been thought of is the proximity of telecommunication linkages. I mentioned Ivanhoe. If you look at Brewarrina, to a lesser extent perhaps the mid north coast at Kempsey, very few of these sites have adequate access, even of the most fundamental broadband bandwidth, let alone fibre optic connectivity. The main reason for that is that most of these centres, for a range of reasons, are sited well out of harm's way so to speak.

Mr BESSELING: With regards to the correctional centres in remote areas we are talking a lot here about how broadband will relate to health facilities, education and obviously correctional facilities. How do you use broadband at the moment to educate the staff that you have or the officers that you have in your correctional facilities or even the prisoners for that matter? How do those two matters, health and education, relate to your facilities in a sense of technology being able to provide better access to that?

Mr RUCKLEY: I think the principle is identical. Our reliance upon technology and as a result our reliance on the adequacy of that technology connectivity is fundamental, as I mentioned earlier, in order for staff to have access to information that resides within the corporate systems and for those staff to impart upon offenders a whole plethora of program activities which would replicate those that take place in a variety of other organisations. In fact, I have often thought that a correctional facility in many respects is rather like a small town. There is education happening, there is broader program activity, there is health activities, there is preparation for employment upon release. So really a correctional environment is almost a small town. It replicates all those functional activities that are taking place within other organisations and the broader community. Our remote locations almost disenfranchise us from the benefits of access to that on a whole of government performance. That is really our problem.

Mr BESSELING: So you would find that lack of access to broadband would be an impediment to delivering better education and health services?

Mr RUCKLEY: Absolutely. The illustration of how long it took to manage security at Ivanhoe to access systems is in a sense the efficiency part of it, but the real impact of that is that in a qualitative sense clearly access to program activities and a whole range of other functional elements cannot take place. We are starting to move at the moment on using technology for direct access by offenders in order to, if you like, enhance the self-responsibility of offenders to do a range of things. Unless we have got adequate bandwidth and broadband initiative, that will certainly be thwarted. The intention of that offender self-responsibility is (a) to create the efficiencies we need within the

organisation to come within budget, but also to take us forward in terms of providing a broader range of services to the community and to offenders, without a consequent explosion, if you like, in the staff needed to do it.

Mr BESSELING: Just further to that, CCTV and digital recording, do they happen on site at the specific correctional facility's location or do you do that off site?

Mr RUCKLEY: That actually happens on site and the digital recording, particularly of critical incidents, and the recording of images through CCTV forms a critical part of our security intelligence and investigations functions which are largely managed on a central basis. Download and interpretation analysis of that information using the broadband opportunity is a critical part moving forward.

Mr BESSELING: So if there was a critical incident at say Parklea or Kempsey or whatever, that would be recorded locally?

Mr RUCKLEY: Yes.

Mr BESSELING: And then it would be transferred to—

Mr RUCKLEY: Transferred to a corporate system so that it is accessible by those authorised to access it across the organisation. For example, at Brewarrina it was badly affected the year before last by storms. It was basically out of telecommunications action for six months, which is absolutely incredulous. There is the remote issue but there is also the service provision part from the Telco providers that contributed to that.

Mr PROVEST: So you use the Soul provider?

Mr RUCKLEY: Yes. I must say I am not sure that all my colleagues share the same view but we took up the State broadband initiative with some gusto and there were certainly not necessarily technical but organisational issues associated with Soul in the very early days. I think they probably should have stuck to pharmaceutical retailing, but when TPG became involved in it, particularly through the chairman, David Teoh, I think for us at least there has been quite a significant improvement in service. They are reasonably responsive at the moment.

Mr PROVEST: I know a lot of schools in my area find it very hard using video conferencing because of the bandwidth and the slowness and there is a bit of frustration, but that is set to improve I believe.

Mr RUCKLEY: Yes. Certainly, in relation to your earlier question, as we move forward I think our submission indicated the extent to which we are using video conferencing for court appearances. In fact, a very significant proportion of offender court appearances now happens through video conferencing, but we want to extend that to also enable and facilitate family and offender visitation, and certainly because that impacts most on remote sites and where we want the video visitation to take place, the existing level of bandwidth would be a constraint in enabling that to happen.

Again, it is very easy to look at the technology of this, but when you look at the relationship between family contact and positive offender development, it really is quite a critical issue.

Mr MARTIN: This is a hypothetical. In relation to the use of something like tele-medicine, given a maximum security gaol like Lithgow, if there is an incident and a prisoner has got to be taken to hospital, because they are maximum security prisoners - I think they have something like three officers have to remain there the whole time while the prisoner is in hospital for security reasons - would there be any prospects of being able to use tele-medicine in the gaol so the doctors could keep tabs on the patient in the gaol facility? Perhaps it would be more cost effective. I do not know from a medical point of view how it would work.

Mr RUCKLEY: I am reluctant to answer that question, given that I am Mr Ruckley, not Dr Ruckley, if you forgive me. I think my colleagues from Justice Health are probably in a better position to do that. I certainly would imagine from a technology perspective it is possible, but whether or not it is appropriate I think it is probably a matter best responded to by Justice Health.

Mr MARTIN: The other point is in relation to rehabilitation programs. How is the technology helping perhaps with that?

Mr RUCKLEY: Yes, in moving forward, one of the things we want to do is that offenders, particularly within a correctional centre environment, spend a lot of their time in their rooms or their cells and much of that time is unproductive. We see a significant opportunity for incell programming to intensify and broaden program involvement by offenders incell hours, which potentially will have some impact on reducing resourcing costs within the system, but further expand the ability for us to place more self-responsibility on offenders to provide development opportunities for themselves. So the whole broadband space is absolutely fundamental to enable that to happen.

Mr HARRIS: Couple of questions. The first is: Is the lack of bandwidth into isolated centres a budgetary constraint or is it just technically not possible at the moment?

Mr RUCKLEY: I think it is both. At the moment the technical possibility of it is the critical issue. I guess really what it all comes back to, and in fairness to the Telco providers, for them in a commercial sense the return, given the investment required is not all that much. I think that is the fundamental issue, we are in this difficult position in terms of locating, for example, correctional centres a reasonable way out of town. That solves one issue from the community perception perspective, but it creates a new issue with difficulties in service provision.

Mr HARRIS: So satellite or one of those more mobile options is not necessarily a problem?

Mr RUCKLEY: Not really. At Brewarrina, for example, we have a satellite dish in place. I think that required an investment at the time of about half a million dollars. That has certainly been subject to fairly significant issues of poor quality of service and poor continuity of service. Certainly, the operational costs of many of those type of mobile services under existing regimes in Australia are quite expensive.

Out of interest, our telecommunications expenditure this year will be about \$8 million. It is a very significant part of our overall IT budget. In fact, it probably represents about 30 per cent of our IT budget, which I find to be quite extraordinary.

Mr MARTIN: That problem at Brewarrina with the unreliability of services, is that due to climatic conditions or the equipment or the service provider or what?

Mr RUCKLEY: Just the lack of stable static equipment.

Mr HARRIS: The second question I had is in regards to home detention. The submission was saying that that needs to operate in the GFM network, which is all right in the city, but in country areas it is the Next G or 3G sort of thing. Does that mean it is harder to do home detention in rural and regional areas and it is limited to the larger populations?

Mr RUCKLEY: Absolutely. Beyond the home detention, the real area it affects is offender electronic monitoring. It has tended to come into its own to some extent over the last couple of years now. Our ability to expand if you like the catchment area for electronic monitoring is very much retarded.

Mr HARRIS: Is that because of the equipment used or could the network be changed?

Mr RUCKLEY: Yes, it is the network capability issues.

Mr MARTIN: What flexibility do you have as an individual department about chasing whatever provider you want? Are you linked to some government policy on that overall?

Mr RUCKLEY: Yes. There is a GTA, a Government Telecommunications Agreement, in place that is co-ordinated by the State Contracts Control Board. It is an interesting point because it is something that is involved in government contracting generally. Quite often these contracts are negotiated on the basis of price. I have always had the view that you do not need to be too smart to

reduce price, but you need to be a little bit smarter to reduce price in the context of the service that you want to obtain. My sense is that the contracts that we have, and we have had for quite some time, concentrate too much on what you are paying and not enough on what you expect for it. It also dovetails with the comment about the performance of the Telco providers. In moving forward, in my view that is a critical issue, that our contracting arrangements concentrate very much on what it is we expect in terms of the delivery of a service and the continuity of that service.

Certainly we, and I suspect a number of other agencies, have needed to invoke the similar thing that has happened in banking where people pay a broker to make sure that they are charged the right interest rate and so forth. Certainly, we have needed in the last three months to introduce a third party to validate in fact the service we expect to get under our contractual obligations at the payment we expect to make under those contractual obligations are in fact the case. That in itself I think is a bit of a worry.

Mr BESSELING: Do offenders have access to the internet or email in any way?

Mr RUCKLEY: No. It is an interesting one. I am sure it will happen at some time, but probably not in my lifetime. Certainly, in the western world I am not aware of any broad engagement offenders have to accessing the internet and email. Although, certainly in North America there are a range of third party organisations that undertake, on behalf of correctional agencies, the management of emails through a control or filter system. I think in many of those examples the offenders may pay 20 cents an email or something.

The interesting part of all that is that there is a cultural thing about offenders particularly accessing the internet, but in dealing with email, there are very specific and far-reaching security implications for that, as distinct from trying to scan and monitor and control traditional mail. The email part of it may come much sooner than we think, but it will be within a very controlled environment and will probably be similar to the controlled telephone system for offenders where who they are able to access is limited to who wants to be accessed and in a very controlled framework and band.

CHAIR: Do both privatised and public correctional centres come under your auspice?

Mr RUCKLEY: Not in an operational sense, no. The private provider certainly accesses the offender integrated management system. We actually at both Parklea and Junee are responsible for the link in to those centres but not beyond. So we are responsible for the wide area network to the front gate, if you like, but not the local area network within the fences so to speak of those centres.

CHAIR: I was wondering, the use of whole blocks of service, as a comparison between the public and the privatised, do they have a better model, worse or the same or do we know?

Mr RUCKLEY: No, because it is to the front gate they are pretty much sharing the same model. At Junee there has been some improvement in the last 12 months, but prior to that it was a very chequered experience that they had, because again Junee is out from the township proper and there have been significant broadband access issues. So it is pretty much identical from the perspective of telecommunications between the private and public sectors.

Mr PROVEST: Obviously there is dissatisfaction in a few like Brewarrina and Junee and wherever. Do you complain to the people in charge of the contract, saying you are not getting proper service?

Mr RUCKLEY: Yes.

Mr PROVEST: What is the process?

Mr RUCKLEY: I think "complain" would be a very mild way to put it. It would probably be fairly difficult for me to profile the passion with which - I must say in all honesty I think we have a fair bit of difficulty in getting beyond the price, as I mentioned earlier. It is quite often the issue probably with central agencies that are responsible for maintaining a concept but not necessarily closely connected to the service delivery implications of it. My sense is that in all honesty there is probably a disconnect there. We all concentrate a lot on price and cost and so forth. In fact, I think it often gets too

great a weighting as distinct to what it is we expect from it. That certainly is the case in this particular space in my view.

Mr HARRIS: Back to the concept of visitations by video, I think that would be really worthwhile. I have a constituent in my area whose ten-year-old son is at Wellington. I am on the Central Coast. The young fellow is only eight years old. It is a huge journey with the grandparents. They obviously have to stay in Wellington. The question is really with regard to children, because children still have to go through and see the process of searching everything as they go into the facility. That would be an enhancement for young people not to have to experience that but be able to still have contact with their parents.

Mr RUCKLEY: Absolutely. I have worked in corrections for quite a few years and the saddest and most concerning part of it is to see those kids go through the front gate to visit their parents. It is very sad. We have certainly got this longer term vision that it would be great for an offender to be able to support or assist their offspring to do their homework. That is a very simple notion but I think that is what you are saying. It has got far broader implications than just the moral issue of parent and child coming together. It is just so powerful in terms of bringing hope to that offender. It is hard to put a context to it in that sense. It is very important.

Mr MARTIN: A quick question on the Joined Up Justice program. We have had a submission on that. That is where you are interfacing with the other bodies in the justice system. Is that progressing well in terms of technical interface and such? I presume we are talking about Juvenile Justice, Attorney General's and so on.

Mr RUCKLEY: I must say that since I have come into IT one of the things that I have found is that nothing happens too quickly, much to my concern and the concern of people that deal with me. The relevance of what we are talking about today and Joined Up Justice is that it is absolutely fundamental. The sorts of things that I have talked about within our agency take on an even greater life when you look at the relationship between the police, the courts, Justice Health and Corrective Services. An improved level of connectivity provides us with a tool box to be able to operate as one, whereas to a large extent at the moment we operate as many. That has got, I think, a tremendous ability to improve significantly our ability to better fulfil our responsibility to the community in relation to security and it has got a significant capacity to improve our ability in terms of reducing re-offending in terms of the level of programs and the co-ordination of those activities and potentially to go beyond that and see the criminal justice system provide a much more preventative approach to its endeavours as distinct from a reactive approach. It is a very powerful opportunity in my view.

(The witness withdrew)

COLMAN O'DRISCOLL, Service Director Mental Health, Justice Health, 1300 Anzac Parade, Malabar, sworn and examined, and

SUSAN HARMAN, Chief Information Officer, Justice Health, 1300 Anzac Parade, Malabar, affirmed and examined:

CHAIR: I am advised that you have been issued with a copy of the Committee's terms of reference and also a copy of the Legislative Assembly's Standing Orders.

Ms HARMAN: Yes.

Mr O'DRISCOLL: Yes.

CHAIR: I draw your attention to the fact that your evidence is given under parliamentary privilege and you are generally protected from legal or administrative action that might otherwise result in relation to the information that you provide. I should also point out that deliberative misleading of the Committee may constitute a contempt of the Parliament and an offence under the Parliamentary Evidence Act 1901.

Now I am going to invite you to make any brief opening statements and then I will open it up to the Committee for questions. I am happy for you to decide who will start.

Ms HARMAN: Justice Health delivers clinical care to people interacting with the criminal justice system. The main reason we are here today is that we have been successful in obtaining some funding for the Digital Regions Initiative and we are looking to invest in infrastructure within correctional centres. So we are working very closely with Corrective Services New South Wales on that initiative. That will seek to deliver tele-health to all correctional centres - we currently have will have tele-health in 12 of our remote and rural centres - E learning and deliver community health strategy and PACS, which is medical imaging State-wide.

We are a long way behind our counterparts in health. We were placed outside of scope for the electronic medical records and nearly all of our systems at the moment are based on paper and fax and that is creating some significant operational issues and having adverse outcomes on patients from time to time. That is the main reason we are here, to talk about what we are doing moving forward to try and catch up.

Mr O'DRISCOLL: From a mental health point of view, we provide State-wide forensic mental health services, not only into correctional centres, but we provide support to area health services, looking after conditionally released forensic patients in the community, but also court liaison services to local courts across the State. As with our colleagues in Corrective Services, we cover the entire State of New South Wales, including the rural and remote areas of the State.

As Susan said, developing those sorts of technologies will greatly assist our clinicians, particularly in terms of tele-conferencing. Having access to electronic medical records at the same time will certainly eliminate a lot of the problems we currently have.

Mr MARTIN: Just a question on tele-medicine. It might be a bit simplistic, but with tele-medicine you obviously want to get the medical advice straight into the gaols. Is there any scope for not having to take prisoners out into the normal community hospitals?

Mr O'DRISCOLL: What tele-health does and where it is extremely useful is in providing more immediate contact with patients, so that you can assess patients without having to send them out all of the time. It will not eliminate the need for people to access outside hospitals, but it will certainly help us to better triage patients and better manage patients and support staff on the ground in more remote places.

Mr PROVEST: Susan, if you are successful in phase 2, exactly what do you spend your money on? I notice you are getting \$1.2 million.

Ms HARMAN: Yes, that is correct. We are looking to invest with Corrective Services in the local area networks. There is a lot of work that needs to be done within the correctional centres to upgrade the LANS to facilitate the kind of bandwidth we require to run our service. A lot of that is going to be spent on just replacing hardware, active equipment. We are also looking at technologies that use bandwidth more efficiently so we can reduce the operational costs. Where we think we need four meg, we might be able to run a two meg line and have it act as a four meg line, because the recurrent costs, the rental costs of the telcos are—

Mr PROVEST: Do you share the same frustrations as Corrective Services?

Ms HARMAN: I would echo everything that Wayne said today, absolutely. We have had much less to do with the Telcos than Corrective Services have. We are coming into this fairly new, because up until this point we simply relied on their network. They carry us through free of charge at the moment. What we are looking to do through this program is actually logically separate, so share the physical infrastructure but run two logical networks, one that is the health network and one that is the corrections network across that same physical infrastructure in order for us to have some autonomy and visibility and for us to be able to control the bandwidth that we need to the sites, which differs to whatever corrective services is running.

Where we can converge, we are hoping to, particularly around the video conferencing and tele-health. Tele-health units themselves I think are around \$25,000 and they have got one down the hall for legal visits and so forth and we have got one for tele-health down the other end of the gaol. We are currently working on the design phase to see where we can share technologies and actually bridge the two networks for the purposes of video conferencing.

Mr PROVEST: Probably, Colman, mental health in that would tie up with the court systems and with records. That is an important part of it.

Mr O'DRISCOLL: In terms of the person at the other end of the TV having access to records?

Mr PROVEST: Yes.

Mr O'DRISCOLL: Yes, that is important. At the moment we rely on faxing of clinical notes to the clinician at one end prior to seeing somebody over tele-health. Access to an electronic medical record in real time would eliminate the need to be doing that.

Mr PROVEST: Why were you guys excluded? You mentioned before you were excluded.

Ms HARMAN: Because the State-wide EMR is very much focussed on the in-patient services, so operating theatres, emergency departments and so forth, which is not our model. As Wayne said, correctional centres are like small towns and we see ourselves as a community health provider within that town. It was not a good fit for us. It is a very expensive solution. When we were placed out of scope, there was not necessarily a strategic alternative for us, which is what we are hoping to progress through this, but \$1.2 million is really only going to scratch the surface. It is nowhere near what we need ultimately to fully digitise our medical records.

Mr PROVEST: In touring around the State of New South Wales we have received other submissions from the medical fraternity saying the band width is not great enough to get digital x-rays and a whole raft of other information. It was a common denominator in outlying areas. So you would have that same problem.

Ms HARMAN: Absolutely.

Mr BESSELING: Given that you have just said you are like a community health centre, you would see a model that was more in tune with electronic medical records for primary care rather than hospital care?

Ms HARMAN: Yes.

Mr BESSELING: Is there a system at the moment that would suit your needs?

Ms HARMAN: We believe so. We are very strongly aligned with a product called Orion that is currently used for health e-link, which was a pilot that was run out of Hunter and the Children's Hospital which was linking in patient information with GPs out in the community. I believe that the Cancer Institute has just procured that solution as well. We do not currently have the support or funding that we require to implement that in full, but the business case is in draft and very close to being sent to the Department of Health, who have verbally suggested that we are going to get the support that we need but formally that is not there yet.

Mr MARTIN: Just to clear up, you hang off the Department of Health?

Ms HARMAN: Correct.

Mr MARTIN: You are division of the Department of Health?

Ms HARMAN: Yes.

Mr HARRIS: So there are obviously efficiencies from having electronic health records for prisoners who visit facilities on a regular basis. Are you also required to supply that information to courts, et cetera?

Mr O'DRISCOLL: We supply information to courts in a much more formal way when they request particular types of reports from us. Those are mental health assessments, psychiatric reports or reports about a particular person's physical health. That is done through an assessment and production of a report. It would not be through letting people access to an electronic medical record.

Mr HARRIS: At the moment, if a person has got medical records outside of Corrective Services, are you able to access them in any way? Is that all done through paper at the moment?

Mr O'DRISCOLL: There is a whole bunch of privacy aspects around that too as I understand it, but yes, it is all paper based records that we would be accessing.

Mr HARRIS: If the general hospital system goes over to electronic records, et cetera, is it feasible then that those records would be able to transfer across to your system so that it streamlines it? If you see someone, you have to complete a medical history when they arrive, obviously that would be of a benefit.

Ms HARMAN: Yes, that is right. As Colman said, there are some privacy aspects around that, but having access to patient summaries and discharge documents and so forth is something we are hoping to achieve. Very importantly for Justice Health, most of our patients are in our care for very short periods of time and us linking them with community health providers post release is something that could be strengthened considerably through the strategies we are looking to implement.

Mr HARRIS: At the moment, if someone enters Corrective Services, do you rely on them to tell you their health history?

Ms HARMAN: Yes.

Mr HARRIS: So if the system was streamlined across both systems, it would obviously be very helpful.

Ms HARMAN: Yes.

Mr O'DRISCOLL: We rely at the moment on people entering custody and allowing us to go to their previous health care providers and ask them for information and that is all via paper.

Mr HARRIS: If they say no, you cannot.

Mr O'DRISCOLL: You cannot access it, but I would imagine the same privacy stipulations would apply to electronic medical records.

Mr PROVEST: If I am out on parole, do you still have an active role in my wellbeing or do I just flick over to the public system?

Mr O'DRISCOLL: The simple answer is it depends. Generally speaking, once you leave the criminal justice system your care is transferred back to the area health service responsible for the area that you live in. However, we provide a service to area health services in relation to particularly difficult to manage mental health patients or formal forensic patients. Some people who are leaving custody who have that last problem present a bit of a challenge for area health services in their on-going management and so we have a service that helps them in doing that.

Mr PROVEST: Can I show my ignorance here. What is a forensic patient?

Mr O'DRISCOLL: A forensic patient is somebody who has either been found not guilty by reason of mental illness of an index offence or a person who was unfit to stand trial.

Ms HARMAN: We are working with people post release in drug and alcohol as well as if they fit a certain criteria and have been on an opiate treatment program whilst incarcerated.

Mr PROVEST: Sometimes when you are on parole, subject to your parole, there are certain treatments you have got to participate in.

Mr O'DRISCOLL: That is correct.

Ms HARMAN: Yes. I think most of those are probably administered through Corrective Services, but that is an area that Justice Health has grown in the last few years.

Mr O'DRISCOLL: Generally, when you are on parole and you have conditions to comply with certain health treatments, those treatments are provided by the local area health service.

Mr MARTIN: In relation to the outreach program, you have spoken about what you are doing at the moment In phase 2. Was phase 1 technically related to that program?

Ms HARMAN: No, and my honest answer is I am not quite sure why it has been called phase 2. It is phase 1 from my perspective.

Mr MARTIN: The other issue, in relation to the tele-medicine, I think I read somewhere in the paperwork that it is directed to the prisoners and their families. Is that right or not?

Ms HARMAN: At the moment there are two separate systems I think. There is the Corrective Services video conferencing, which is looking to link with families and legal visits and court appearances and so forth.

Mr MARTIN: This is in relation to the tele-health thing, so it is not part of the medical. You do not have any involvement with family members in terms of their medical history?

Ms HARMAN: Not that I know of, or maybe we do.

Mr O'DRISCOLL: It would be very useful for things like family conferences, preparing people for release back into the community, to be able to video conference with family members about the ongoing care of an individual in the community.

Mr MARTIN: But not in terms of treating family members for health issues?

Ms HARMAN: No.

Mr O'DRISCOLL: No.

Mr HARRIS: You said that your preference is towards a system called Orion. Is that compatible with what the rest of Health is moving towards?

Ms HARMAN: Yes, it is.

Mr HARRIS: So they will talk to each other?

Ms HARMAN: Yes.

(The witnesses withdrew)

(The Committee adjourned at is 1.52 p.m.)