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SENATE

ENVIRONMENT, COMMUNICATIONS, INFORMATION
TECHNOLOGY AND THE ARTS REFERENCES COMMITTEE

Reference: Competition in broadband services

MONDAY, 2 FEBRUARY 2004

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SENATE
ENVIRONMENT, COMMUNICATIONS, INFORMATION TECHNOLOGY
AND THE ARTS REFERENCES COMMITTEE

Monday, 2 February 2004

Members: Senator Cherry (*Chair*), Senator Tierney (*Deputy Chair*), Senators Lundy, Mackay, Tchen and Wong

Substitute members: Senator Greig for matters relating to the Information Technology portfolio

Participating members: Senators Abetz, Allison, Bolkus, Boswell, Brown, Buckland, George Campbell, Carr, Chapman, Conroy, Coonan, Eggleston, Chris Evans, Faulkner, Ferguson, Ferris, Harradine, Harris, Humphries, Knowles, Lees, Mason, McGauran, Moore, Murphy, Nettle, Payne and Watson

Senators in attendance: Senators Cherry, Lundy and Tchen

Terms of reference for the inquiry:

To inquire into and report on:

- (a) the current and prospective levels of competition in broadband services, including interconnection and pricing in both the wholesale and retail markets;
- (b) any impediments to competition and to the uptake of broadband technology;
- (c) the implications of communications technology convergence on competition in broadband and other emerging markets;
- (d) the impact and relationship between ownership of content and distribution of content on competition; and
- (e) any opportunities to maximise the capacity and use of existing broadband infrastructure.

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Committee met at 11.09 a.m.**COBB, Ms Sarah Elizabeth Jill, Senior Business Development Officer, Gold Coast City Council****PERRY, Mr Grayson, Manager, Economic Development, Gold Coast City Council**

CHAIR—I declare open this public hearing of the Senate Environment, Communications, Information Technology and the Arts References Committee and welcome everyone here today. Our apologies for the late start. The committee has received over 40 submissions to its inquiry into competition in broadband services and it has already conducted two interesting days of hearings in Canberra and Sydney. We are pleased that over the next two days we will be able to give Queenslanders—and a couple of Mexicans from over the border—an opportunity to have their say on this important topic, although I should note at the outset that it is unfortunate that the Minister for Innovation and Information Economy, Paul Lucas, is unable to make a presentation on his government's broadband initiatives because he has an election on at the moment.

I now welcome our first witnesses today, representing the Gold Coast City Council: Mr Grayson Perry, Manager, Economic Development, and Ms Sarah Cobb, Senior Business Development Officer, Economic Development and Major Projects Directorate. Thank you for giving us your time today. It is very much appreciated. I express our particular appreciation for the council's assistance with the arrangements for these hearings and your kind offer to host the committee this afternoon at an inspection of the Varsity Lakes complex, which sounds well worth a look and which we are quite looking forward to seeing.

Before we move to our discussion, there are a few procedural comments I have to make. For the benefit of all our witnesses here this morning, I point out that the committee prefers all evidence to be given in public, but should you at any stage wish to give your evidence, part of your evidence or answers to specific questions in private you may ask to do so and we will consider your request. You are reminded that the evidence given to the committee is protected by parliamentary privilege and that the giving of false or misleading evidence to the committee may constitute a contempt of the Senate.

Mr Perry, the committee has before it the council's submission, which we have already published. Would you like to make any alterations or corrections to the written submission at this stage?

Mr Perry—Not at this point, Mr Chair.

CHAIR—I invite you to make an opening statement before we move to questions.

Mr Perry—Thank you. At the outset, we appreciate the opportunity to present to this committee this morning. Gold Coast City Council's presentation will provide some information on issues and impediments to broadband penetration within Gold Coast City, some of the initiatives that council is undertaking in terms of encouraging broadband uptake and activity and some of the programs and projects that we have implemented or are implementing. You may be aware that Gold Coast City Council is Australia's second largest local authority. It has an annual budget in excess of approximately \$500 million. But, having said that, it has also had to service

Australia's fastest growing population for the past 40 years, which brings with it its own issues and impediments. From a population in 1954 of approximately 45,000 people—effectively a small coastal village—the city now has a population in excess of 430,000 people. There are varying estimates, but there are some indicators that we are actually approaching close to 440,000 people now. That brings with it some issues, but it should be said that in its history and development the Gold Coast has been built on a spirit of private entrepreneurial business activity, with limited government funding, infrastructure and other services. It is a significant contributor to the national economy.

Gold Coast City's national and international competitive positioning and its ability to attract knowledge- and information-dependent industries is dependent on the provision of broadband infrastructure and services at a world's best practice standard, particularly in terms of coverage, access and price. It should be noted also that we very much appreciate the opening of a Telstra regional office within the city. I think it has brought a new dimension to telecommunications activity, and certainly those Telstra staff have worked very closely with council in trying to encourage broadband uptake in the city, so we do thank and acknowledge Telstra's presence in the city.

Among the characteristics of Gold Coast City is the fact that it is diverse, in that it is highly urbanised yet has extensive rural locations within the city boundaries. There is also a significant business presence in the city. It is not just a narrow tourist strip, which is the traditional view of the Gold Coast. We are not a tourist town anymore; there is a significant deep business sector behind that. This diversity is rarely acknowledged and is part of the confusion in the perception of what Gold Coast City is and comprises. We are very pleased to note that, for the first time, NOIE, through its high bandwidth incentives scheme, does acknowledge that the Gold Coast is not just a highly urbanised area. It does acknowledge that Gold Coast City Council may apply for some of the funding under that program because it does have significant regional areas which remain eligible under that program. We have been excluded in the past because we have been classed as an urbanised metropolitan area, and that has caused us some frustration at a federal government level, in terms of accessing those programs.

The city is not a traditional city; it developed as many smaller towns which subsequently unified into one city. As they have grown, they have become joined. So it does not have a traditional or central CBD; it is a series of small coastal locations which have now become highly urbanised into a continuous urban and business strip. The fact that we have grown as smaller precincts is reflected in council's Pacific Innovation Corridor program. You have received some handouts explaining that particular project, which I will refer to in a moment. The city is some 70 kilometres long—it is a linear city, which does produce its own issues in terms of density of potential broadband users. The demand may be lower than in some traditional radial cities, because we are composed of small coastal locations, with different urban densities across those.

It is the sixth most populous city in Australia. It is the largest city outside the capital cities. Even though we have a population in excess of 430,000 people—it is close to 440,000—we have approximately another 50,000 to 60,000 people in the city at any point in time in terms of tourists. So we do have over 500,000 people in the city on any given day, which does give us some serious critical mass, we feel. In addition to that, we get nearly 10 million visitors to the

city every year in some form, whether they are daytrippers or national or international visitors—as I said, a significant contributor to the national economy.

The national broadband strategy, however, does not seem to take any consideration of larger regional cities such as the Gold Coast. Those cities under pressure to handle high growth are often excluded from federal government programs. We are not alone in this. I believe that other cities such as Newcastle and cities on the Central Coast also face these same issues. These issues include, but are not limited to, requirement for significant investment in infrastructure to keep up with this growth and fibre passing through the cities without any current access nodes. As an example, a NextGen cable now owned by Leighton Construction passes through the Gold Coast. It is one of the few fibre-optic cables going through the southern end of the city. However, there is no access for the city in terms of an access node at this point.

Another issue is the spread of the population centre as the city grows outwards. We are pushing heavily to the west and to the north. They talk about the 200-kilometre city stretching from Noosa to Tweed in the south. That is going to happen as a continuous urban strip.

A high level of post-1990 development means an impact in terms of incompatible technologies—RIMs, pair gains—that is proportionally higher than in areas which have not experienced this rapid growth. So we do ask that the federal government consider the issues for these high-growth larger regional cities and develop an appropriate program within their national broadband strategy to work in partnerships with lead stakeholders such as local governments, chambers of commerce and telecommunication providers to address this collectively and in a coordinated manner.

Gold Coast City Council has acknowledged this challenge through programs such as our Pacific Innovation Corridor project and is working with telecommunications providers to overcome some of these issues. Success has been achieved in securing competitive fibre from Brisbane as far as Robina—for example, a PowerTel cable. However, we still face some challenges with respect to the link to the southern end of the city, through Burleigh to Coolangatta and over the state border to Tweed Heads.

Demand aggregation programs which we have implemented have been successful in addressing a number of particular black spots—I will address those in a second—as part of our business development program. Through PIC, council has undertaken this demand aggregation model alone, without other state or federal government assistance. The city is dependent on small private businesses. Three-quarters of businesses—a significant number; it is probably a similar environment to the national perspective—have fewer than five employees in the city. Ninety per cent have fewer than 10 employees. In total, small business accounts for 95 per cent of all businesses within the city, although through our investment attraction program we are attracting larger firms such as IBM to the city. Small business finds the cost thresholds of moving to broadband a relatively greater burden than large business or government agencies would. But, on the positive side, if the provision of cost-effective broadband services was achieved, there would be potential for a significantly greater return on investment in terms of contribution to the national economy.

Council's Economic Development and Major Projects Directorate was formed after amalgamation in 1995. The Economic Development and Major Projects Directorate has not put

in place a significant economic development program for the city. This is in recognition of the fact that developed economies are undergoing rapid economic and social change. There is a need for local governments—as we take on more responsibilities, unfortunately—to take a lead role in promoting and developing our own local industries, because if we do not do it then no-one else will, effectively.

We have in place an economic development strategy that identifies a number of key industries that council is actively developing, such as biotechnology, film and interactive media, communication, information and e-business, education, research and training, and health and medical. For your interest's sake, the education industry contributes approximately \$500 million a year to this city. So we do have a number of industries which contribute a significant amount in terms of the city's economic growth.

Another large industry is the marine industry, which we are focussing on. As an example, we have the Gold Coast marine precinct, a major council initiative with in excess of \$130 million worth of investment. The largest pleasure marine manufacturer in the country—Riviera—is there. There are close to 3,000 employees within that precinct. That would not have occurred if council had not taken a lead role in economic development. Approximately three years ago that Gold Coast marine precinct was effectively a bare patch of dirt. Now we have 3,000 employees. So we do feel that we are putting the runs on the board through an economic development program.

In 1998, Gold Coast City Council realised the growth of the Internet signalled a movement in the economy towards knowledge based industries. The council put in place something called the Pacific Innovation Corridor Project. Council has been a lead proponent of this particular project. The concept was effectively the deployment of high-speed, low-cost, cost-effective broadband services to the city, and the council worked with organisations such as Boeing and PowerTel to make that happen. In the end, PowerTel laid a cable from Brisbane. It ends at Robina. It runs from Brisbane to Beenleigh south of Coomera, with a loop from Coomera to Oxenford, Robina, Surfer's Paradise and Southport. It tails to Burleigh and Coolangatta. From each of these points of presence high-speed access is reticulated to the community. In the opposite direction, this fibre-optic cable would link back into major national—and potentially international—networks. That is the basic structure of the PIC philosophy. The cable was laid on 8 March 2001.

But I suppose the telecommunications or technology meltdown that has happened across the globe has been an impediment to increased uptake of this particular connection. Having said that, council has continued to undertake a precinct development strategy based on the corridor and the 10 Pacific Innovation Corridor Project precincts, which basically sit over the top of that particular cable.

Since that time many other telecommunications providers have also entered the city, such as Ucomm, AAPT et cetera. We have seen that as a welcome change to the city environment for broadband uptake. There are now a large number of telecommunications providers in the city. When the Pacific Innovation Corridor Project was first mooted, there were effectively no telecommunications providers except Telstra within the city. So that has been a positive. We have undertaken a large number of programs within the Pacific Innovation Corridor Project, one of which is a demand aggregation model, which I will come to in a moment.

I suppose I will now address the other council initiatives. Some of the initiatives we have really put in place to encourage broadband uptake are cooperative arrangements. There are clear limits, obviously, to what council can achieve alone. Therefore much of council's focus is on developing effective cooperation with federal and state government agencies, other councils in the regions who are taking a south-east Queensland approach, business organisations, educational institutions, telecommunications suppliers and the community in general.

To date, we have to say there is probably little support in terms of federal government programs within the city, only because we have an inability to access them. There are other programs, such as the regional ACC, which we have been very successful in accessing. So we have accessed some programs but not in terms of straight broadband and telecommunications. We were not able to access any Networking the Nation funding, for example, even though we were able to put up what we felt were some very competitive projects. The word that we got back from Canberra was effectively that we are not west of the divide so we are ineligible to access that particular program.

Council has put in place a telecommunications group. In effect, council has identified all the telecommunications providers in the city and got them to sit at a table and talk to each other—which I have to say has been no mean feat and has put considerable strain on Sarah's resources and time. But we feel that that has actually been a very good group. Once they did get together I think they saw the value in talking to each other. It is not about exposing their own strategies or secrets; it is about talking across a table about some issues that affect everybody and trying to find some cooperative coordinated solutions to that. We feel that this is assisting in removing impediments to some extent.

This group has been an important reference group for council and it is from initial discussions within this group that projects such as the telecommunications snapshot project—which is really a snapshot that we distribute to the community at large of all the telecommunications providers in the city—and also the broadband expo have been developed. Recent meetings have identified that we do need to put in place a generic broadband marketing campaign. We are working with the telecommunications providers to do that, through a major initiative to really get people to understand what getting broadband is all about and what you can use it for.

Regarding broadband for new residential and property developments, we are working with the development industry, telecommunications providers and council to encourage developers to implement broadband infrastructure at the point of development. We are promoting the benefits of broadband to new developers, ensuring the provision of the relevant information that they need to make hard business decisions and explaining why they should be including broadband infrastructure at development rather than trying to retrofit it. We are ensuring the provision of broadband services as part of development applications and approvals within the city. So, from the internal perspective, the council's economic development area has been working with the planning area to try to ensure that that becomes a normal part of the development approval process. We are looking to adopt that within council's new planning scheme, which was recently released. We are working with planners and other people within council to try and make that happen.

It is also about encouraging broadband content in applications development and identifying and considering programs from council's own budget to support broadband content and

applications development from SMEs within the city. We hope that we will be able to bundle that with state and federal government organisations and also with educational institutions, such as Griffith University, Bond University and other universities, to leverage up our dollar. Our philosophy is to make \$1 into \$4, for example. I should note that we do not have CSIRO research facilities or those types of federal government facilities in this city. Certainly, we have encouraged the universities to expand their own research facilities. We provide a significant amount of funding to universities such as Griffith University, to encourage research. We fund chairs in a number of CRCs. We support the Institute for Molecular Science and Drug Discovery, which is now called the Centre for Glaucomics. So council, through its own money, is funding a lot of these things to encourage research and technology development.

We have been heavily involved in broadband information seminars, expos and conferences, through officers such as Sarah Cobb. We have tried to work with organisations such as NOIE—we have tried to get funding assistance from them to run these programs—but to date that has had little or no effect, because their programs are just not geared towards the type of work that we are doing in encouraging broadband uptake. That is not necessarily a criticism of NOIE; it is just the way they have structured their programs. We have put in place a broadband expo, which has been extremely successful in 2003. We are holding it again in 2004 and we hope that it becomes an annual expo where telecommunications providers, broadband suppliers and other service industries related to broadband will come to exhibit. We will then provide a very large marketing campaign to get residents and businesses through the expo so that they can learn about broadband and why they should be using it. We have had a lot of support from telecommunications providers such as Telstra, PowerTel and OntheNet and also from some of the larger developers in the city, such as Delfin and Lend Lease, which obviously have an understanding of broadband and of why people should be using it.

We have also undertaken a demand aggregation exercise, which is about identifying precincts or nodes within the Pacific Innovation Corridor and the issues or lack of access that businesses are experiencing within those precincts. We physically go into those precincts, talk to business providers, aggregate their demand and take that demand back to the telecommunications providers in an open forum where they can pitch to those precincts for that business. Last year we established a pilot project in Yatala, which is in the north of the city, next to Beenleigh; it was extremely successful. The high cost of broadband connection in the past, or limited ability to access broadband in the past, has resulted in that demand aggregation exercise. Businesses in Yatala now have access to two broadband solutions. We are now rolling that out within the Gold Coast airport and in the John Flynn hospital medical precinct at Coolangatta. We are also undertaking that within the Gold Coast Marine Precinct. We see that as a very successful initiative in terms of getting businesses online. We are assisting them with making the hard decisions. We are taking the legwork out of it for them and putting telco providers in touch with business. Once again, that has been an initiative of council, without any assistance from any other government organisations.

CHAIR—Thank you. That was incredibly comprehensive. You dealt briefly with access to federal government programs. Have you been able to access any assistance from state government in respect of getting these initiatives together, particularly in demand aggregation, additional access nodes and so forth?

Mr Perry—Through the Information Industries Bureau we have had some success in accessing their funding programs. They have been a very close partner. In fact, an IIB officer does actually sit with council's economic development office three days a week, to work closely with council and business in the city. Yes, we have been successful in Information and Innovation Economy funding to some extent. Sarah, do you have anything to add?

Ms Cobb—We have not had any specific funding into things like the demand aggregation program and the broadband expo, although I had initial discussions two weeks ago with state government about the possibility of doing something in the next financial year. We are waiting to see the outcome of that. The majority has been led by us.

CHAIR—In regard to the whole general issue of access, the state government puts a lot of emphasis on its SmartNet, Reeflink and the other various attempts it has made to try and lever off its own demand to get access for broadband. Has any of that created any openings for Gold Coast?

Mr Perry—We have not had access that I am aware of to that infrastructure. It essentially goes north or to rural and regional Queensland. For example, QRail does allow telecommunications providers to use its own corridors, so a number of providers have used that, such as Ucomm, I think. Physical access to Queensland government infrastructure has not happened at this point. However, we have been talking to the Queensland government through the South-east Queensland Telecommunications Strategy about addressing some of these issues, but they have yet to progress a number of those recommendations, as far as I can see.

CHAIR—In terms of the demand aggregation pilot projects you were talking about, what sorts of projects do you think should be prioritised under the National Broadband Strategy?

Ms Cobb—We were really quite excited about seeing the Community Brokers program coming to the fore. We would certainly flag that as one that we could see as leveraging up what we had started with. At this point, Gold Coast has been excluded from that program.

Senator LUNDY—Is this the \$8.4 million of federal government funding?

Ms Cobb—That is correct. We saw that as an opportunity to expand it through other Pacific Innovation Corridor precincts and into a lot of the residential areas. We felt that we had a good working model that we could simply then replicate. As I said, we have actually been excluded from that program under the current guidelines, but when I sought clarification on the Higher Bandwidth Incentive Scheme and found that, although the wording of the guidelines excludes Gold Coast City, when you go into the maps two-thirds of the city is actually included. So you can see some of our difficulty. I have emailed the manager of the Community Brokers program to seek clarification to see if that would apply, because that would be very effective and we would be very happy to work with them on that basis. The places that we are having problems connecting are mostly in the areas that we would be eligible for under the Higher Bandwidth Incentive Scheme.

Mr Perry—I think it is a blanket definition of, 'You are a metropolitan or urban area, you are adjacent to Brisbane, therefore you should be removed from that particular program.' Once again, it is perhaps a lack of understanding of the city.

Ms Cobb—We are very flexible; we are very happy to discuss any options or opportunities. At this point, simply because that is available and on offer, we would like to be able to access that particular program.

Mr Perry—It is not seeking a handout; it is seeking to work cooperatively with council, because we are prepared to provide funding to cooperate jointly with other government agencies.

Ms Cobb—I think also that, being on the ground, we have the contacts; we already have the relationships. It is very easy to value add onto that.

CHAIR—I want to come back to the issue of RIMS and pair gains. You indicated in your earlier statement that, because it is a high-growth area, the proportion of RIMS and pair gains this year will probably be higher than most, because of the need to manage population growth. How do you seek to manage those issues with developers and with Telstra over time?

Ms Cobb—Telstra's Gold Coast officers are very aware of the issues with RIMS.

CHAIR—I am sure they are.

Ms Cobb—They are extremely aware of those. In fact, one of the two solutions they put in to Yatala was their ADSL solution. We had another company—Managed Solutions—put in a wireless solution. The ADSL solution was actually one overcoming the RIM behind which Yatala was developed. So the issue was raised very early on as that was an initial project as at the opening of Telstra's Country Wide office in the city. On the Telstra web site there is a list of the RIMs that they are looking at tackling in the immediate future. A lot of those for the city have been addressed, and they are actively working at other ones. One of the difficulties for us is that we do not actually have a list of where all the RIMs are located. One of our issues in addressing black spots for the city is that a lot of companies keep commercially in confidence which areas they are able to supply to and which they are not. One thinks it would be nice to draw a lovely map and be able to identify that these areas are able to access broadband and these areas are unable to access broadband and then we could actually tackle the black spots, but it is very difficult to get that information. It is also difficult because of the different compatibility of technologies. It is interesting that the high bandwidth incentive scheme acknowledges that and acknowledges the fact that, although you may be located in what is classified as a metropolitan area and therefore excluded from the scheme, if your connection is incompatible due to technology, you are able to come back into the scheme and access it. Among the issues we face is the fact that there may be a RIM here and it may affect these buildings, but the house next door, or the building next door, can connect. So it is actually very frustrating trying to identify that.

I know Telstra does work actively here, and I would acknowledge the fact that John Lister and his team did organise in their first year in the city to have a delegation of approximately 60 representatives from Telstra come up here to look at it from the investment side, to actually be able to understand and experience first hand what was happening in this city—what were the issues, what were a lot of the major developing areas—so that they would appreciate that and hopefully get these issues addressed in a timely manner for us.

CHAIR—Has that helped in terms of that need to ensure that new developments are more broadband friendly?

Ms Cobb—No, I do not think that has reached that stage at this point. That is a general impression of mine, not based on fact, I should say. But we did approach the UDIA last year, as part of the broadband expo, and they had an afternoon seminar which we sponsored on broadband technology and new developments, to try to raise awareness to the development community. The fact that increasing that is something that we really need to tackle this year was raised again at our last telco meeting in January.

In some of the suburbs in the northern area of the city, particularly around the Coomera area, there has been a fair investment in infrastructure, and there has then been fibre to the home in a number of new developments at that end of the city, which is terrific.

Mr Perry—I do not think developers in the past have seen it as a selling tool, although, I have to say, within Varsity Lakes, for example, there are a number of developers who identified the fact that broadband uptake is going to be a good selling point and enable their particular buildings.

Ms Cobb—I think also they have been advocates for it within the city, which has been excellent as far as we are concerned. But there is still work to be done on it, and it was, as I said, raised as one of the issues to tackle for this year, as a project within our economic development branch.

Mr Perry—Getting it as part of the planning approval process is one of our key aims, although, unfortunately, because of the pace of development in the city we have not been able to implement that at this point. So, even though we are going through an internal process with bureaucracy et cetera to make that happen, development continues unabated outside.

CHAIR—I have a final question, which you have sort of addressed in your earlier statement, but I would be interested in looking out another five or 10 years: with regard to a major project like the Pacific Innovation Corridor Project, with its emphasis on the marine precinct and the media precinct and so forth, what do you really need for that to be successful and expand to its next stages in the next five to 10 years?

Mr Perry—It is really an access proposition—high-speed, cost-effective access. That is still the impediment at the end of the day. We have a lot of fibre in the city. We should not complain about the amount of fibre we have in the city. It is the age old question of that last mile connectivity, which we have not found the—

Ms Cobb—I would also like to add that I think the competitive position from Robina to Coolangatta needs to be revisited, in that the majority of our competitive fibre goes as far as Robina. We put in an expression of interest to the coordinated communications infrastructure fund to continue the Pacific Innovation Corridor. However, we had misunderstandings or difficulty in determining exactly where the city stood, because the initial guidelines indicated that all areas except capital cities are considered regional, so we developed a project on that basis. Two days before we were due to submit it, I thought, ‘I’d better just clarify this. When I phoned I was verbally advised that areas classified as adjacent urban areas, such as our area,

Newcastle and the Central Coast, were actually excluded. We then got the okay to be able to submit it, but it was obvious to us from the impression that we were getting that projects such as ours in an area such as ours were not being targeted under this particular program; there was a much more regional focus. So we as a city have decided to withdraw and not continue the process, instead putting those time and effort resources into other projects—which are the sorts of things we have talked about today—for which we can guarantee a higher probability of return and which address the particular connectivity from Robina to Coolangatta.

Mr Perry—Also ensuring that educational institutions have full and open access to the AARNet neighbouring network, to ensure that their R&D and technology development continues.

Senator LUNDY—Just to clarify on the definition of ‘city’, was that for HiBIS or the demand aggregation brokers scheme?

Ms Cobb—You ask about the clarification of ‘city’. Within the Higher Bandwidth Incentive Scheme, the Gold Coast is specifically excluded in the written guidelines, but on the map—and if you would like to see that, I have a copy of the map—

Senator LUNDY—No, I made some notes when you said that.

Ms Cobb—It is quite clear on their map that two-thirds of what is classified as Gold Coast City is actually included in the program and only one-third is excluded. So we then went back to the Community Brokers program, explained our classification under HiBIS and said, ‘Could you clarify the city’s status?’ because certainly within the CCIF we were initially excluded.

Senator LUNDY—So when you went back and made that phone call two days before the close, was that in relation to the demand aggregation program?

Ms Cobb—No, that was in relation to the coordinated communications infrastructure fund. They indicated to me on the telephone that there had been some discussion. They were not able to give me the answer straightaway; they said, ‘I just need to seek clarification on this.’ Then we were told that a decision had been made. I phoned a number of the other cities that had been affected—Geelong, the Central Coast and a number of the economic development areas—and they were unaware that they had been excluded. Nobody had actually communicated.

CHAIR—Obviously someone has rung somebody, because the minister is now reviewing the definition. Submissions close today.

Mr Perry—That is a good outcome.

Senator LUNDY—Again for clarification, you said earlier that you were ineligible to apply for the demand aggregation initiative. Does that have the same definitions as HiBIS or are there other criteria?

Ms Cobb—We do not know. I have a copy of the guidelines. Regarding eligibility, page 3 of the guidelines states:

Applicants must be regional, rural or remote organisations ...

We would certainly be in the regional classification. But under the program objectives, on page 5, it states:

For the purposes of the Demand Aggregation Brokers Program, regional areas include all of Australia except for capital cities and adjacent major urban centres.

That is the clarification of what we were classified as and the reason for initially being excluded from the CCIF program. As a result of the HiBIS one, I thought we should email them and seek clarification. I am awaiting a response to my email.

Senator LUNDY—And that is the one you made the phone call about two days before the close—no, that was CCIF.

Ms Cobb—Yes, I did the other two by email so that I would have a record as to our classification on file.

Senator LUNDY—It is not surprising then that the government is trying to clarify some of those things. You might have a little more luck next time. I too would like to go to the issue of RIMs. I was very interested in your evidence about your inability to get a definitive list of where RIMs are located within the exchange service areas in your jurisdiction. Have you specifically asked Telstra for that information?

Ms Cobb—I have not specifically asked for the exact location of every RIM in the city, no. The last update I have was actually taken off the Telstra web site. They have produced a list of the MiniMux locations and the suburbs they are in, identifying the streets they are in, and when they are aiming either to have those completed or to have addressed those issues.

Senator LUNDY—But that is not where the RIMs are—

Ms Cobb—That is not necessarily where the RIMs are.

Senator LUNDY—that is just where they have acted.

Ms Cobb—Yes. I have not specifically asked. We have asked in telco meetings, including at the meeting on 29 January, if companies would be prepared to identify where they do and do not cover. The solution we were suggesting and that we managed to achieve was that, as part of a generic marketing program, we look at developing a web site with tools and the like where there might be some form of searchable database with a drop-down menu where you put in, ‘I’m in this suburb.’ It would be terrific if you were able to identify it down to a street level, but it is likely that it would be on a suburb level, where we would say, ‘These companies are providing into various levels of a suburb,’ and you could contact them. You will have seen in the attachment to our submission, the telecommunications snapshot, that we do have a lot of providers in the city—

Senator LUNDY—Yes, I noticed that.

Ms Cobb—and people find it very confusing. They will maybe ring two or three, find they cannot get a solution and give up. I think that we have a role as local government to make it a simpler process for people—even if we were able to say, ‘There are six companies currently providing services in your area.’ But Telstra and their competitors—let us put them all together—were in general reluctant to provide the information on a more detailed basis.

Senator LUNDY—And with no accurate information no-one can establish a business case, let alone assess their service options.

Ms Cobb—I think where we have done it in general, where we have resolved the issues, is actually in responding to community needs. As the community come to us and say, ‘We have a problem’, we identify whether it is just them or other businesses as well. We have concentrated on the business sector, and we hoped the community brokers program would assist us on the residential side. But we respond to feedback from the community; we have found that is more effective.

Senator LUNDY—You raised the issue of development approvals and putting in place some guidelines and said that you were still working through those processes. What is the aim there? Is the aim to determine a prerequisite level of broadband availability in new developments and as a council mandate that—require that—before any investment is made?

Mr Perry—Effectively, yes.

Senator LUNDY—What would be the mechanism to do that in your engagement as a council with the telecommunications services provider, as opposed to the land developer?

Mr Perry—That has been one of the issues that we have had some difficulty resolving, because the developer often effectively subcontracts to the telco provider to lay the infrastructure, along with a number of other services—people like Ergon and Energex or whoever. That has been a little bit of a thorny issue, which we have not resolved. But, at the development approval process stage, as part of the planning scheme and that whole approval process, we really do want to have tick boxes: what is the broadband infrastructure providing? How do you provide that? Tick box—you can keep going. Planners are very experienced people, but unfortunately a lot of them still do not quite understand broadband applications and what broadband means. We have been questioned at length about why a house would need a broadband connection when they can use the telephone line. So internally there is an education process that we have had to go through to get them up to speed, and that has retarded our ability to put in place something more concrete.

Senator LUNDY—Would it be your aim as a council to try and encourage or initiate a competitive process at that level of engagement between the developer, the council and the telecommunications infrastructure provider?

Mr Perry—We would really like to see the developer engage in that. The developer should be coming to us and saying, ‘Look, I’ve sorted out my broadband requirements. I’ve got it. This is what I am doing. Here is the evidence.’ Okay, tick. You have done that as part of your requirement.

Senator LUNDY—What statutory obligations or process obligations are you under as a council to notify telecommunications carriers of a pending development and are there any characteristics of that process that are anticompetitive or that limit competitive opportunities?

Mr Perry—There is no statutory requirement that I am aware of, but I will take that question on notice to further ask our planning area. But really the developers are talking to people like Telstra, because they have to provide phone lines. People see that as a normal part of a development. You need a telephone.

Senator LUNDY—So Telstra is still the default infrastructure provider, as far as you can see?

Mr Perry—Yes, and there is nothing wrong with that. Once again, it is giving developers the choice. There might be some areas in the city for which Telstra is unable to provide cost-effective services. There might be some wireless solutions. We have a number of wireless companies in the city. It is about giving developers a choice so that they are able to evaluate and assess what is the right technology and infrastructure for them.

Senator LUNDY—Does the Gold Coast council operate as a developer? Do you do any development of land yourself?

Mr Perry—No. In terms of telecommunications infrastructure, council also has a build-own-operate environment, and we are currently looking at some of that existing legacy of telecommunications infrastructure and trying to leverage that up and, maybe for some of our more remote depots where we have some dedicated telco infrastructure, to use that to provide that to the broader business and surrounding residential community.

Senator LUNDY—So your own mini aggregated demand model?

Mr Perry—That is right. Once again, IT people need a little bit of leveraging and information.

Senator TCHEN—At the beginning of your evidence you said that there is a common perception that the Gold Coast is built by private enterprise. I realise you were quoting. However, you quoted without any disclaimer, so I assume that you accept that as well. Given that context, it must imply that the Gold Coast has all the geographic, economic and growth advantages, or enjoys a certain degree of that, right?

Mr Perry—Yes.

Senator TCHEN—In that case, is it reasonable to think that, in your demand for additional broadband funding from the federal government, the Gold Coast is seeking to demand for its cakes the raisins the government is trying put in the porridge of the rest of Australia? Is that fair?

Mr Perry—No, I do not think so. The Gold Coast has many of the good aspects of entrepreneurial activity. The good aspects are really what have built this city. But we cannot continue to do it on our own. We are being overwhelmed by our inability to provide adequate levels of service infrastructure. We have done it effectively on a shoestring budget for so many years that what has happened is that we have been left behind in the infrastructure race. We are

playing catch-up and will play it for many years, because the growth has exceeded our ability to provide the infrastructure. Yes, we have gone and done it ourselves, and the business community have said, 'We are going to do it—to make it physically happen,' but there comes a point where you are overwhelmed and you cannot do it anymore.

Senator TCHEN—Certainly the Gold Coast council has done some very impressive work in terms of providing information technology, strategy and incentive for growth in this area.

Mr Perry—Thank you.

Senator TCHEN—I will come back to that later. I would like you to go through more of that with us. Firstly, on Telstra's service, I noticed that you were not critical of Telstra's service, but it might be fair to say that your comments about them were lukewarm. If we look at Telstra's function as a purely commercial one, one would expect that Telstra would be making every effort to provide service to a high-growth area like the Gold Coast. If they have not been doing that, could it be that their resources are limited because they are required to be diverted to support other parts of Australia which, without that support, would be information technology basket cases?

Mr Perry—I think there has been a national focus on rural and regional Australia; and Telstra has got some community service obligations et cetera to meet in that respect. I think Telstra's commitment to the city is signified by the fact that it has now opened an office, and that has been a fantastic result for us. I do not necessarily think it is about resources. I think it is perhaps some business case cost drivers, return on investment, et cetera. We do not think that you should wait until there is significant demand before you provide it. If you provided it, you would drive demand. That is perhaps some of the philosophy that is still there.

Senator TCHEN—Certainly the Gold Coast council seems to have that philosophy—

Mr Perry—That is right.

Senator TCHEN—You have listed some of the council's initiatives—I think this is the sixth year, historically; it might be more—and I wonder whether you can take the committee through the reasons why the council chose those particular aspects and how you went about doing it. Particularly, could you tell us whether your actions were in response to what you perceive as market failure or whether you were trying to encourage markets in that particular direction. In other words, could you tell us whether the strategies you developed were proactive or reactive.

CHAIR—That is a very big question. Do you want to narrow that question down?

Senator TCHEN—I just want to get a feel for it, Mr Perry. Maybe you can do it in 10 minutes.

Mr Perry—They have been reactive in some respects, because we have identified market failure definitely in terms of the demand aggregation project. Certainly that was a failure of our ability to connect business with telecommunications providers. So, yes, we have taken a number of proactive initiatives such as the Broadband Expo and broadband seminars. We have sponsored a large number of seminars around broadband, such as the Australia-Korea Broadband Summit,

which would not have come to the city if we had not sponsored it. We worked with Microsoft, I think, on that. Through council's economic development strategy, we have a philosophy where we want to develop knowledge based industries. We are not unique in terms of a global perspective about what we want to achieve there, but we have identified some of the key city projects that we need to put in place to make it happen.

One that I did not mention was the Innovation House project, which was really about putting in place, with partners such as Delfin Lend Lease, a house or apartment facility which is packed full of products which use broadband: things like Internet fridges, security cameras and plasma televisions—all of which run off broadband services and applications. We were able to leverage over \$150,000 worth of funding, and it would not have happened if council had just sat back and said, 'Everyone get together and we will all feel good about Innovation House.' In many instances it is about council making a financial commitment to something and then leveraging up industry partners to make things happen, and I think that is where we do some of our best work in terms of the economic development program. That project was open for seven months. We got over 3,000—probably closer to 4,000—visitors who, we hope, have been encouraged to go and take up broadband services.

That was a proactive project which we think has fulfilled a need to educate business. It is a whole facilitation and education process, and there is some reaction time in there, but as we get better at this job we really feel that we are identifying some gaps ahead of time and we are trying to put in place projects to make that happen.

Senator TCHEN—In these innovative projects, like Innovation House, you obviously had a very good response from the community. Did you get much response from the infrastructure providers? I think that the link underground is the important part to make it work, isn't it?

Mr Perry—Yes.

Ms Cobb—I think we should say that it was a part of a range of programs we were running at the time to encourage the understanding of broadband and how it would affect the way we live and work. On that basis we certainly have support from the telcos as a whole towards the program. As I said earlier, in our latest meeting we will be looking at continuing a further promotional program on broadband, our objective being to broaden people's understanding of the different types of broadband available and also the different providers within the city. This is not a criticism but a fact: Telstra has been very effective in advertising their ADSL, and the result is that people phone me and do not say, 'I can't get broadband,' they say, 'I can't get ADSL.' Therefore a perception is forming in the marketplace that ADSL is broadband, and we need to counter that so that we give a wider perspective to the community.

Mr Perry—It is about providing consumers with that choice. We are now undertaking Innovation House 2 as a project, to really continue that broadband dissemination program. That will also involve environmental and other applications and will be a stand-alone facility.

Ms Cobb—At that last meeting we talked about expanding our generic promotional program. I asked the telcos in attendance at that meeting if they would be prepared to support such a marketing program financially. They said they would certainly consider it if we brought a marketing proposal to them. They have also supported activities such as the broadband expo, by

being involved as participants and sponsors. So I think we can say that as a whole the program has been supported by the telcos.

Senator TCHEN—Thank you both.

CHAIR—Thank you very much for your evidence. It is incredibly informative. Congratulations on the work you have managed to do, and I hope it is successful into the future.

[12.02 p.m.]

BRUHN, Mr Carl Francis, Project Director, Varsity Lakes, Delfin Lend Lease Ltd

McKEE, Mr Neil, Deputy Chairman, Gold Coast Region Information Technology Forum Inc.

PROVEST, Mr Geoffrey William, Chairman, Gold Coast Region Information Technology Forum Inc.

CHAIR—Thank you for giving us your time today. It is much appreciated. We are aware that you are appearing together as a matter of convenience to the committee's program and that we should not assume that any of you necessarily endorse the evidence of any of the others. In fact, it is understood that there is a possibility that Mr Bruhn will appear again this afternoon in conjunction with the presentation of the Silver Communities. Is that the case?

Mr Bruhn—At this stage I will leave Mr Barclay to make that presentation.

CHAIR—I will now invite each of you to make a brief opening statement before we move to questions.

Mr Provest—I would like to present an outline of the position of the Gold Coast Region Information Technology Forum. I will be supported in that by the deputy chair of the forum, Mr Neil McKee.

CHAIR—Please speak up as we are having a little trouble hearing you.

Mr Provest—I will present an overview of the comments we wish to make to the committee. I will be supported in that by the Deputy Chairman of the forum, Mr Neil McKee. Mr Bruhn, from Delfin, will talk about some of the experiences that Delfin Lend Lease have had in relation to the Varsity Lakes and Varsity Central developments. The Gold Coast Region Information Technology Forum, which I will refer to as the forum during these comments, is the first of the Gold Coast City's industry forums. There are about 10 now in all, covering a wide range of different areas of economic activity. We were formed in August of 1997. We have a mission, which we have given ourselves, of promoting the development of the information technology and communications industries in the Gold Coast region and promoting employment within those industries. So it is essentially a public, community based focus, rather than that of any individual company, or a more narrow interest.

Our membership comprises employees and office holders of most of the leading information technology companies on the Gold Coast, including IBM, Eracom, Telstra, OntheNet and Golden-Orb Technologies, as well as numerous members from Griffith University, Bond University and many of the schools. Many private professionals and employees of other general businesses are also represented amongst our membership. We are a broad based, community/business organisation focused on promoting the development of the information technology and communications industries in the Gold Coast region.

Our activities are supported by sponsors at the federal, state and local government levels. The federal government has supported the activities of the forum in the past with the Regional Assistance Program. We had a grant a couple of years ago of \$80,000, which was spent on various activities to promote employment in the industries. The state government, through the Information Industries Bureau and the Department of State Development, is a sponsor, as is the Gold Coast City Council. We employ a part-time executive director and a part-time secretary, and we have a volunteer committee of 10 members this year.

Our activities have, since the beginning of the forum, comprised a monthly breakfast meeting where we have a speaker of general business interest. Those breakfasts are usually well attended. Each week we send out bulletins on matters of general news affecting the industry to 800 people on our list server—for which we thank OntheNet, who have sponsored that activity at no charge since 1997. We lobby on matters of importance to the industry and we provide representation to organisations of importance and influence such as the Regional Economic Development Advisory Committee of the Gold Coast City Council and the Queensland IT&T Industries Forum, which meets up in Brisbane. We have a web site, www.gcritf.com, on which you can find out more than you ever wanted to know about us. We work cooperatively with other organisations to deliver services that are of benefit to the broader industry—such as Tech-talks to help the technical community—and we have worked with the Australian Computer Society, representatives of whom, wearing different hats, will also appear before you in the course of your hearing here on the Gold Coast.

We have played an active role in community education. Some examples of that include seminars we held on the Y2K problem back in 2000, careers education which we provide in local schools and other forums, and our participation in the annual Broadband Expo, which the council has organised. In addition to all that, we have a scholarship program at Bond University, which provides an annual scholarship. The particular organisations that support that vary, but it is a valuable and worthwhile activity of the forum as well.

Since the earliest days, the forum has identified the implementation of the Pacific Innovation Corridor as the No. 1 economic priority for the Gold Coast. The Gold Coast needs to diversify from tourism and property development, which have always been the mainstays of the economy, into other activities of first-world countries if it is to succeed and fulfil its potential in the long term. So we actively support the council's vision and work to help bring it about. It is fundamental to that vision that broadband be available at world competitive quality, particularly to all the nodes, otherwise it is a concept without substance.

It has been a matter of concern to us that there has been difficulty getting broadband available to users throughout the Varsity Lakes and Varsity Central developments. Mr Bruhn will speak to some of the practical issues which have impeded the full success of that key part of the city's economic development.

It has always been the policy of the forum that broadband should be available to all businesses and all homes on the Gold Coast. We say that this is a fundamental issue in the 21st century. As the federal government contemplates the full privatisation of Telstra, it does need to consider the issue of availability of broadband to all businesses and all homes—we say the availability to all homes on the Gold Coast but obviously that extrapolates to the entire country. Unless broadband

is available, there cannot be economic development that will enable our residents and businesses to participate in the First World economy.

I want to take this opportunity to publicly acknowledge the very important role of the Gold Coast City Council in driving economic development here. The council's role is not an intrusive one. We do not have the dead hand of government getting in the road; we have the supportive role of government working with us and individual businesses, doing practical things to help make a difference. I know the role of council—in Grayson Perry, Sarah Cobb, Greg Young and their whole team—is very much appreciated, because of the visionary role they play.

We say that broadband is particularly important on the Gold Coast because the information technology industries here are microindustries. There are surveys done every two years. The last survey found that there were over 700 ICT businesses on the Gold Coast, 70-plus per cent of whom employed fewer than five people. Many of those businesses are in the suburbs and in outlying areas. They are conducted in people's garages and homes. This is the nature of economic development here. It is important that broadband is available to these businesses and that they do not have to come into the major commercial areas. However, we do have concerns about the lack of broadband in some very significant commercial areas such as Varsity Lakes and Bundall.

The position of the forum about the type of technology by which broadband should be available is neutral. We just say that it should be available. There has been considerable debate within the forum, particularly in the context of preparing our submission for this committee, about the type of technology. There are a considerable number of people who see wireless as the way forward and the way to bridge the gaps; others have a diversity of views. As an organisation we are neutral on this but, in fairness to the many people who have expressed opinions, I should mention that.

We think that the definition of broadband is an important issue which often clouds debate. Arbitrary definitions are often put forward about how many kilobits a second upload and download it has and that sort of thing. We think that the focus of a definition ought to be what is required to deliver the applications online by way of both upload and download and we think that there needs to be a forward 10- and 20-year view about where the industries are going. Definitions should be set, based on the requirements of the applications.

In the context of preparing our comments today, we have asked our members to email back to us to tell us if they have got broadband available or not, because, although it is only anecdotal, we are interested to see what people have to say about whether they do or do not have broadband. I will ask Mr McKee to hold this map somewhere where it can be viewed.

A map was then shown—

Mr Provest—The blue dots on the map represent those who have responded to say they have cable connections, the green dots are those with ADSL, the red dots are those that say that they do not have broadband at all and the yellow dots are those with wireless connections.

Obviously, the type of broadband in some cases simply reflects the choice of the individual user. But some of the red dots on the map are in areas where there ought to be blue, green or

yellow dots. They are quite major commercial areas, and the fact that there are red dots in the middle of the ICT hub of the Gold Coast is outrageous. It is a matter of most serious importance to us that it be addressed. I will ask Mr McKee to turn the map for the benefit of the audience, so that they can see also. There seems to be very little broadband south of about Burleigh.

We see the issue as being fundamentally one of availability rather than of competition. We know the committee's major concern is competition, but really we see the issue as being one of availability, because broadband is such a valuable service that the economic cost to most users pales into insignificance once broadband itself is available. The one qualification for that, of course, is the case of commercial users whose businesses are based on broadband itself, such as Internet service providers. You will hear from OntheNet and Silver Communities later today, and they will speak for themselves. But I have had representations from some members complaining about the differential pricing available on the Gold Coast—it is being treated as a regional area—and the general uncompetitiveness of bulk procurement of broadband. I cannot take that comment further, because I am not privy enough to the economic factors and the pricing information behind it, but I highlight that as something that has certainly been of importance.

After availability, the issue seems to be one of take-up. Obviously providers have to be able to make a commercial return. We think the issue of take-up needs to be addressed with a lot of community education about the benefits of broadband. In particular, we find the tendency of many dial-up users to resist moving to broadband difficult to understand, given that the cost of broadband is usually on a par with, and in some cases cheaper than, dial-up.

Finally, the forum wishes to record its concern at the exclusion of Gold Coast City from federal government grants such as the various NOIE grants that the representatives from council have indicated to you. The Gold Coast seems to miss out both ways. It seems to be treated as neither city nor country. It is a large city, and it properly requires and should receive support. I do not have anything else I wish to say at this stage, so I invite Mr Bruhn to speak.

Mr Bruhn—Thank you for the opportunity to present to you today. Not being a technical person and not being an expert in the field, I will endeavour to relay to you some of my experiences with the Varsity Lakes project on the Gold Coast. I would point out that I do not represent the view of Delfin Lend Lease or that of Lend Lease nationally or that of any other group represented here today. Although many Delfin projects nationally may share my experiences, the localities of these projects vary significantly, as do the communication platforms, partners and strategies. My comments therefore will specifically relate to Varsity Lakes. Should the committee desire, I would be more than happy to recommend to our CEO that Delfin Lend Lease prepare a group-wide statement, if that is of assistance to you.

CHAIR—It is up to you how you present to us, but certainly written statements are things which we can study at length.

Mr Bruhn—By way of background, the Varsity Lakes project is about 343 hectares in size. Ultimately it will have about 3,000 homes and probably a population of about 7,800 people. The project value is in the vicinity of \$1 billion, and it is expected to take six to eight years to complete. We have been operating since August 1999.

In my presentation today, I want to relay my experience with broadband across two sectors within Varsity Lakes—namely, our residential community and our business community. I will complete my presentation with the key points from both sectors. The Varsity Lakes residential community is a fully planned urban community which will house, as I said earlier, approximately 7,800 people in 3,000-plus dwellings. The demographic of Varsity Lakes residents is very diverse. You may see it as being representative of the many different household types we find in today's complex urban fabric. To cater for this diversity, Varsity Lakes offers a full range of housing types, from units and townhouses to standard homes and executive residences. A further attribute of this diversity is the city's high dependence on small private businesspeople, many of whom work from home.

How does a diverse population such as this communicate? Unfortunately, they are limited to a standard 56k dial-up connection. It is astounding that a community such as Varsity Lakes in this day and age does not have access even to ADSL, as a bare minimum. Since the commencement of Varsity Lakes construction in 1999, we have been proactively installing additional conduits in most streets throughout the development, with the hope that true broadband would become a reality. It has not, and broadband reticulars remain somewhat of a dream.

Surveys of our community show that approximately 70 per cent of our residents own a computer and have access to the Internet. Given the myriad information that is available these days, and our desire to implement things such as community portals to enable our community to better communicate, it is very difficult to do without an effective platform to bounce it off. If you think then in terms of the benefit that such a system as a community portal could provide to the economics of the community, it is quite astounding. Not only could we do a lot more of our interaction online, we could also pay our rates and bills online, reduce a lot of travel time and reduce a lot of time spent in queues in banks et cetera. It is astounding that we cannot readily do this in today's environment.

With a population currently exceeding 2,000 residents, the complaints we receive relating to the provision of decent Internet access are at an all-time high. Telstra are aware of this issue and I believe are implementing new equipment to existing RIMs to enable ADSL. This is very encouraging, but the question that remains is: when is this going to happen? Telstra in the last probably six months have been very supportive and willing to listen to our concerns. I know they are working very hard to placate our residents, but this still remains an issue that has not yet been fully addressed.

Where a community is predominantly residential, broadband providers are saying the take-up rate is not sufficient to justify its provision. Given this, the only way all residents will have access is for developers to directly fund the infrastructure. Obviously, this cost will be directly passed on to the residents—yet another of the growing number of examples of infrastructure providers passing on establishment costs to new residents in new communities, which is something that results in increased costs of home establishment, raising the bar on affordability. New communities are therefore suffering an inequitable distribution of infrastructure costs which older communities do not have to carry.

Varsity Central is the Varsity Lakes business hub. It is a fully integrated mixed use precinct which combines residential, retail and business into a vibrant town centre. Being approximately 40 hectares in area, Varsity Central, which immediately adjoins Bond University, will ultimately

provide employment for some 4½ thousand people. This job target is supported by the Gold Coast City Council and is consistent with the council's economic development strategy, and for Varsity Lakes it will be a node on the Pacific Innovation Corridor.

Despite having a point of presence—or POP—located within Varsity Central since 2001, the distribution of broadband fibre has been almost impossible, due to the reluctance of telco providers to take commercial risk and provide connections at a commercially acceptable cost. A recent survey we conducted of potential businesses to relocate to Varsity Lakes showed that broadband connectivity is by far the number one issue that businesses on the Gold Coast face. Ease of access and lower connection costs will enable business, in the Gold Coast City Council's words, to 'exploit the potential of broadband and economic development objectives can be achieved'. We need this to sustain council's and Gold Coast business's objectives to provide an alternate economic base for the city.

To overcome this issue with broadband connectivity in Varsity Central, we partnered with Silver Communities to roll out a broadband backbone through the Varsity Central precinct. I am extremely proud of the fact that we did this with no support from government. We have access to the best possible broadband infrastructure in Australia. However, the obstacles still faced by our partner, Silver Communities, still call into question the long-term viability of the Varsity Central initiative. Bruce Barclay, the managing director of Silver Communities, will address some of these issues this afternoon in his presentation. Within the Varsity Central precinct, we have a number of businesses pursuing broadband access with both fibre and wireless. However, without a secure and stable platform, their business plans—and those of Silver Communities—remain at high risk.

In summary, I would make the following points. Whilst significant broadband infrastructure exists on the Gold Coast, as most of the speakers prior to me have said, accessibility for all users needs to be addressed. Before we can have competitive broadband, we need competition. Competition is stifled, I believe, when the playing field is not level. Private enterprise, given the correct tools of governance, could assist to level the field and provide the necessary skills and tool set to converge the gap in the current marketplace. Telcos, with the support of government, should consider broadband communication, in today's world, as mandatory infrastructure, like power, water and sewerage, but provided in such a way that the cost is not borne directly by the home owner or business. Finally, the Gold Coast's responsible and strategic initiative to create an economic base other than tourism for the city must be supported by all levels of government. The issue of broadband connectivity is hopefully something that you, the committee, can help to address, to help us fulfil our strategy to promote this alternate economic base for the benefit of the residents of the Gold Coast into the future. Thank you for your time today.

CHAIR—I want to ask you a question about the second-last point you made—one that was interesting for me—which was that broadband should be considered by developers, along with power and water, as an essential type service. As I understand the way development approvals work, the developer ultimately has to pay a sort of head cost to the council, to ensure that water and sewerage are put on, but power and so forth are ultimately left to the power utility to put into a development, as I recall. What would be the significance of making a thing like broadband provision, for example, a condition of approval for a local government authority?

Mr Bruhn—That is a very good question, and I think a very long-winded answer may be required. As I see it—and as you said—with water and sewerage, typically a developer has the responsibility to provide essential services for the area under development. In some instances, there is also the need to provide head works charges for upgrading of surrounding and additional services which that community will need from the city. Power, as you said, is covered almost entirely by the power authority, apart from our obligations to install conduits and, at times, substations or transformers.

As was said earlier, we have provided a bare minimum of conduits, in just about every street in our project, to cater for that future development. This is not addressing the whole problem, although I think it is providing an opportunity to have a system in place that can cater for future reticulation of broadband. We are required to provide at the very least a communications connection, which in our case is done by Telstra; however, I believe we need to look at the infrastructure that is being implemented to see whether and how it can be upgraded. To simply say that it should be borne by—in this case—the development company I think is not reasonable. We need to look at this holistically; we need to look at it from a consumer's point of view. And, as said earlier, if we have to bear all the costs and provide all the infrastructure for the broadband service, it automatically goes straight on top of the land or the dwelling price. So it needs to be a combination of things. It is partly the developer's responsibility, but it is also the role of either the local authority, the state government or the federal government to initiate how we implement a true broadband infrastructure across the country.

CHAIR—Thank you. Mr Provest, I am not going to ask too many questions—I want to hand over to other people—but I was interested in your point about availability rather than competition being the key issue here. Are there any initiatives you would suggest that could work in an area like the Gold Coast to get some of the dark fibre brought online or opened up for that last mile access? Or is availability essentially about getting ADSL rolled out in the interim?

Mr Provest—That is an issue that I ought to refer to the members on. There may well be quite a diversity of opinion on that.

CHAIR—I am sure there would be.

Mr Provest—I could possibly make quite a useful written submission to you on that point, but I do not think I should shoot from the hip.

CHAIR—Sure. That is fine. It is one of the key questions in all of this, at the end of the day, so I am quite happy to put that question on notice.

Mr Provest—Mr McKee may well have an intelligent comment on this.

Mr McKee—I appreciate the point on the dark fibre. It could very easily be led up with very little capital cost, but it tends to still be only in selected areas and does not go the last mile. The last mile is our biggest single issue, and that is where there is such a diversity of opinion—whether it is wireless or cable. The cable that was put in previously, which has been mentioned, is wonderful, but it touches so few points on the Gold Coast—maybe six or eight points. Even 50 metres from one of those points there is virtually no service, so it is about getting out from those centres of fibre. The fibre is there, but it is not getting away from the fibre.

Mr Provest—The problem really seems to be that no-one is charged with responsibility for ensuring that broadband is available to all homes and businesses and so it is happening incrementally and in accordance with particular commercial driving factors for the various suppliers. But no overall approach, in our observation, is being taken to ensure that it actually gets to everyone. The end product, if there is no coordination, is going to be that some areas miss out.

CHAIR—They are my main questions at the moment.

Senator LUNDY—Going back to the original residential development and the relationship between the developer and the telecommunications infrastructure provider, or Telstra, what was the process—as far as you are aware—by which Telstra decided to install RIMs in that development?

Mr Bruhn—As I understand it, our development plans—as part of our approval process—are lodged with Telstra, and we need to get a confirmation from Telstra that they can provide a service to the particular subdivision or stage of development. I think partly Telstra may not have been fully aware of or may not have wanted to know exactly the extent of our development—as they are with some developments. They were probably just taking each application as it came in, and as far as I am aware they may only lately have started taking a more strategic view of the development strategy for the coast—and I think that is probably prevalent with our development as well. I know they are going back and modifying RIMs, and I understand that we are not putting in RIMs any more; we are now putting some other technology in place, which is fantastic.

Senator LUNDY—When did you first become aware of the broadband inhibiting features of the RIMs?

Mr Bruhn—In 1999.

Senator LUNDY—Was that before or after they were installed?

Mr Bruhn—It was probably when they were installed that we truly understood what the issue was between the RIM and the exchange, and how it worked.

Senator LUNDY—What course of action was open to you then, to either make a complaint to Telstra or to request different infrastructure, and what was your experience at the time?

Mr Bruhn—At the time, we probably could have taken it up more directly with Telstra, but quite often with the rate and demand of development it is something where you know you have at least a phone line—until you really understand what the consumer wants and will use. There is a bit of a catch-22.

Senator LUNDY—Is it a fair observation to say that you were really relying on Telstra to understand what the telco demand was, and as a developer you were really being led by their knowledge and understanding of the market?

Mr Bruhn—That is a fair statement.

Senator LUNDY—With the replacement technology or the strategy now to put CMUX services into RIMs, what is your understanding of the reach of that initiative into the residential areas? That is, have Telstra advised you what percentage of customers they will be able to service or how many ports for ADSL they are installing in the RIMs and whether all the RIMs have the physical capacity to host the CMUX?

Mr Bruhn—I am not entirely sure. As I understand it generally, the CMUX will cater for our population.

Senator LUNDY—I suggest they are very good questions to ask Telstra right now.

Mr Bruhn—Yes, I may need to go and clarify that with Telstra. Thanks for the advice.

Senator LUNDY—I just had experience in a fast growth, outer metropolitan region where the MiniMux pilot led to something less than 40 per cent of the RIMs being able to collocate with that technology, so it was not a viable long-term solution in the end. The other issue is that you said that you were investing in a conduit in the development. That is something the developer has obviously undertaken at your expense.

Mr Bruhn—That is right. We have put it in at our own cost.

Senator LUNDY—Did you try and negotiate with Telstra access to their conduit for the purposes of encouraging competitors to look at installing alternative infrastructure?

Mr Bruhn—I know that we had, at a broader level than project level, discussions with Telstra and others about additional conduits or utilising existing conduits, but it essentially all comes back to the competitive nature of the business. We elected to put our own in so that we knew that when or if it came time to introduce a broadband cable there would be a conduit there so that no-one could go away with the excuse that there was not enough space to provide one. We also did it for the fact that, if it did go in, the last thing we wanted was someone coming in and digging a trench through the whole development, uprooting trees and digging up driveways and all the things we had painstakingly planned for.

Senator LUNDY—Finally, on this whole issue of ADSL, one of its features is that it is asynchronous. You talked about an appropriate definition of broadband. Given what we now know about ADSL, how appropriate is it that federal government policy and so forth has such a strong emphasis on the reach of ADSL? What are your thoughts? Perhaps I could throw this open to all of you: the usefulness of ADSL in providing for the long-term broadband needs of Australia—in particular, your region.

Mr Provest—It is better than nothing at all, which would seem to be the harsh reality, if ADSL were not available. But I think Mr McKee may be able to comment on that.

Mr McKee—Yes. In summary, it is a stopgap to something more significant. Yes, it is an improvement on dial-up but it is only a small step. Sure, for residential it is quite a good step, but once you go to any sort of business it is not an acceptable step. That is our biggest problem down here as small businesses. Small business is throttled by the limitations of ADSL. A house can operate on ADSL but it is definitely a problem for business.

Senator LUNDY—What proportion of small businesses in this region are home based or located in the residential suburbs?

Mr Provest—There is a study done every two years by Mr Alan Blackman. The results of the most recent study are available on our web site. At the risk of getting the figures wrong—

Senator LUNDY—No, that is fine.

Mr Provest—you will find that it is something like 70 per cent. But that obviously needs to be checked for precision. It is very substantial.

Senator LUNDY—But it also links with this point that Mr McKee makes as well and the points that were made strongly by the council representatives.

CHAIR—A good half of your dots were ADSL links rather than broadband links from memory.

Mr Provest—That would be right.

Senator LUNDY—Just looking at the map being held up by Mr McKee, there are probably more ADSL dots than cable dots—by a significant amount. Is it possible for the committee to have this map as an exhibit—or a copy of it?

Mr Provest—Yes. We prepared the map for the committee, so we are happy to leave it.

Senator LUNDY—Thank you. I move that we accept that as an exhibit.

Mr Provest—We have prepared a schedule of individual addresses that relate to each dot, so I can tender that also.

Senator LUNDY—I move that that also be accepted by the committee as an exhibit.

Senator TCHEN—If you submit that as evidence it might be published; it almost certainly will be published. Would there be any privacy concerns for your members?

Mr Provest—I was not aware of that. Thank you.

Senator TCHEN—Do you wish to reconsider?

Mr Provest—We are happy to make the information available to the committee. I do not think it is appropriate for our members private address details to be published.

Senator TCHEN—Okay.

Mr Provest—Thank you.

Senator TCHEN—Chair, I am sure we can consider suppressing that.

Mr Provest—We are submitting the list so you can see the substance that lies behind the information that has been presented.

Senator LUNDY—I modify my motion to say that we will keep the details of the individuals confidential, as requested. I have another general question about the points you made, Mr Provest, about broadband being the No. 1 issue for the economic development and growth of this region. How long has your organisation been asserting that? I am pretty familiar with these issues and have been for a while. But how long has it been clear to your constituency here on the Gold Coast that that is in fact the economic priority for this area?

Mr Provest—The forum first resolved this in October 1997—

Senator LUNDY—1997?

Mr Provest—merely two months after it was formed.

Senator LUNDY—Okay, so for quite a while now. Some six—

CHAIR—Pre bubble.

Senator LUNDY—Yes. And it has remained as the priority? That is an interesting point that the Chair made. ICT was in a boom period. So even post the hype—or what some people suggest was hype—around the dotcom era and so forth you have maintained that priority nonetheless?

Mr Provest—Absolutely. We had success in that period—1999, 2000 and 2001. We thought we were really getting there. Telstra, PowerTel, Uecomm and Optus all laid cable of different sorts here. We thought, ‘Good. It’ll happen.’ But the last mile issue has been surprisingly difficult to overcome.

Senator LUNDY—You have said consistently that competition is the key. There are obviously competing infrastructures—that is one aspect. But the access regime is another aspect, particularly in that last mile. I do not know how familiar you are with the current competition regime, but how confident are you that the current laws are serving the purpose of creating that competitive tension through the access regime to the existing infrastructure?

Mr Provest—We do not say that competition is the key; we say availability is the key.

Senator LUNDY—And competition is the mechanism?

Mr Provest—I do not think it is reasonable to expect four suppliers or more to compete to provide broadband in its different forms to every single home and business. That is obviously not an economical proposition. What is important is that, somehow—and this is the issue that we call out, but we are unable to provide the answer to—there is some coordination. At the moment, this issue is only being addressed on a commercial level by the various suppliers. No-one is taking an overall view, simply because it is regarded as a commercial issue. It is not just an issue of competition. It is a matter of availability of basic and essential infrastructure to the community.

Senator LUNDY—So you are arguing that there comes a point, if there is market failure and competition is not evolving in the market, when there needs to be some strategic intervention.

Mr Provest—That is right. The council has done an outstanding job in proactively identifying this issue and trying to facilitate to the individual businessperson and home owner the availability of broadband by actually negotiating with the suppliers. That is an enormous task that the council has undertaken—and all credit for what has been achieved. For all practical purposes, we are not going to see that happen to 150,000 different homes on the Gold Coast though. I think we have 10,000 with broadband at the moment and about another 30,000 with dial-up. Again, that is from anecdotal information I have had. There is a long way to go, and you could not expect council to facilitate it to another 100,000, or at least not without an awful lot of support.

CHAIR—Thank you very much for your evidence this morning. It has been very helpful to the committee. Good luck with the promotion of the region.

[12.48 p.m.]

LANE, Mr Christopher Robert, Chief Technical Officer, Coastalwatch Holdings Pty Ltd

TAN, Dr Clarence Nyap Watt, Chief Executive Officer and Chairman, Bond Wireless

CHAIR—Welcome. Thank you for giving us your time today; it is very much appreciated by the committee. As I understand it, Coastalwatch is a partner company of Bond Wireless. I assume you will brief us about that in your presentations as we go. The committee has Dr Tan's submission before it, and we have already published it. Would you like to make any alterations or corrections to the written submission at this stage?

Dr Tan—It is fine, thanks.

CHAIR—I now invite you to make an opening statement, and then we will move on to questions.

Dr Tan—Thank you very much. I would like to add that I was with Bond University for over 11 years, and I am currently an adjunct professor there. We do do some research work in the area of wireless technology and so on. I will give a short brief on Bond Wireless and the relationship with Coastalwatch, and on wireless technology. Bond Wireless was started in April 2002, basically to concentrate on the narrowband wireless area, on SMS applications and on wireless applications. We won an Asia-Pacific ICT Award in the same year, and we came to the notice of Motorola. When we launched our products last year at CeBIT in Sydney, we were approached by them to take up an offer to partner them in distributing their fixed broadband last mile wireless solution.

Chris Lane is the founder of Coastalwatch. We have been working together on a number of different projects. They have surf cameras on all the beaches. They are one of the largest lifestyle portals in Australia. They have issues, obviously, with broadband, and I asked Chris to have a look at this technology to see whether it was worthwhile pursuing this as a business model for the Gold Coast and Australia in the larger sense.

We did some preliminary market research. It was Chris's opinion that it was a worthwhile technology to look at: very cost effective for providing broadband solutions where there were none, obviously—in the Gold Coast and so on. We spoke to some ISPs here. There was a particular project here at the start of the Gold Coast where they could not get broadband access. Apparently Telstra had promised that they would be given MiniMux solutions in two to three years time and there was no solution for them.

We went in and did a quote, because with the Motorola wireless solutions we could access different buildings all the way down the coast and therefore pick up and provide broadband access to a number of buildings that we would use as a transmission point. Within two weeks of the developer apparently informing Telstra of the potential solution that they had found with wireless, Telstra provided MiniMux solutions, and we were then basically out of contention. I will let Chris talk about the problems he had with the ADSL networks that he used with

Coastalwatch and why he thought that the broadband wireless solution was a good one for Motorola.

Mr Lane—Coastalwatch is probably one of Australia's biggest lifestyle portals now. We are in the top 10 sporting web sites in Australia providing broadband access, up against AFL and NRL and cricket. I would probably have one of the most extensive ADSL networks in Australia. It spans now from South Australia all the way up the Whitsundays. Most of those locations—nearly all of them—are on the coastline in regional areas. Of course, we have quite an extensive network in cities such as Sydney, but when we get to Victoria and South Australia the coastline is where most of our connections are. I will talk to you about those types of problems in a second.

I worked with the wireless solutions earlier in our development. I became aware of the Motorola solution specifically for last mile. One of the solutions that we have always had relates to which areas can get ADSL and which cannot. For example, on Phillip Island in Victoria, half the island gets ADSL and half the island cannot get ADSL; they are split into three locations. So we looked at these wireless solutions to provide solutions for us to get broadband into surfing locations. Sometimes in some of these locations—like Bells Beach in Victoria—some of the biggest sporting events in Australia are held, and this year we will be broadcasting those live.

Another thing that we have had problems with, which Telstra is addressing now, is transmission loss in terms of ordering ADSL. I know that Telstra has announced that it has upgraded the transmission loss across lines so that you can get ADSL further from the exchange, which is fantastic. We are ready now to submit at least 10 to 15 per cent of our orders again to get ADSL again in those areas. One of the interesting things is that that transmission loss is only for a 1.5 megabyte setting—the highest level. In my case, I do not need a 1.5 megabyte connection at a location for download. I am more interested in a steady upload, so you have limitations there. Maybe I might fit under the quota if that were the situation in some locations.

The next thing that I would raise is the knowledge level of service technicians on the ADSL network in the regional areas. My experience is that the technicians in the city are quite savvy in terms of repairing faults. When you get to regional areas of Australia—Byron Bay, Phillip Island or locations like the Whitsundays—the technicians are not as savvy in repairing faults, so the repair times for ADSL networks become quite long.

One of the problems I have had with ADSL is when I have had faults with ADSL lines—I use a third-party carrier that relies on Telstra as well—I could fly to the Whitsundays or to Phillip Island to fix problems and then find that the problem is not related to any of our equipment. Therefore I have to fly back again. In that situation, when you have fixed phone lines and you are going down there to fix problems, there is an ability to put compensation forward for the amount of effort and time for your business to try to get the service back up to normal speed. When you are a third-party carrier and you are buying off that person, there is no way of claiming for compensation for your business.

Another problem I have had is where I have a request for a business service, a camera—I get these requests all the time from the boating community in some parts of Australia—and I do not know whether I can get ADSL into the area. It could be a remote camera site somewhere. How do I know that that location gets ADSL unless I fly out there and go and knock on doors around

the suburb and ask: ‘Can you get ADSL on your phone line? Could I use your phone line to find out?’ In regional areas, there is a 20 per cent failure rate in connecting ADSL service. Once I submit the failure of the service to be connected properly, and the technician comes out the second time, usually it is fixed. But a 20 per cent failure rate in all the connections that you order is pretty high. It is mainly in the synchronisation or the setting up of the ADSL at the exchange.

The last thing I would say about demand across regional Australia—especially where I am—is that I work with a lot of the communities in regional areas, and they rely on a lot of things like cameras on the bars in broadband. They ask why they can’t get a broadband camera at their surf beach—or location or boating harbour. And I say, ‘You haven’t got ADSL in your area.’ They ask, ‘What will it take?’ and I always say that it takes 150 people on a demand register to get broadband activated in your area. In regional areas, that is quite hard to get sometimes. A lower figure on the demand register for regional areas would be quite helpful.

Senator LUNDY—It is not guaranteed, either. Telstra reserve the right to make a commercial decision.

Mr Lane—That is why we moved towards wireless solutions—and we will talk about the Motorola technology in a second, and you can ask us questions about that—and trying to provide, from one area to the other, a broadband solution for more locations. That is a reason why we have partnered with Bond Wireless on this technology.

Dr Tan—Basically, we have been trying to get approval for a Motorola Canopy system for back-hauling, where you can send 20 megabits per second bandwidth across 30 kilometres. Unfortunately, I think it is still stuck with the ACA, and so on, on the power rating of the bandwidth that is being transmitted at a 5.7 gigahertz range. I think this basically gives us an undue barrier in terms of trying to provide competitive access to technology. It has been used regionally and worldwide for over a year and a half. Bond Wireless at the moment has a presence in Thailand, Malaysia and other Asian countries, where Motorola is also rolling out the Canopy system, and they have minimal problems in Malaysia and so on.

The fourth point I want to make is: we provide an SMS premium solution, similar to what was used for *Australian Idol*, where you SMS and you get charged a premium price. We have come up with a solution where you get charged, for example, \$5 and you have access to wireless, Internet and broadband from your laptop, which we think would be very convenient and easy for visitors to the Gold Coast who are coming to the convention centre for conferences. They could access broadband without having to put their credit card details on line, and so on. It would work through a prepaid phone card. We are providing this service now to a client of ours, who is providing content.

It upset us that our client has complained that their customers who could not access the Telstra network to access the premium service were told to dial a particular number for assistance. When they did that they were told by Telstra that this service was not available and that they should switch to a particular Telstra service. This actually involved Coastalwatch, who provide weather forecasts and so on. Telstra provided a similar service but they sold the service to us to resell to people like Coastalwatch. We were thinking of using this technology to provide more affordable and convenient broadband access to the general public. Our client is looking at the Trade Practices Act, and it is still not resolved at the moment.

My first encounter with the broadband issue was when we started Bond Wireless on the Gold Coast. I could not find a data centre that was both affordable and had the quality I needed to support my customers worldwide. So finally we had to move our hosting services to Sydney. It is a real pity that this happened. We are now looking at co-locating some of our services overseas as our overseas market has been developing very rapidly. From the IT Forum, Gold Coast City Council and Delfin, you have heard testimonials that the impediment of not having broadband access is forcing some of us to move our services overseas and even move our businesses overseas. Obviously there are concerns about security and reliability of the broadband access.

Lastly, as the chair of ACS, I have had complaints from ACS members on the Gold Coast about the inability to access broadband—in residential areas and for business and so on. The chapter was from the Gold Coast because there is demand and enough membership for some events to be held here. We have been holding a number of events on the coast, including a Microsoft versus Sun debate. It is a great impediment for us if we do not have this access.

CHAIR—Excluding ADSL, which is an interim solution, what are the options for broadband access around the Gold Coast at the moment?

Dr Tan—Very limited, actually. They could get a wireless broadband solution, but somebody has to pay for the initial infrastructure in a particular area. There are some enterprises that would require, for example, the solution we proposed for this development down on the southern part of the Gold Coast. By having this project go ahead we could build an infrastructure to link up all the different buildings. That would have picked up potential residential users who would otherwise have no access to it, because we need the rooftops to hop from one point to the other.

CHAIR—But wouldn't there be fibre-optic through most of the CBDs around here?

Dr Tan—We are proposing a wireless solution for them, where the POP could come from Robina to an apartment building, for example, pick up customers there and then rebroadcast the signal all the way down to the coast, picking up customers on the way down. We think it would be a very reasonable proposal. But with Telstra's monopolistic position, there seems to be a lack of a Chinese Wall between the wholesale and retail side of the business. I find it very difficult to put a business case for successful competition on the coast.

CHAIR—What are the spectrum issues with wireless on the Gold Coast?

Dr Tan—The Motorola Canopy system operates on 5.7 gigahertz, which is a free band in most parts of the world, including Australia, as long as it is unpowered, which is less than two watts. But it only has a range of three kilometres. If you power with 60 watts you have a range of 30 kilometres. The reason why we look at Motorola as a solution, as opposed to other providers, including some local Australian companies that have developed their own technology, is because Motorola has been around for a long time. If you are going to go with an infrastructure investment, you want to have some certainty that the technology will be around for a while. The problem is Motorola needs to get approval to get the 60 watts rating up so that it can actually get a transmission line. It uses a TDMA technology, an old mobile phone technology, but it works quite well. It will have an upgrade path where you can actually put it on trains and so on so you can get broadband access while you are commuting.

Senator LUNDY—I want to go to the point about the powered back-hauling of fixed wireless broadband at 5.7 gigahertz. I do not quite understand what the problem there is and what specific approval is required to solve your problems and prevent that from being a barrier to entry for you.

Dr Tan—I just brought it up because apparently Motorola is pursuing it with the government, with the ACA and so on. But basically, without that back-haul approval, we cannot offer this particular service for more than three kilometres. We can hop from building to building, which is what the interim solution is, but we cannot do long haul. For example, if you wanted to get from Robina down to Coolangatta, we could do it very simply, if the approval were given.

Senator LUNDY—Is that an issue across the Telstra network, or is it across your own infrastructure and it is a technical standard that has to be—

Dr Tan—No, it is not. It is an ACA ruling.

Senator LUNDY—So it is a policy issue.

Dr Tan—It is a policy issue.

Senator LUNDY—You also talk about the issue of the lack of Chinese Walls between retail and wholesale. That was the subject of some of the debate surrounding the last series of changes to the telecommunications competition law. As a competitor, where do you think the worst aspects of that are—which are preventing you from being more competitive or getting access to the markets? Describe what happens when you confront that lack of a Chinese Wall.

Dr Tan—With this example that we had, this particular development south of the Gold Coast basically had issues in providing broadband wireless solutions. Initially, Chris actually hooked up this community with a simple WIFI link into one of the areas there when Telstra would not provide any broadband access. And then, when Motorola Canopy came along and we put in a proposal about how we intend to do this, two weeks later they had ADSL broadband access within the community, with MiniMux.

Senator LUNDY—Let us backtrack. When you approached Telstra to buy broadband wholesale, to provide an alternative infrastructure provider—

Dr Tan—To clarify: we are not an ISP; we were going to partner an ISP who has a point of presence in Robina.

Senator LUNDY—But you were seeking to buy from Telstra wholesale a broadband connection so you could roll out a last mile solution. You could not get that, but then later Telstra rolled out their own ADSL solution. Did they subsequently do a deal to support you in what you had to do, now that they had destroyed your business case?

Mr Lane—It is in the process of rolling out now, implementing a CMUX solution. I think Sarah Cobb indicated that the Telstra web site gives you a list now of CMUX locations and future CMUX locations. The going forward for that, as far as I am aware, is only 12 weeks—it may be a little bit further. So you know a CMUX is going to arrive in a location in 12 weeks.

Senator LUNDY—But that does not help you, because, as a competitor, you are thinking in much longer time frames than 12 weeks.

Mr Lane—Exactly.

Dr Tan—We feel that we are just being used as a bargaining chip to get access for people who do not have access into it.

Senator LUNDY—If you had not started negotiations with Telstra to provide a service that would compete with them at the retail level, do you think that Telstra would have looked at that community to provide an ADSL service, or do you think that you are an integral part of what prompted them to respond?

Dr Tan—We feel that we were the reason they moved forward their roll-out date, because the developer told us that they had approached Telstra and they said they would not have that for two to three years.

Mr Lane—It is a limiting factor for us now to do proposals based on this technology.

Senator LUNDY—So that tactic has provided a disincentive for you now to even contemplate working up a business plan for new areas?

Mr Lane—It is not necessarily that tactic. But, if you move forward on a community, with the new technology for the last mile only, and you put a lot of time and effort and money into providing a solution for the last mile, to lose it, from a monopoly point of view, is—

Senator LUNDY—What happened to this particular initiative? Did you end up proceeding or not?

Dr Tan—We do not need to anymore because now they have MiniMux in there, so the whole community has access.

Mr Lane—CMUX is coming, so the developer now is quite happy in that he is going to get a very good price solution for his community. These communities and these developments in the southern precinct of the Gold Coast and Tweed Shire are quite huge now.

Dr Tan—I think that is the problem now when you have a commercial entity with Telstra. As a government body, when they are mandated to provide access, that is fine. But, when they actually are a commercial enterprise and it is a business case whether to put in broadband access or not, then there is very little chance for smaller people like us to compete in this particular market. As Carl has pointed out correctly, in the Varsity Lakes area and so on we can provide access to all those black spots. It is a matter of who is going to pay for it and how we are going to get access to it. When we do get access, the big boys move in and there is really no point for us.

Senator LUNDY—What does that mean now for your business in the long term? You mentioned that, for other reasons, you are looking at moving offshore and so forth. What does it

mean for your ability to try and find these new markets here in Australia? Are you still doing that or are you moving in a different direction?

Dr Tan—I should explain why Motorola approached us to do this. Motorola have the traditional channels where they use the radio operators as distributors, but they know that broadband is driven by applications and so on. That is why they came to us. For projects that we are doing with a number of different enterprises where they themselves have issues in trying to get broadband access to use our software, we will probably quote them a broadband wireless solution using Canopy. It might not be for full Internet access; it might just be for VPNs and so on. There is a space for it. But it is a pity because the prices have been dropping dramatically, so it is very affordable and doable, but there is no case for it.

Senator LUNDY—I have one other question, going back to Coastalwatch's role as an ADSL reseller and the difficulties you have had in accessing information about where ADSL is available, where it is not and the failure rate upon application. It is not the first time that some of that frustration has come up in evidence to this committee. As a competitor to Telstra, can you cite any specific examples of where you feel you have been blocked access to information you have sought? Can you also tell me whether you have specifically asked for the exchange service area plans for where RIMs are located so you can start to get an idea of what the penetration is potentially in a given area?

Mr Lane—I work very closely with a major telecommunications carrier that we use. That is a reseller of Telstra services, of course. We are always after as much information as we can get on the availability of network access throughout Australia. The extent of the information that that telecommunications sales executive receives and his relationship with the Telstra executives stems from the wholesale department on the Telstra web site, which you have heard Sarah Cobb speak about. This seems to be the only source of information on where availability is. I will give you an example. I read the wholesale sheets on the Telstra web site every four weeks or every two weeks, depending on availability, so I can expand my network across Australia. I sometimes know that areas come alive before the carrier does, because you never know when information is going to be updated on the site.

Senator LUNDY—So it is not a useful business resource for you as far as accurate and timely information go?

Mr Lane—Exactly. It is the only resource we have that is available at the moment. Like I said, there are a lot of transmission loss areas. That was a big issue with me. To give you an example, I wanted to put ADSL into Newport Beach in Sydney, and I could not do it because the transmission loss was too high.

Senator LUNDY—What do you mean by transmission loss?

Mr Lane—At the moment you have to be within 3.5 kilometres of the exchange, and I know Telstra have just announced an extension of that range, which is a huge benefit. It is going to make availability—

Senator LUNDY—But only if the copper is of a suitable quality.

Mr Lane—Yes, exactly. I might have had 20 per cent of my locations throughout Australia rejected because of certain things like that. Telstra puts out an announcement that they are going to extend the transmission loss error and I ring up my telecommunications person at the major ISP and say, ‘When can we submit all our applications again?’—because it is never notified to me what the transmission loss was in the first place. We never know that information.

Senator LUNDY—The endeavours of this inquiry, at least to date, have discerned that it is such a scratchy figure because it does depend on the quality of the copper, the gauge of the copper and the idiosyncrasies of that particular regional network, and I presume the same vagaries will apply—

Mr Lane—So the boundary has changed: it has extended out. It is great, but you have 20 per cent of your whole business depending on that. Then you have to resubmit all your applications all over again—there goes another week’s work. You could have got more information about how much a loss was, in the first place, then you would have said, ‘Well, there’s no use in reapplying for these locations, because they’re too far.’ So now I have to go through at least two weeks work to resubmit.

Senator LUNDY—Finally, have you ever experienced—and I am sure you have read about it—having an application rejected and then finding out later that the customer had applied through Telstra for ADSL services and had their application accepted?

Mr Lane—That has never happened with me. I have read about those situations. But I have actually experienced the same thing where I have had transmission loss. I have to give you this pointer—a warning. It is quite funny. I have actually had locations, even here on the Gold Coast, where my site has been rejected and then I have known, say, that the Gold Coast City Council or the Queensland government has got ADSL in the next-door building. I have resubmitted the ADSL on three separate phone lines simultaneously—and the one that I have just done—only to get passed. The funny thing about it is that now I tell my telecommunications carrier to only submit my applications when the weather is dry.

Senator LUNDY—That is extraordinary.

Mr Lane—That is what I am saying: as a technical business across Australia, at least if you had information about whether you could or could not get it and more information about where and how big the transmission was, et cetera, at least then you could make a decision. Can I say this: I have had experiences where I have applied for ADSL in an area and the phone lines have been so terrible, like you said, only to have Telstra come out and replace the phone lines three weeks later because of the residents complaining about the quality of phone lines. Then I have resubmitted my application and it has passed.

Senator LUNDY—That is a very helpful insight. I guess you just have to be diligent in resubmitting your applications and having a little bit of techie intelligence operating out there.

Mr Lane—It just gives you an idea of the extent of the ADSL network around Australia.

Senator LUNDY—Thank you.

CHAIR—Thank you very much.

Proceedings suspended from 1.19 p.m. to 2.25 p.m.

BARCLAY, Mr Bruce, Managing Director, Silver Communities Pty Ltd

CHAIR—Welcome. Thank you for giving us your time today; it is much appreciated. And thank you for joining us for lunch.

Mr Barclay—Thank you.

CHAIR—It is all good fun. The committee has copies of a submission which you are proposing to table. Is it the wish of the committee that that submission be published? It is so ordered. We have also been given some background material on Silver Communities, which has been very helpful to the secretariat and to the committee. Before we move to our discussion there are a few procedural comments I want to make. For the benefit of witnesses, the committee prefers all evidence to be given in public but should you at any stage wish to give your evidence, part of your evidence or answers to specific questions in private, you may do so and we will consider your request. You are reminded that the evidence given to the committee is protected by parliamentary privilege and that the giving of false or misleading evidence to the committee may constitute a contempt of the Senate. I now invite you to make an opening statement before the committee moves to questions.

Mr Barclay—Thank you, Chair, and thank you, Senators. Silver Communities appreciates the opportunity afforded by this committee to submit to the inquiry and, whilst the background to the submission comes from wide consultation within our business network and our dealings within the property and telecommunication industries, I stress that the views expressed in the submission are mine alone.

Silver is in the business of delivering ICT services to select communities. The core focus of our business model is to identify and address the value proposition required by end users within the communities and business clusters we serve—that is, our focus is more on the user experience rather than on the technology or the delivery platform. Our experience and research has shown that being able to access a connection is only part of what the consumer considers when evaluating the value of an IT service available to them. Other critically important issues in the value proposition are the speed of the connection—most importantly, in both directions; the total cost of the service, which is obviously a connection cost, the ongoing cost relating to various plans and any underlying penalties for excess consumption; the support and customer service they can expect from their supplier; user-specific services and content and connection flexibility within the environment that they are looking to connect; and general access to general interest content.

The founders of Silver are well-credentialed and highly experienced in the property sector as developers, property managers and community service providers. This is not in my notes, but we are not geeks and I am not geeky. The business grew out of our frustration with not being able to find ICT services in the marketplace that actually address the market we are looking to serve with digital living services from a property market perspective. To create a point of difference and to add value, Silver not only provides what is now becoming the traditional bundle of broadband services—voice, data and video—but we also focus on identifying and facilitating the content which allows residents and businesses within our community to access the real benefits

of digital living—that is, at-home education, in-home entertainment, work from home and telecommuting solutions, security, access control et cetera. Our approach to the submission comes from our position as a community specialist, not as a telco, and our coalface understanding of what purchasers and tenants of residential property and SME businesses are actually looking for in their communications solution. I will skip over the benchmark community page in the submission as Carl Bruhn before me has spoken about Varsity Lakes, and I am happy to answer questions on our business model there and questions.

Following my introduction, the first issue that I believe is worth dwelling on for a brief moment concerns defining broadband. There has been much hype about what broadband can do and how it is going to change the way we communicate in the information age. However, this hype is quite misleading as the economic and social benefits espoused do not kick in where Australia has currently set the standard. Whilst there is currently a lot of focus on the availability of ADSL—or perhaps, more correctly, the lack thereof—I am at a loss to understand why there is not more recognition of the fact that ADSL is a very poor broadband product, at least in terms of what the market requires to be globally competitive. If the agenda is economic and social advancement then we need to be a lot more focused on the deployment of symmetrical broadband services of much higher capacity. It is very disappointing that Australia has chosen such a low standard in its definition of broadband. By world standards, 256 kilobits per second is no more than fast narrowband and it certainly is not broadband. Whilst ADSL certainly provides faster connection speeds for general Internet use, it is totally misleading to suggest to the market that ADSL is a broadband service that can deliver significant economic and social benefits.

Whilst I accept that, for a number of economic and practical reasons, ADSL is the only product that can be made widely available in the short term, I believe that, if we want to be serious about improving our standard in the global information economy, government must consider ADSL as a transitional product only. Government should focus more on the creation of an environment that is conducive to the widespread deployment of broadband delivery platforms with much higher symmetrical capacity. For example, it is not until you get to platform speeds of two megabits per second or better that video can be entertained and you need at least four megabits per second to achieve DVD quality. Business and personal videoconferencing is just one example of where the economic, environmental and social benefits can be demonstrated, but this is just impossible on ADSL.

There is growing demand within many sectors of the economy—home education, work-from-home professionals and the SME market, to name just three—for a service that allows the user to send information equally efficiently as they receive it. You only have to look at what is being developed in software and content to understand this. Until there is widespread availability of affordable broadband at symmetrical speeds in excess of two megabits per second, we are unlikely to see any real economic or social impact.

In terms of deployment issues and frustrations, I would like to make the following comments. If Australia is to regain lost ground in terms of its global position—and there is no argument that we are way behind world standards—I believe that the issue of deployment cannot be dealt with at the telecommunications industry level alone. Left to their own devices, the major telcos are not going to invest quickly enough in the new infrastructure that is required to give Australians access to world-class broadband services.

I appreciate that the following comments relate only to part of the market—that is, to new development. However, given the rate of new development around the country and customer frustration in this area, it is a good place to start. It is also the place where commercial viability and sustainable solutions can be found if the infrastructure costs are shared. I therefore suggest that the deployment of broadband could be expedited if a coordinated approach were taken across relevant industry groups and authorities. Deployment and new developments is an issue that should involve not only the telcos but also local authorities and the development industry. Local authorities should be given the means to insist upon certain standards of telecommunications connectivity through their development approval process, and developers need to deliver it as if it were a standard utility. This, of course, assumes that telcos commit to connecting to it and will provide services at more competitive pricing structures as a result.

Some of the frustrations that we have noted first-hand within the property industry include that developers do not yet understand the importance of provisioning their developments with broadband and, therefore, they are delivering buildings and communities that are difficult to cost-effectively connect retrospectively. We continually find developments that have been promoted as smart wired and broadband ready by developers who, on the advice of their engineers, have installed some degree of high-speed ethernet cabling but who are unaware that the major telcos cannot cost-effectively connect to this delivery platform and, therefore, will not make individual consumer connections to the building. This has led to a lot of frustration for purchasers and for the marketplace.

In terms of property sector education, I recommend to this inquiry that this inquiry consider the importance of educating developers as part of its agenda and look at ways government can support the ongoing education of the property sector, particularly in regard to the importance of providing for future communication services and solutions. This could be done by implementing funding that could be accessed by industry bodies and local authorities for a range of education programs. The Property Council of Australia and the Urban Development Institute of Australia are two such bodies.

I also believe that consideration needs to be given to the legislative support required by state and local authorities in promoting and implementing a variety of last-mile delivery solutions. I will dwell on that in a moment, after I address the role of niche players. More and more, niche or boutique operators are emerging to service the last mile. They are using a variety of technology and delivery platforms to deliver broadband. It is important that these business models be encouraged, as it is my belief that it is these players that are going to have a major impact on the roll-out of high-quality, high-speed platforms that will truly impact on the economic and social outcomes for Australia. These smaller niche market specialists are more likely to understand and address the needs of their customer base, as customer satisfaction is crucial to their success. These consumer specific private networks are also more likely to realise the benefits sought from business clustering and master planned communities, as they are likely to also be the catalyst for important business and community collaboration solutions.

However, the real concern I have is that, if they feel their major market share is under threat, Telstra and to some extent the other major telcos are likely to look to anticompetitive behaviour to squash these business models. It is critical that government provides a lead in providing the framework that encourages growth in this sector of the market and the legislative support that protects professional operators emerging in this space. For example, clear guidelines should be

established for state and local authorities to follow with regard to the installation and maintenance of private networks, particularly where there is a requirement for the installation of distribution infrastructure within council controlled property. It is critical to Silver Communities and other businesses that they have long-term security over their networks.

Lastly, I would like to add my voice to those of others that are concerned about the state of play in the pay TV content area. Content is critically important to the user experience of broadband and, therefore, it is an important element that must be considered in reviewing the issues surrounding deployment and take-up. Our customer feedback tells us that the content they seek must be current and must be relevant to individual tastes and preferences. Foxtel unquestionably has a monopoly in this market, and we are greatly concerned that they are doing deals that favour some service providers and not others. We believe government should take action to ensure equitable access to this content if the smaller niche players, who we believe are critical to deployment, are to survive. If the smaller niche players are unable to access this content on a commercially competitive basis then the potential for major players to squeeze them out on the basis of content is very high. This will substantially slow the deployment of high-quality high-speed platforms that we believe Australia requires to be competitive and thereby slow the meaningful economic and social outcomes. That is my submission. As I said, it comes from the perspective of a small player telco in the property industry. I am happy to take questions on it.

CHAIR—Thank you. I will start with the last question that you raised. It looked at the issue of Foxtel and its relationship to Telstra. Do you have a view on the ACCC's recommendation that Telstra should sell its share in the Foxtel HFC cable system?

Mr Barclay—I am not personally aware of the content of the ACCC ruling. I have the view that it is unwise to vest the media control in the major telecommunication provider in Australia.

CHAIR—Your background is in the development industry. In terms of trying to get telcos interested in the sort of solutions you are providing, have you found resistance or just a lack of interest in the sort of service models you wanted to provide?

Mr Barclay—We have found that there were various components—there are specialist players. The telcos were quite happy to provide supply but they were not able to supply content or community services. Our particular solution does require more than just access to provisioning. So we have had no difficulty in getting access to wholesale supply. There did not seem to be any player that had the holistic solution that our residential purchase market was looking for.

CHAIR—Looking at the Gold Coast, how uneven do you think the playing field is in terms of access, competition and services for broadband in this area?

Mr Barclay—It is incredibly uneven for a variety of reasons of distribution. Our particular business model is very niche—it only works in medium-density master plan communities or business clusters. I have no solution for equity in terms of roll-out but I do think the encouragement of other players, particularly in the wireless space, could expedite the availability of broadband services where, as I have previously said, I do not believe ADSL, as a long-term

product, could fill that space. It would be good to see mechanisms, whether at a federal or a state level, that facilitate that deployment.

CHAIR—I cannot remember whether I read in your background paper or elsewhere that the sort of solution you are talking about could be of particular relevance to high-density inner city developments, where the argument is that the telecommunications investment might not be what it needs to be at the moment.

Mr Barclay—We have had a lot of interest from developers of high-rise residential towers and mixed-use towers in CBDs on the eastern seaboard, and we are currently in discussion with a number of them who are unable to find an ICT package from a telco. They can get telephone services and in a lot of cases they would also be able to get ADSL, but they are looking for a lot more than that to address the market demand in terms of digital living, which includes security, access control and content.

CHAIR—Senator Tchen, do you have any questions?

Senator TCHEN—Thank you for your evidence, Mr Barclay—this is certainly very interesting. I am particularly interested because you said your experience and comments focus on a particular niche market, which is the high-density urban development. In response to the Estens report, the government developed this national broadband strategy, of which, for example, earlier witnesses—the Gold Coast City Council—were somewhat critical because they could not get access to it. It seems to me that this national broadband strategy might be a bit of a misnomer given that the Estens inquiry was essentially looking at services in rural and regional Australia. From what you said, particularly given the context of the Gold Coast, where there are significant economic, social and geographic advantages for a much higher standard of broadband to be utilised, it seems we are looking at two issues here. One is an equity issue: the rest of Australia does not enjoy this type of market advantage and it is a question of how they can be provided with adequate service. On the other hand, the issue at a location like the Gold Coast, which enjoys most or all of the market advantages, is how government can set the regulatory or policy framework which will support providers like you to go ahead and develop the business and provide a service that is of a much higher standard. Can you comment on what I just said? Does it make sense to you?

Mr Barclay—Yes, it does. Whilst I am sympathetic to and supportive of the issues of the bush and make no comment that there should be any change of priority for servicing that market, I think there must be a weighting put on economic outcomes in terms of Australia's global position. We have a large number of SMEs and work-from-home businesses on the Gold Coast that do not have access to business-grade broadband and who would greatly benefit from access to symmetrical business-grade and business-reliable broadband services. So I think some consideration needs to be given to the importance of supporting the SME, micro-SME and work-from-home market in that agenda. I am not about to suggest what that weighting should be.

Senator TCHEN—In that case, can you talk, say in the context of the Gold Coast, about what you see the government's role should be? I know you spoke about a general case, but can you be more specific about how you see governments can assist providers like you to provide better services or world-standard services?

Mr Barclay—I think one issue has already been raised today by others, particularly council and the Gold Coast Region IT Forum—that is, that the Gold Coast falls into no-man’s-land when it comes to various funding programs that may relate to education or support programs by local authorities and industry bodies. They would help substantially.

Really, the only other comment I can make is that I am looking for the fabric that allows these boutique players like Silver Communities to emerge and thrive. At the moment, we have a real issue, for example, that I can relate from first-hand experience at Varsity Lakes. The Gold Coast City Council is not clear on how to deal with our private infrastructure when we seek to run private assets through public conduits or ducting or if you want to put a wireless aerial onto a public building. It is somewhat clearer, and precedents have been set for the major telecommunications companies under the ACA, but local authorities seem not to have clear guidelines when it comes to small private networks. I am not quite sure what the solution is, but that is the area that needs to be addressed. I am not quite sure of what the federal government’s role in that process is, but certainly that is an area that needs to be cleared up.

Senator TCHEN—There was a suggestion earlier today that there should be a national standard. Which witness was it? I think it was the Gold Coast Region IT Forum; they suggested some sort of national standards and national approach to services like this.

Mr Barclay—Certainly I would support previous comments that relate to the fact that it should be mandatory for developers to include broadband reticulation and access to broadband as part of their developments. My paper is suggesting that there is a business model that can be made where the sharing of the infrastructure costs is real, and that will result in higher capacity symmetrical services being made available to the consumer.

Senator LUNDY—Going on from that point there about mandatory provisions, are you able to point out, in the development guidelines at a state, local or even federal level, the process by which a developer makes contact with the telecommunications services provider? Do you know what I am talking about? What do the rules currently say, so what would have to be changed?

Mr Barclay—I cannot quote you sections and page numbers, but I can certainly give you the experience that I have had when wearing my developer’s hat. When we seek development approval for our projects, we are given guidance by council in relation to car parks and common facilities. At the moment, we must provide a letter from Telstra saying that we can provide standard telecommunication services to each of the dwellings or commercial spaces. I see that broadband could be treated no differently to that, under town planning controls—not to dictate which broadband solution a developer needs to use, because that would be dangerous territory for a local authority, but to demonstrate to council that a broadband solution was to be implemented and that it would be assessed.

At the end of our developments, council would come back and see that we have complied with those development controls. There would be an onus on the developer to have formed a relationship with a telco, or a Silver Communities type provider, and be able to demonstrate that broadband was available to consumers and users of that space.

Senator LUNDY—Do you know whether the requirement of a letter to satisfy local council that says you are able to provide the standard telephony service is a Telstra specific letter? Is it

possible that you could provide a council with a letter from someone else, like Silver Communities? As far as you know, would that satisfy the council requirements?

Mr Barclay—My understanding of that is that a Telstra letter has traditionally been asked for because they were the widely reticulated incumbent. I do not believe it is any longer required to be from Telstra per se. We need to demonstrate that we can provide those services. Speaking for council, perhaps incorrectly, I think there would be a concern that it was not from a small player that did not have a sustainable model. I think they are within their rights to seek assurance that there is long-term communication available to that community. Even within our own communities, we recommend Telstra reticulation because we think market choice is very important.

Senator LUNDY—Is that on the basis that other service providers will be able to access their infrastructure?

Mr Barclay—That is right. I can comfortably take that position at the moment because, whilst I am providing a fibre ethernet based service, Telstra cannot compete with it. That will obviously change with the emergence of wireless and so forth, but customer choice and competition in the marketplace is obviously critically important.

Senator LUNDY—Theoretically, though, Telstra could sell their retail services over your infrastructure if they wanted to, couldn't they?

Mr Barclay—That is something that we are looking at. As a private asset of the company, it is certainly something that we would look at as a business model. How it would be practically implemented is a space that we need to go into in the future.

Senator LUNDY—Going back to your point about the importance of content, you said something earlier that caught my attention—that 256 kilobits is like a fast version of what you are already getting. Can you describe the other sorts of applications that your services can support and where you think some of the areas of movement are if the bandwidth was, indeed, available and affordable for residential consumers?

Mr Barclay—I have spent a fair bit of time looking at what is emerging in the content and application space. The example I gave of personal videoconferencing was just one example. But certainly the gaming area is one very large area where the major global players—Sony, Microsoft and others—are spending millions of dollars on R&D for interactive gaming activities that require substantial bandwidth. You have the issue of movies on demand, and you have applications of working from home or the micro SMEs that are working from these bases needing to move multimedia files around. A lot of the documents that I now send in submissions for activity within the business are approaching 10 meg files if we drop images in them. That is just an impossibility if you are in a 56k, or even a 256k, environment. So we need to be looking forward at delivering into the residential environment capacity that some commentators in previous submissions—not today, but on your records—are suggesting should be as high as 10 megabits. I would support that—that, certainly within the five- to 10-year timeframe, that will be an absolute requirement. My concern is that, by dwelling heavily on ADSL now, we are looking at an interim issue and not really addressing the more important issues. It is only when, as we

have on the Gold Coast, we have micro businesses that are able to communicate efficiently that they will be able to prosper and grow, and contribute to our society.

Senator LUNDY—I am particularly interested in your comments about the asymmetrical service and the need for symmetrical services. Are you able to extrapolate a little more on the inhibiting effect of ADSL being asymmetrical—obviously meaning you can have much more downloaded than you can upload—and what the home-based business or small business implications of that restriction are? On top of that, ADSL can theoretically go up to an eight meg download, but that is not what is on the market at the moment. Perhaps you could just talk about how you see that suppressing development here, even with ADSL, and particularly on the symmetry issue.

Mr Barclay—The upload issue is the critical point. There are a lot more applications that require that upload to be efficient enough to be able to deal in real-time activity. In the community within which we are working there is talk about having video interaction between the education sector and the home. Whilst, arguably, you will be able to receive the video with an ADSL download, you will have no capacity to send it back. So the concept of videoconferencing or interfacing between parents and children in an education environment does not exist. As I say, gaming is another area where, unless you are able to send your information as efficiently as you receive it, you are obviously not going to be able to participate in that. In the teenage community that is a huge social activity. It is going to be more so as these major software suppliers start to look for returns on investment of the interactive gaming that they are developing. So there is importance placed on upload, or the capacity to send. It is not so much an issue for me whether it is DSL or ADSL. There are copper technologies that will provide solutions in this space. By no means am I anti-copper, by any stretch of the imagination, but the current ADSL product and its upload speed is unacceptable.

Senator LUNDY—What about the inhibiting effects of download caps?

Mr Barclay—It is certainly going to be an issue moving forward—with being able to download content like movies and so forth. Our particular model has been set up to address that, inasmuch as we are looking at putting a lot of those services and functions on the private network, where we are not incurring data charges.

Whilst I have raised this issue before—and it is probably getting a little bit technical for me to understand why we have it—I have been reassured that we are beyond the point of changing our charging regime in the short term. If we accept for the moment that we are stuck with it, we need to look for solutions that will overcome it. The running of private and virtual private networks will go a long way to allow business collaboration, where they can share data without incurring the cost of excess downloads in the true Internet world.

Senator LUNDY—Do you provide a voice-over IP service as well?

Mr Barclay—We do. We have had a very strong uptake of voice-over IP.

Senator LUNDY—Can you tell me about your experience with interconnecting calls, terminating calls and so forth through the voice-over IP network?

Mr Barclay—We have taken a Cisco voice-over IP product that is well proven in the corporate space. It is not a new to market product any more, in our opinion. Significant development has been done on it in the corporate sector. We have found that there has been no issue for us, albeit I do stress that we have a unique environment where we are providing the connection and the phone as part of the development so that the users have it there when they walk in. It allows us to provide value-added services like access control and other enhanced features. Our early experience—our business model is now only 18 months old—is demonstrating call cost savings, particularly in the area of local calls and intercommunity calls, which are of course free.

CHAIR—Mr Barclay, thank you for appearing today. You have been very helpful.

Mr Barclay—Thank you.

[3.02 p.m.]

DAVIDSON, Mr Keith Charles, Chief Executive Officer, Norlink Communications Ltd

CHAIR—Welcome. I know you have travelled from Lismore to be with us, so thank you for that. It is much appreciated. It is a lot closer than travelling to Canberra.

Mr Davidson—That is true.

CHAIR—The committee has received your submission, which we have published. Would you like to make any alterations or corrections to your written submission at this stage?

Mr Davidson—The submission is fine. I just might provide an update in my opening statement.

CHAIR—Okay. I now invite you to make an opening statement before we move to questions.

Mr Davidson—Norlink Communications has been a regional telco now for two years. You would have seen in our submission that we had been going through the process of implementing a new wireless local loop network in the Northern Rivers. At that stage we were testing services. I have a few points which will bring you up to date as to how we have gone on that. We have implemented our broadband services from two base stations: one overlooks Byron Bay and the other one is in Lismore. We are now delivering a range of guaranteed bandwidth services and best effort services, with defined levels of services to a number of communities. Overall, we are getting coverage out to nine communities, with services delivered out to 35 kilometres from a base station. The customers we have there are getting 1.5 by 512 megabit services over 35 kilometres.

We moved our service into a fully commercial service from 1 November, and we have a range of subscribers utilising our services. We have a basic broadband service, which is an ADSL type service, and we have some guaranteed bandwidth services up to two megabits per second synchronous. That service is limited to a distance of 10 kilometres, using a different frequency modulation than you would to reach out to broader distances.

We also have VPN type services. We were quite pleased to put on a group of radiologists in December who were operating their own virtual private network. They are not really going out to the outside world but are utilising our network to deliver health services within the Northern Rivers. This is on top of the full suite of services that Norlink has been delivering over the past 12 months. We currently deliver dial-up Internet DSL fixed lined services. We have been delivering that for some time. We have 3,000 customers overall.

Specifically on broadband, in 2000-01 Norlink included in its strategic plan comprehensive strategies for the long-term deployment of new infrastructure to enable economic and social growth that will be realised with the development and delivery of true broadband. These strategies included a customer aggregation strategy and a backbone strategy which incorporated intraregional backbones and long haul backbone networks. We had a demand aggregation

strategy for large users, such as corporations and government agencies, and also a demand aggregation strategy for residential users and SMEs. In addition, we had a customer retention strategy. One of the key things in the telco game is how you manage to keep your customers, given that there is a high churn rate within the telecommunication industry. I am pleased to say that our customer retention rate is something less than one per cent, where the industry average is more like three per cent.

In the demand aggregation space, the Norlink wireless deployment is a demand aggregation strategy that we have seen for small residential and SME users. We see that the wireless is a good short- to medium-term technology to deliver broadband to regional communities, with a graduation to fibre as demand grows. We see this as an incremental step. My medium term is probably a lot longer than someone else's medium term, because we look at a period of, say, 10 to 20 years. We are not looking at tomorrow or five years time, though most corporates in their investment profile will be looking at five years as being a long-term strategy. So to deliver true regional broadband to communities in regional Australia we need to take a much longer view.

We believe that, to create a true competitive environment, ownership of the local loop or even that intraregional backhaul network should be vested in the community—for example, local government. This infrastructure should be no different to water, roads or electricity. Services can then be provided wholesale to any number of carriers who wish to enter the market. Quite often, a lot of the major users in regional areas are in fact corporates who have their head offices in Sydney or Melbourne and make their decisions about the purchase of telecommunications in those locations, and clearly they go for the big three for those types of services. Therefore, in most cases the services are delivered by one of the big three in regional areas. If you have a local intraregional network that is available to all, it will create a much better competitive broadband, which the rest of the region will be able to take up and utilise. Norlink is implementing and proving this model. It is now working with other regions to develop broadband in their regions, and we have actually signed an MOU with another region to work with them to develop their own micro telco.

Norlink has developed a paper on the micro telco model as a vehicle to enable this to happen. To this end, I have brought the paper here, and I would like to table it as part of the documents. In summary, we have entitled the document *The key to the puzzle of regional telecommunications*. This document is a result of what we have learnt over the past five or six years. We see Norlink as being a prototype micro telco. This model includes backbone partnerships, complementary use of existing infrastructure, shared back-end services, demand stimulation, aggregation of buying power and new infrastructure. Such a model would bring many benefits. These would include a fully defined working model that actually has been deployed in a region in Australia and technical management issues that have been developed by an organisation such as Norlink that can be brought to bear on other regional telcos as we have outlined in the MOU with this other region. The regions would be able to create their own identity, so it would be a local community owned telco in some form.

It provides for new infrastructure deployment. It provides for the use of the existing Norlink business model to be deployed as well, and the associated business planning that has gone into it. It provides lower costs for existing services over existing infrastructure, through the aggregation of demand. It can create jobs within the local community by services being delivered within the local community. The major proportion of the telecommunications spend can stay within the

region if they are providing customer care within that region. And you can actually implement as part of the model we have included—that is, the Norlink community development program, which is quite comprehensive. Those sorts of programs can help with that customer retention model. It can significantly reduce initial capital investment by having an incremental model of investment, and it allows for the fast deployment of services. Essentially, there is a lot of technical support to bootstrap the micro telco.

Without the deployment of new infrastructure regionally, it is Norlink's belief that true broadband competition will never happen in regional Australia. The quality of current infrastructure in the regions is quite poor. There are a large number of communities in our region, which extends from the area of Tweed Heads down to Grafton. There are 58 towns and villages within that region; 18 or so have DSL-enabled exchanges, but the majority of the population actually live outside the ADSL zone. Although Telstra has now moved the assessment of the quality of service that can be delivered by ADSL out to four kilometres, it still leaves a lot of people outside that zone. Therefore, only the deployment of new infrastructure will bring competition, and only the deployment of new infrastructure will bring economic and social development to regional communities. Thank you.

CHAIR—Thank you, Mr Davidson; that is fascinating. I am pleased to hear that Byron Bay and Lismore are online now. It is good to hear. In your submission you talk a little bit about the inquiry's terms of reference, particularly the impediments to competition and the uptake of broadband technology, and you refer to difficulties with acquiring spectrum. What recommendations would you make to this committee about how we would tackle issues like that?

Mr Davidson—Spectrum is a finite resource that is available for the delivery of wireless services into regional areas—or anywhere, for that matter. The two most usable spectrum bands for the delivery of wireless local loop services, the 2.3 GHz band and the 3.4 GHz band, are tied up by two major organisations. Those organisations have chosen up until now to sit on those spectrum bands and not use them. It was a 15-year licence period. It is now three years into that licence period, and none of that spectrum is actually being used. We did enter into negotiations with one of those licence holders for a period of six months, only to have their board make a decision not to do that, which caused us to reassess our method of deployment. We were fortunate to be able to access a small amount of bandwidth that was available in the 3.4 GHz spectrum. We are still in negotiations with the 2.3 GHz spectrum holder over making the licence available to us, but that now means that we would have to run separate technologies in one region, with a very small capital base, so it is very difficult for us to proceed down that path. As far as a recommendation goes, I reckon spectrum is too valuable to be held and warehoused. It will delay the deployment, in the short to medium term—my definition of 'medium term'—of broadband services in regional communities for some time, unless those issue are resolved. Spectrum needs to be available in regional communities.

CHAIR—It might sound like an obvious question, but what is the commercial advantage to a carrier of warehousing spectrum for two, three, four or five years?

Mr Davidson—I do not think there is necessarily any commercial advantage in doing that, it is just that one of the holders of the spectrum had significant financial difficulties. They were initially looking to deploy a wireless local loop service in that spectrum and then chose to opt

out of that and move back to their core business, which is delivery of pay TV in regional areas. The other holder of a spectrum licence is currently doing wireless deployment trials within the capital city areas, so their focus is not on regional areas.

CHAIR—Right.

Senator LUNDY—It is good to see you, Mr Davidson. The last time I saw you was when you appeared before the Australian telecommunications network inquiry, which held a hearing north of Brisbane. I remember from evidence at that time some of the challenges Norlink were facing in getting access to the towers. Obviously, things have been going well and that all has proceeded. For the sake of continuity and curiosity, can you take the committee briefly through the process of events that has enabled you to finally get your services operating.

Mr Davidson—There were two significant issues that confronted us. We have addressed one of those, which was spectrum, and it took us a good nine to 10 months to resolve that issue. Access to the Telstra towers actually took us a full 18 months to obtain. Given that we really only have a finite amount of funds, it obviously put considerable pressures on the organisation. The process in getting access to towers is that you either have a facilities access agreement with Telstra or you have someone else who has a facilities access agreement with Telstra to go through the process. We have a relationship with another carrier who is delivering our microwave link. We have two base stations connected. That carrier had to negotiate tower access for themselves to deliver our service; therefore, at the same time, they negotiated our access to the towers.

The process is very defined. Getting tower access is a five-stage process. It involves completing some documentation, then you move through each stage. You move from one stage to the next stage as you are getting approved. Quite often, and we are not certain where the fault lies, you find that you end up back at stage 1 on a regular basis. It took up until July 2003 for us to get access to the towers. The deployment of our antennas on the tower certainly is not optimum given that there are actual locations on the towers that would have been much more advantageous to Norlink. The current locations on one particular tower are at different height levels. That is causing us some issues that we need to address now, and we will have to go back with some positioning changes.

Senator LUNDY—Do you have to deal with Telstra or your partner to get that problem fixed?

Mr Davidson—We are currently dealing with our partner to do that. They have gone through some changes themselves and it has been a bit more responsive now. In regard to towers for our future deployment, we are currently not looking at Telstra towers.

Senator LUNDY—Is that because of the challenges and problems?

Mr Davidson—Partially. You have to go for the locations that look the best. We have a couple of options in both Maclean and Grafton. Alternate facilities owners look better. We actually have negotiated access for those two locations.

Senator LUNDY—You mentioned in your presentation that inter-regional backhaul should be vested in the community in some way. Why do you say that? What are the issues about backhaul in the regions that make you say that?

Mr Davidson—Getting back to an interconnection point with a long-haul carrier is actually quite a significant cost. Our current microwave link is a managed service that we have bought, and it was a significant cost for us to do that. Having a backhaul network within the region and an ultimate deployment of high-speed bandwidth within CBDs to start with for local communities, vested in the community in some form, provides a mechanism to allow earnings to happen over that network that can ultimately be reinvested into more infrastructure and be incremented out to further and further distances.

Interestingly, in the Northern Rivers a group of six councils are coming together and starting to realise the advantages of that. They are looking at resource sharing. The issue that confronts them is that, if they want to have resource sharing—as in having centres of excellence for, say, human resource type management issues within local government, or dealing with geospatial issues—they cannot do that without having seamless communications between each location.

Senator LUNDY—What proportion of the costs in your business model would be comprised of those backhaul costs and, effectively, buying or leasing that bandwidth from major telcos? Does that dictate what sort of prices you can offer your customers?

Mr Davidson—In essence you really cannot get access to that at the moment without putting a gateway in. There is no access to high-speed bandwidth within the region per se. You can go through Telstra to get that access. With the change of ownership of the NextGen network that may open some opportunities there. I understand that AARNet has entered some negotiations with the NextGen network and there are access points within the NextGen network on the Gold Coast and also in Lismore and probably in Grafton as well. But again, it is all dark fibre and needs to be lit up in some form. That is a part of that investment in that local infrastructure to create that network and provide that gateway to enable any number of carriers to come through, by a low-cost wholesale service, the investment probably being underpinned by savings and resource sharing through local government, perhaps.

Senator LUNDY—Telstra is obviously there. What is the barrier to using Telstra?

Mr Davidson—At the moment we do not have that need because we have not employed that network, so we need to investigate that ourselves. There is no barrier to using Telstra apart from cost. Again, we have not addressed that cost issue for a number of years—it is not a part of our business model at the moment. Equally, if Telstra makes its network available at a competitive price, then so be it—that is great.

Senator LUNDY—Regarding the micro telco model that you have presented in the supplement, how does that vary from the Bendigo community telco model?

Mr Davidson—To my understanding the Bendigo model was a demand aggregation model, which was about getting the community to man together and make a better purchase of fixed line and other services. It did not specifically have an infrastructure deployment component. My understanding is that they are considering some sort of infrastructure deployment component but

they have not come to any terms with that. Infrastructure deployment is fundamental to any regional telco.

Senator LUNDY—And that is really where this model stands out: it is about infrastructure as well as aggregating the demand as a package.

Mr Davidson—It is about community ownership and reinvestment into the infrastructure. If you are not building infrastructure, you are not going to have it. The economic development officers of various councils are now telling me that one of the critical things they are asked by industries or businesses looking to relocate to the region is: what is the quality of the telecommunications services in their region? If they are answering, ‘Yes, we have ADSL,’ then that is just not good enough.

Senator LUNDY—You said that you see these wireless and broadband solutions that you are providing as an incremental step and that ultimately in the long term, which is 20 years—the long, long term, depending on how long your long term is—you may take up fibre-optic. Did you say you would end up going to fibre-optic?

Mr Davidson—Obviously there is an issue in relation to the business case for developing for a fibre-optic capability to the home, but we are talking about the long term here and the long-term aim should be to deliver high bandwidth services to the community to deliver ubiquitous type services such as health, education and entertainment—all the services that are required within a community—and allowing people to overlay that with any number of applications and services that they choose.

Senator LUNDY—Thank you.

CHAIR—Senator Tchen?

Senator TCHEN—Thank you, Mr Davidson, for your evidence. I found the description of your micro telco model very interesting. Initially I had a question about whether it is similar to the Bendigo model but you have already answered that. But it raised a couple of interesting points in my mind. In terms of this particular inquiry, we are looking at broadband competition. I suppose the connection is that you are looking at the regional and remote communities—the small communities—and these micro telcos will be able to represent those communities, go into the broadband provider market and seek a competitive outcome.

Mr Davidson—In essence, yes. The thing is that at the moment a small community has no choice. They have one provider, a provider who may or may not deliver broadband. There might be a particular entity within that small community that has a need and they may buy a specialist service. But it will only be a solution for them; it will not be a whole of community solution. What you need to do is take a long-term view and look at being able to bring a competitive market to the community. If that community is fortunate enough to have that single user, you need to work with that single user to bring a staged development into that community. Certainly, you need to allow any carrier to come in and deliver services over whatever network is deployed.

Senator TCHEN—But at the same time—and this is not a criticism; I am just musing—your mini telco within the local community is actually a monopoly—

Mr Davidson—Yes and no.

Senator TCHEN—because it actually prevents anyone else coming in.

Mr Davidson—I understand what you are saying. I am not putting forward Norlink as a micro—

Senator TCHEN—This is not by way of criticism; it is because we were talking about competition.

Mr Davidson—The locally deployed network needs to be managed but it does not need to be managed by a provider of telecommunications services. It can be managed as you manage the delivery of roads. You have many different providers of services on the road. It is about vesting ownership within the local community and—more specifically—local government, who will engage someone to manage that network, allowing all the others to come in and deliver services to whomever. By its very nature it is a bit monopolistic. Some people could talk about natural monopolies and things like that. If it is vested in ownership in the local community somehow and is a service managed by someone, it could be put out to a competitive market for someone to manage those services. So it is not as if we are putting any particular entity forward as the manager of that network.

Senator TCHEN—I hope you do not think my question is a criticism of your model. I want to tease this out because if this model is going to work across the nation we need to look into it and see whether it actually would have broad application. The other issue with your micro telco is that in those communities which do not have these services or which cannot get access or where the sole provider refuses to give access, the main reason or rationale for that is that the commercial risk is too high—the cost is too high.

Mr Davidson—That is right.

Senator TCHEN—What your micro telco does, because it is regionally owned, is remove the cost aspects. The community carries the cost, essentially.

Mr Davidson—That is right.

Senator TCHEN—That makes it viable. However, it also means that the cost is actually transferred to the community. For the model to work, the telco has to be managed efficiently and effectively because otherwise the commercial provider will be proved to be right—the cost will be too great. How do we overcome that possibility? You cannot be sure. Earlier, we had Mr Barclay here talking about a different model in different circumstances. His model is actually based in a very highly competitive area where any management failure would result in the business disappearing. However, a community telco like this would almost have an irresistible existence. It would have continuing existence because keeping it going would be a political issue.

Mr Davidson—I understand, and there have been some issues of deployment of those sorts of services in regional areas with different infrastructure types, I guess. There are two issues. You spoke about the commercial risk. The analysis of the commercial risk from the corporate sector point of view is taken over a shorter payback period than you would normally use in an infrastructure deployment through local government. You have to look at the local community side of things as actually not being inefficient with the resources but in fact making a decision to spread the risk over a greater period and to manage the network so that, should a management entity who is managing the network fail, you then call for expressions of interest and tenders to allow another management entity to come in. The region—the community—is only owning the infrastructure and providing management services. The management company takes a fee on all the carriers that are paying over. The community is not paying the management agency. It is just like another product set that the management agency is offering to the whole of the carrier community. I am not too sure I have answered that question.

Senator TCHEN—Yes, I understand that. My point is that a lot of models can work in one or two cases, because they are driven by people with vision, with ability—

Mr Davidson—I do not think this model would work in a region that did not have vision, in any case, because you are looking at a long-term view. You are looking at local government getting into the region and saying, ‘Yes, we want to make our region, as a competitor to the one down the road, as competitive as a capital city.’ You cannot do that without regional vision. If you are going to say, ‘I want to have a service of last resort,’ let us stick with what we have.

Senator TCHEN—Thank you, Mr Davidson.

CHAIR—Thank you very much for your evidence this afternoon and for coming again. It is much appreciated. You were tabling a document?

Mr Davidson—Yes.

CHAIR—We will accept that as an exhibit.

Senator LUNDY—Yes.

CHAIR—It is so ordered.

Proceedings suspended from 3.32 p.m. to 4.07 p.m.

FARAGO, Mr Robert, Director, Bits on Light Pty Ltd**WOO, Mr Tak, Managing Director, Network Technology (Australia) Pty Ltd, trading as OntheNet**

CHAIR—Welcome. We thank you both for your time this afternoon—especially Mr Farago, who has come down from Brisbane—and for being on our last slot for the day. I am not sure how your two companies work together, but we hope that you will enlighten us in the course of your presentations. The committee has received your submission, Mr Farago, and we have already published that. Are there any alterations or corrections you need to make to your written submission at this stage?

Mr Farago—No, there are not.

CHAIR—I now invite you both to make your opening statements before we move to questions.

Mr Woo—I will start. First of all, I will address the question of our relationship. Mr Farago is a business partner at our business, OntheNet, which we founded in 1994. At that point we were the first ISP on the Gold Coast. We have become quite experienced in dealing with the local community because we service local government, business and home users. I will explain a little bit about how we see broadband take-up and competition on the Gold Coast from the point of view of an ISP, and then we will move onto Mr Farago and some of the stuff that he mentioned in his submission.

To open with, we might look at this size of the city. Gold Coast is the sixth largest city in the country. It is actually larger than Canberra, Hobart and Darwin. By population size we are even larger than the Northern Territory and the ACT. But we are still treated as a regional area where we pay STD calls to our next city, which is Brisbane. I am sure everyone knows about the tiered structure that Telstra Wholesale has on the Layer 2 service for DSL, and Gold Coast is treated as Regional 1. So we are paying regional prices where, in some senses, we are being treated as a capital city as well, in terms of size. Most of the Telstra Retail products are on data services, and Gold Coast is treated as a regional area as well, where we pay extra in comparison to the capital city. We do understand that the city is large enough and it has a population that means it probably should be counted as a capital city, but in terms of how the government looks at the Gold Coast, most of the funding programs, such as HiBIS, CCIF et cetera, exclude Gold Coast as one of the regions that can apply for that regional funding.

In terms of how Telstra looks at the Gold Coast, after the recent restructure last year we are managed on the retail side by Telstra Country Wide, which looks after regional areas. That is where we stand at the moment. On the supply side, we still have a lot of issues with broadband on the Gold Coast on the supply side. In this area, being one of the fastest growing regions of the past 10 years, we do have a lot of RIMs, which means home users or businesses cannot get DSL. There are still the usual problems of them being too far away from the exchange or there being rural exchanges which are not turned on for DSL. They seem to be pretty much the same issues as any other regional area. We do welcome Telstra's efforts in those areas where they are doing

copper transposition in some cases to bypass pair gains, putting in MiniMux and CMUX-AU to replace the RIMs and running more copper. Also, in the last two weeks they have announced that they have increased the distance limitation for DSL from 3.5 kilometres to 4 kilometres—that also helps.

As an ISP, we do have some corporate clients that are on higher speeds and require fibre. We welcome the efforts of the Gold Coast City Council to bring in other players through their PIC project. We now have the choice of a couple of fibre connections from various players. The PIC project does not only serve the purpose of the larger corporate customer; it also helps to aggregate demand for those such as ourselves so that we can lower our costs by buying alternative fibre capacity and lower the cost to our customers through our pricing. On the demand side, these are some of the numbers we have from looking at our own subscriber base to see what the market is doing and what speed customers actually demand: we found that 45 per cent of our customers are actually on the lowest speed connection—256k on broadband—and 40 per cent of our customers are on 512k. The price difference between 256k and double that speed is around \$10 to \$20 on our prices. Only 15 per cent of our customers are on 1.5 megabits per second, and the price is about \$50 more than the 512k connection.

Considering that our customer base mainly consists of about a 50-50 split between home and business users, we find that the market has spoken—it is very price sensitive. Our customers do not like to pay for high speeds; even when the difference is only \$20 per month they are not asking for the higher speeds yet. As previously mentioned, we are looking at the long term and the short term, and we think that in the next five to eight years ADSL is probably going to be able to meet the demand from most of the users out there, especially if we consider that we have ADSL Plus and ADSL2 coming. That will improve the distance and speed available. Lastly, we want to say that we are introducing our own infrastructure. I think our first exchange rollout is going to happen in April this year. We will not only be providing ADSL; we will also be running multimegabit services and some symmetrical services with ULL.

Mr Farago—I would like to make the point that broadband systems are made up of two components. One is the last mile and the second is the backhaul component. I acknowledge that other witnesses have spoken about the challenges of the backhaul component, but let me firstly address the last mile.

It is my view that there is very little competition in the four broad categories of last mile technologies, which are fibre, copper, HFC cable and various wireless technologies. I believe my submission looked at those. Telstra is dominant in each of those categories, with a 50 per cent or more market share. Other OECD countries have competitive tension between the various technological categories, which leads to improved outcomes for consumers. For example, in the US, cable companies compete against the phone companies which leads to better outcomes.

I will firstly look at fibre. As Tak mentioned, although everyone would like to have one gigabit per second fibre to the home, they are not willing to pay for it yet. We believe that in the five- to 15-year timeframe we will see that. Fibre has the capacity to be the last network required for the home. It has the characteristic that you can keep upgrading the equipment at each end and keep adding new capacity to the fibre. Already some US based telcos with very expensive pieces of equipment at each end can run fibre to a terabit per second for long haul, which would be great.

We believe that in the interim period—that is, the next five or 10 years—copper will be the most relevant technology. I qualify that by saying that applies in urban areas where the quality of the copper is good and most people are within four kilometres of exchanges. Wireless will have an important role to fill the gaps in some areas where there are things like RIMs or distance limitations, particularly in outer urban and regional areas such as our own. For rural and remote areas, wireless technology may be the only cost-effective way of reaching those homes.

We have looked at DSL solutions in quite a bit of detail. We acknowledge that the ACCC has worked hard to unbundle a lot of the components that make up an ADSL last mile system—those two are ULL and line sharing, both of which are available in a regulated setting with regulated pricing. However, the ACCC policy settings—pricing and other terms and conditions—are perhaps not yet quite right, and my submission alludes to this too, because DSL is not yet deployed widely, and by ‘widely’ I mean competitive providers apart from Telstra, outside the CBDs. Some of the significant issues regarding expanding that coverage include co-location costs and the costs of backhaul, which I will mention shortly. Some of the new intelligent wireless technologies that other witnesses in other cities have mentioned are very exciting and will expand the market.

I will now move to backhaul. Each of the last mile technologies, whether DSL or wireless, require backhaul—taking the information from some aggregation point back to the wider Internet. The aggregation point might typically be an exchange, cable TV head end or a tower, in the case of a wireless system. Fibre is the most scaleable backhaul technology, however coverage of fibre is limited outside the capital cities unless you can tap in at some point, and not all cities or towns have that capability. Satellite is not adequate due to the delays experienced by the information travelling over that link.

There are a couple of possible recommendations, which I also alluded to in my submission. One is to open up the HFC cable to wholesale customers. In the case of ADSL that market has flourished, at the retail level at least, as more retail providers have accessed that infrastructure. Secondly, and perhaps more controversially, is declaring the fibre to the RIMs. At the moment, Telstra is rolling out technologies to upgrade the RIMs, but there are capacity limitations. I suggest declaring that fibre would open up those customers, and perhaps HiBIS can also help in that regard.

Declaring fibre to exchanges, from a DSL perspective, would be an important step. I do not know whether the committee has looked at the Japanese DSL market. Their regulators deregulated that fibre down to a world-low level of 4.9c per metre per month, or about \$A50 per kilometre. That has resulted in the incumbents having only 37 per cent of the Japanese DSL market, while in the US it is around 95 per cent. That has certainly led to greater infrastructure competition, as well as competition at the retail level. Some people would say that the Japanese regulators have gone too far and possibly made that cost too low, and I am sure that some smarter people than me, with economics degrees, could come up with a better level than what Japan has done. But I think that is an example of infrastructure competition where existing infrastructure is reused and augmented with other equipment at the exchange to lead to better outcomes.

Senator TCHEN—You talk about ‘declaring fibre to the RIM’. What do you mean by that?

Mr Farago—I am not a lawyer, but the ACCC has the power to ‘declare’ telecommunication services—that is, where there is not a commercially acceptable agreement on price, the ACCC can arbitrate and come up with a price they consider appropriate, based on the long-run costs. So various components in the telecommunications sector have been declared and, therefore, those input costs to other carriers have come down.

Senator TCHEN—I understand the ‘declare’ part, but what do you mean by ‘fibre to RIM’?

Mr Farago—One of the limitations of universal broadband availability is RIMs; it applies to perhaps 10 per cent of homes. Senator Lundy probably has a better idea; she probably gets lots of emails about it. Most RIMs are connected via fibre, so if you made that capacity available to alternative providers they might choose to invest in infrastructure at the RIM level and service those customers. But, at the moment, using retail fibre pricing, it would not be economic.

Senator TCHEN—I see. And it is that the same for the exchange?

Mr Farago—Yes.

CHAIR—Following on from that issue, I am interested in how you would declare it to RIM. Essentially, if the RIMs were being removed, wouldn’t that particular cable cease to be declared? I am trying to get my head around what your proposal is.

Mr Farago—My proposal is that, in certain areas where there are RIMs, a competitive provider might put another box next to a RIM, access the fibre which goes to the RIM and access the copper from the point of the RIM to the household or business. I believe that Telstra are no longer rolling out RIMs—they are rolling out replacement technology now—but there are an awful lot of existing RIMs out there.

CHAIR—Essentially, the advantage would be that, for the last mile, the other provider could lay down their own copper or something like that?

Mr Farago—You would use the existing copper, which we can do now from the exchange but not economically from the RIM, at this point.

Senator LUNDY—I would like to explore this a little further. My understanding is that, given that resellers of ADSL services—probably the most useful example for this conversation—cannot provide that service to a RIM anyway, this issue has not really come up in the context of ADSL resellers. I want to query your understanding that the fibre would not formally be considered part of an Internet exchange network, given the nature of the RIM. Are you telling me that if, for example, a CMUX unit was put in a RIM—and because of so-called fair competition Telstra would lose that to the reseller—and if a customer requested an ADSL service through a Telstra competitor, an additional commercial negotiation would have to take place to secure the reseller’s use of the fibre between the RIM and the exchange?

Mr Farago—Yes, there would be.

Senator LUNDY—That is very interesting.

Mr Farago—The resellers that are successful out there—the larger ones and the smaller ones—basically use the Telstra infrastructure from the copper, through a RIM or through an exchange and all the way back to a capital city. That is the layer 2 resale of DSL provision. If you are talking about infrastructure competition, that is a layer lower, where a provider would put their equipment into an exchange and then use the Telstra copper for the last mile.

Senator LUNDY—That is right.

Mr Farago—I am taking that one more step to say, ‘Okay, let’s do it at the RIM level,’ but the number of customers off a particular RIM is very small; therefore, it is harder to make the economic case to do that. But I am suggesting that if that fibre were declared then people could use the copper from that RIM or they could set up a wireless last mile from that RIM. There would be other options, but that fibre or the bandwidth backhaul is the problem.

Senator LUNDY—The questions I have asked Telstra on this issue have never drawn out the fact that additional commercial negotiation would be required for access to that piece of fibre in the context of, for example, the MiniMux trials. I think that this and various other Senate committees have been assured that if a CMUX unit were to be installed in a RIM then it is like having a DSLAM, as opposed to a CMUX, in an exchange.

Mr Farago—Resellers can use that without an extra charge. However, if we want infrastructure competition—that is, competitive infrastructure—it needs to be put next to the RIM, not into it, because the RIM may not have room.

Senator LUNDY—I see. So you are talking about a different scenario to the normal reselling of an ADSL port?

Mr Farago—Yes. Sorry for the confusion.

Senator LUNDY—No, it is important for me to understand your evidence. Going to the backhaul pricing, you said that this area is treated as a region for the purposes of ADSL pricing. Could you run through what the prices are for ADSL in this region compared to a capital city? Mr Woo, I do not know if this is one for you.

Mr Woo—Perhaps we would have to use the publicly available information because this is NDA pricing that Telstra Wholesale employ. We probably cannot mention it in public.

Senator LUNDY—Yes. I think the point you made, and we know from evidence earlier today, is that some of the government programs treat this area as a capital city, but for commercial purposes, as resellers of ADSL, you pay their regional rate, which is more per service than you would pay if you were in a capital city. Can you give me an idea of the percentage more or is that something you have negotiated?

Mr Farago—It comes down to commercial negotiation.

Senator LUNDY—Okay. I do not want any commercial-in-confidence information. You are quite right: there are published figures.

CHAIR—Mr Farago, your submission indicates:

Regional areas, just a couple of hours drive from the capital cities, are of particular concern as the input costs for their services are 35-40% higher than metropolitan prices.

Would that be the sort of range you would be talking about for the Gold Coast?

Mr Farago—No, we are about an hour's drive away. The demarcation point is about 165 kilometres from the capital cities. I believe that is public information. I believe Telstra have adjusted their pricing at various points in time, too, so it is hard to give an accurate percentage.

Senator LUNDY—Declaring the fibre to the RIMS is an interesting new proposition that has now entered into the debate. How would that change the dynamic of your company in looking at ways to provide services? Presumably you would still have to test your market to see if there was a business case in those areas.

Mr Farago—Yes, it is certainly the case that the density of customers is an important factor. So a large exchange in Australia might have 40,000 lines hanging off it, which means that the commercial risk is lower if you put a piece of infrastructure there. A RIM might have only 400, so the hurdle must be a lot lower or the input costs need to be lower to make that hurdle viable.

Senator LUNDY—Going back to the point about the distance limitation change from 3.5 to four kilometres, what are the implications for you as a service provider? Given that it used to be 3.5 kilometres—and I am sure that you have knocked people back on that basis—does Telstra have a process through which they now approach you and say, 'You applied for this person and this person and, according to our records, they might now be eligible, so you get first bite of the cherry'? Or do you just have to market yourself and hopefully pick up—

Mr Farago—We search the databases, find all those ones and check them out again.

Senator LUNDY—Presumably Telstra have those same databases, because you have made applications that they have knocked back. How do you know that they are not doing anything anticompetitive by targeting those customers who were ineligible because of that limitation and who are now eligible?

Mr Farago—Telstra assure us that there is a Chinese wall between wholesale and retail.

Senator LUNDY—How confident are you of that?

Mr Farago—We work well with the wholesale people. They are very professional. We trust them.

Senator LUNDY—Have you seen any evidence to think that that is not the case?

Mr Farago—None that comes to mind.

Senator LUNDY—We will keep a close eye on that.

CHAIR—I have a couple of quick questions, Mr Farago. In your submission, looking at the issue of the Telstra fibre network, you indicate that there is currently no resale of Telstra dark fibre, which is fibre already in the ground but currently unlit and therefore unused. You go on to say:

There is however declared access to existing fibre “ducts” for competitive fibre providers, if there is space remaining in the ducts.

Can you explain what that means? The notion of having Telstra dark fibre unused and in huge chunks in the ground is something which I find mystifying. How could that be utilised in a competitive way?

Mr Farago—I guess Telstra wants to protect that asset and only offer it from a retail basis. I do not know how that decision came about, but the ACCC and the declaration regime have decided that the duct is the level at which they want to unbundle the network. It is true, globally, that there is a lot of dark fibre that people have in the ground, and they choose not to light it. I presume it is for commercial reasons.

CHAIR—We can ask the ACCC on Thursday. My final question, to either of you, is on the issue of the market being very price sensitive. Earlier in the day we heard from the IT forum people that the question is more about access rather than competition. When you are talking about the market being very price sensitive, you are talking more about competition than access, aren't you?

Mr Woo—No, we are only comparing our own database of customers. I will say that is not the comparative issue between us and other commercial entities and the products that they offer. It is more how, given a set of numbers, they split it up into different speeds based on the price difference.

Mr Farago—We are talking about the supply side and the demand side. That is how the demand is breaking down for the people that can get it. All those people can get 1.5 megabits but they choose to get lower speeds because, presumably, the price is more attractive to them. So there is still a supply issue—definitely.

CHAIR—That will probably do me for the moment. It is a very good submission. There are some interesting ideas in there. Do you have any questions, Senator Tchen?

Senator TCHEN—Yes, I am still trying to figure out some of these phrases. Mr Farago, you said that you have three specific recommendations. I will just see whether I have got them right. The first one is to open up the HFC network to the wholesaler.

Mr Farago—Yes, some people have suggested that as well. It is not a new idea, I guess.

Senator TCHEN—The second one is to declare fibre to RIMS.

Mr Farago—Yes.

Senator TCHEN—The third one is to declare fibre to exchange.

Mr Farago—Yes.

Senator TCHEN—Mr Woo, do you concur with those recommendations?

Mr Woo—Yes.

Senator TCHEN—So they are recommendations from both of you. That gives them more force—double the force!

Mr Farago—Not all the views expressed in my submission would be held by Mr Woo.

Senator TCHEN—With respect to your first one—opening up the HFC network to wholesalers—the ACCC has recommended to government that Telstra should be required to divest itself of the HFC network. Are you talking about the same thing or are you thinking of Telstra continuing to own the HFC but making access available to wholesalers? Which of those?

Mr Farago—The latter. However, in other markets I have noted that there is competitive tension between different companies that own different pieces of infrastructure. I do not think that allowing wholesalers to access the HFC network would lead to greatly better competitive outcomes. However, the cable has certain characteristics of greater speed at certain times than the ADSL network, so it would improve options for end users. But that is different to Telstra divesting itself as the ACCC suggests.

Senator TCHEN—Do you have any comments on the ACCC's recommendations?

Mr Farago—I have not read them in detail, so, no.

Senator TCHEN—All right. Now, as to declaring fibre to RIM, I will use layman's terms and see if I have got it right. What you want is open access to RIM?

Mr Farago—My understanding is that people can access the copper at the RIM now but it is uneconomic to do so because of the backhaul equation, so people need fibre or something to connect from their box next to the RIM back to an exchange or some other point.

Senator TCHEN—You are not talking about replacing the access to households; you are just talking about getting access into the RIM at the entry point?

Mr Farago—Yes, at which point you could use copper, wireless or a number of technologies, but it is expensive to get to the RIM at the moment.

Senator TCHEN—I think this question applies to the next recommendation—about the exchange—as well. Both the RIM system—the in-the-ground system, I suppose—and the exchange, which are real estate, are, I suppose, investments by the Australian community, generally through PMG in the old days. Telstra is the corporate successor to PMG but in due course, if it is privatised, the Australian community will get the money back. If access to either or both of these facilities is declared available to other providers, should those providers then pay for the access?

Mr Farago—Yes, in the declared regime people do pay for the use of those assets, based on modelling of what the true long-run cost would be. So, yes, people would pay for that.

Senator TCHEN—That sets my mind at ease. You are not thinking of open sesame—that is good.

Mr Farago—No.

Senator TCHEN—Thank you. That makes sense. There are just a few other issues in your submission itself. In the retail markets, you said that currently the Telstra regime is that there is a regional rate if it is more than about 150 kilometres from the capital cities. Do you know what the justification for that is, apart from it being a historic price base? It seems to me, in terms of technology, the cost should be the same.

Mr Farago—I agree. With fibre, the costs are much less distance sensitive than they once were in the old days of copper, so I presume Telstra charges that because they can.

Senator TCHEN—Has that ever been tested?

Mr Farago—I do not understand the question.

Senator TCHEN—Has anyone ever actually challenged this particular pricing structure?

Mr Farago—I do not know whether anyone has challenged it.

Senator TCHEN—Presumably not, otherwise it would not be here. To tell you the truth, Mr Farago, I found your submission so educational I am still digesting it—

Mr Farago—I hope it does not give you indigestion!

Senator TCHEN—so I do not know whether I have any further questions to ask you. I might leave it at that, before I display my ignorance any further!

CHAIR—Senator Lundy, as we have a bit of extra time, did you have any more questions?

Senator LUNDY—I would like to go back to this issue about content and infrastructure. You reflected on some of the more salient issues in the emerging markets review of the ACCC, particularly how in the jurisdictions where there is competition between types of infrastructure there has been a lot more progress on price, penetration and so forth. Specifically, what are your thoughts on Telstra's ownership of the HFC cable and the prospect of divestiture, as raised in the emerging markets report, as being at least a partial solution to the situation Australia finds itself in with comparatively low penetration and not much downward pressure on prices? It is a bit of a dorothy dixer, but go for it.

Mr Farago—I guess there are commercial issues with forcing divestiture because you have to compensate the person you are forcing to divest. I can understand that. I do not know an easy way of getting to a competitive dynamic like other markets have.

Senator LUNDY—Given that cable only goes past so many homes—I think 2.5 million homes—if there was divestiture, do you think that is enough penetration in the Australian market to have the sort of influence that it has had with different interests holding cable and DSL, say in the UK market?

Mr Farago—Possibly not. It is only a couple of million homes, to my understanding, and Optus has possibly slightly less. In the overall scheme of things, maybe it will not make much difference to the people that currently cannot get broadband of any form.

Senator LUNDY—Which tend not to be those people anyway.

Mr Farago—Yes. In my own street in Brisbane, I can get Optus, Telstra cable and ADSL, plus another couple of ADSL providers. So I am well serviced, but people in outer urban areas, newer areas, possibly only have one choice or no choice.

Senator LUNDY—Thank you very much for a great submission.

CHAIR—Thank you very much. There were some very good ideas in that, and thank you for your research. That concludes our hearings for today. We will now adjourn for a function at Varsity Lakes and resume here tomorrow morning.

Committee adjourned at 4.42 p.m.