

COMMONWEALTH OF AUSTRALIA

# Official Committee Hansard

# SENATE

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

**Reference:** Australian telecommunications network

## TUESDAY, 29 APRIL 2003

### ROCKHAMPTON

BY AUTHORITY OF THE SENATE

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#### SENATE

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

#### Tuesday, 29 April 2003

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

**Substitute members:** Senator Moore to replace Senator Wong for matters relating to the committee's inquiry into the Australian telecommunications network and the role of libraries as providers of public information in the online environment

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

Senator Greig for matters relating to the Information Technology portfolio

Senator Ridgeway for matters relating to the Arts portfolio

Senator Nettle for the committee's inquiry on the environmental performance at the Ranger, Jabiluka, Beverley and Honeymoon uranium operations

Senator Moore and Senator Wong for the committee's inquiry into the Australian telecommunications network

Senators in attendance: Senators Cherry, Lundy, Moore and Tchen

#### Terms of reference for the inquiry:

To inquire into and report on:

- (a) the capacity of the Australian telecommunications network, including the public switched telephone network, to deliver adequate services to all Australians, particularly in rural and regional areas;
- (b) the capacity of the Australian telecommunications network, including the public switched telephone network, to provide all Australians with reasonable, comparable and equitable access to broadband services;
- (c) current investment patterns and future investment requirements to achieve adequacy of services in the Australian telecommunications network;
- (d) regulatory or other measures which might be required to bring the Australian telecommunications network up to an adequate level to ensure that all Australians may obtain access to adequate telecommunications services; and

(e) any other matters, including international comparisons, which are deemed relevant to these issues by the Committee.

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#### Committee met at 11.10 a.m.

#### PALMER, Mr John Nevil (Rick), Critical Projects Officer, Rockhampton City Council

## UPTON, Mr Thomas John, Director, Community and Cultural Development, Rockhampton City Council

**CHAIR**—I declare open this public hearing of the Senate Environment, Communications, Information Technology and the Arts References Committee. I welcome everybody here today. Let me state at the outset how pleased we are to be in Rockhampton in beef week. It will give us an opportunity to hear first-hand the experiences of people living in the Capricornia region in relation to our inquiries into the Australian telecommunications network and the role of libraries in the online environment.

I welcome Mr Palmer and Mr Upton, our first witnesses, from the Rockhampton City Council. Thanks for giving us your time today; it is very much appreciated. 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 any answers to specific questions in private, you may ask to do so and the committee will consider your request. You are reminded that the evidence given to the committee is protected by parliamentary privilege. I also inform you that the giving of false or misleading evidence to the committee may constitute contempt of the Senate. I understand you have put in a submission to the committee here today. Is it the wish of the committee that the submission be published? There being no objection, it is so ordered. Would you like to make any changes to the submission?

Mr Palmer—No, thank you.

CHAIR—I invite you to make an opening statement, after which we will move to questions.

**Mr Palmer**—Tom Upton may be coming as well. He has an involvement with COIN. I gather the committee has already had a look at the facility.

CHAIR—Yes. It is a very impressive facility.

**Mr Palmer**—Tom is also involved in the development of an online library, which may have some relevance. My submission has been about the telecommunications network and the network that presently exists in Central Queensland, from a council perspective and from a community perspective. Obviously the issues of having an effective working telecommunications network are very important and are likely in the future to become even more important. For that reason, council has in very recent weeks made some examination of what the services are like within the Rockhampton and immediate areas.

The normal telecommunications network—the normal phone network—has worked well for a lengthy period of time and, from council's perspective, continues to work efficiently and effectively. Obviously there are a number of providers who are involved in providing that service, and that works admirably without any particular difficulty from our perspective. One of the things that did interest us particularly was the development of Reefnet. The Queensland government have obviously had an active role in telecommunications and, through the Department of State Development, have provided a broadband backbone along the Queensland coast that services the major provincial towns between Brisbane and Cairns. The Queensland government bundled sufficient services together, using railway land to provide the network, to make the development of that project attractive to Optus. It is an interesting way to provide telecommunications infrastructure and could be of interest to the Commonwealth because it shows that, by bundling together some government services, it is possible to provide infrastructure of that type.

In Rockhampton we have a number of networks. The most common network by far is the Telstra network. It has been based partly on ADSL and partly on fibre-optic cable, and it has the potential to use satellite. Satellite is not being used at the minute, as I understand it, but it certainly is available to all areas in the immediate vicinity of Rockhampton. I have attached to the submission a copy of some diagrams and maps that have been provided to the council by Telstra. They show the ADSL coverage from the three exchanges in Rockhampton and one at Alton Downs. I gather that the one at Gracemere, which does not operate on ADSL at the moment, will do so in the immediate future.

By way of explanation about the map, there are two circles. The first one shows an area that is  $2\frac{1}{2}$  kilometres from each of the stations and an outer line which is  $3\frac{1}{2}$  kilometres. Obviously the area at  $3\frac{1}{2}$  kilometres is the extremity of the ADSL coverage. Telstra advise me that, for the areas at  $2\frac{1}{2}$  kilometres, it is expected that 90 per cent to 95 per cent of residents within those areas would have ADSL capacity if they chose to access it.

In addition, there is also attached to the submission a map of a lengthy Ergon Energy network. Ergon, as I understand it, has an interest in allowing large organisations to access that. Ergon does not see itself as developing a residential network, but it is available to organisations and bureaucracies like council, the university and others which may have an interest in using it—in a sense, people who have a large amount of traffic and, I guess, not a lot of administrative difficulty.

**CHAIR**—I am having some difficulty reading the Ergon map. Would it be possible to get a clearer copy to us later in the day?

**Mr Palmer**—I will photocopy the original copy and give that to you. There are some differences in where the Telstra areas are. I do not have a map of the Telstra fibre-optic cable within Rockhampton; although I understand that it may have increased. Two years ago it was something like 140 kilometres through Rockhampton, linking major commercial and business districts, particularly in South Rockhampton, and it has expanded in the time subsequent to that. I am not totally aware of exactly where those areas run, though I am aware that they do include some areas of North Rockhampton. From my understanding of it, they are probably a lot more detailed in South Rockhampton and they pick up the larger organisational business sites in both areas.

There are some other broadband connections. The two examples that I have given are owned by WIN Television and the *Morning Bulletin*. Before Rockhampton got a very wide-ranging broadband capacity, those two media outlets had special needs and they developed their own. In summary, council sees the present network as working effectively, and there is obviously a concern that that continue. One concern is that, for some reasons which we may not even perceive at the present time, the development may not keep pace. If, for some reason, provincial and regional Australia does not become as attractive a place for telecommunications investment, there may be a chance of some of those services not continuing at their present level. We are obviously also concerned that there may be some changes in cost that may in fact mean that access in provincial and regional Australia will become less competitive from a price perspective than it is at the present time.

Council's view is that the Commonwealth government would certainly do well to consider the precedent that the Queensland government set with respect to bundling together some of its services—if in fact it is necessary—to provide better service in some areas of regional Australia. Reefnet could be a very useful example of government using its telecommunications spend to encourage better infrastructure at a price that is acceptable. We totally concede that, at the present stage, we are quite satisfied with both the infrastructure that exists and the price at which it exists, but we are concerned that those things could change at a later time. If they were to change, those alternatives may be available to the federal government to look at ways in which they may bundle some services together to encourage the development of services in areas of Australia like provincial and rural Queensland.

**CHAIR**—Thank you, Mr Palmer, that is fascinating. I have a whole bunch of questions. The first one is about Reefnet. We heard evidence yesterday in Cairns, from both Cairns and Townsville, that there were not enough entry points into Reefnet for it to be used by even medium sized commercial users. Do you know if there has been much commercialisation of Reefnet in Rockhampton?

**Mr Palmer**—The difficulty, as I understand it, is that there is no last-mile connection. There is a connection point that exists in the Rockhampton exchange and it is a question of how it is distributed from there at other times. If we did not have competitive prices and competitive infrastructure, obviously that would become a particularly important issue.

CHAIR—Is Optus doing any selling of access to Reefnet around the town?

Mr Palmer—Not to my knowledge.

CHAIR—But the Queensland government is putting its traffic through the Reefnet cable?

Mr Palmer—Yes, that is my understanding.

**CHAIR**—In your submission you refer to the work of Mr James in terms of the ADSL coverage of the area. He indicated that he expects 90 per cent to 95 per cent of customers would be able to use ADSL within the 2.5-kilometre radius, provided there are no blockers such as pair-gain systems. Do you know whether there has been any study of, or do you have any knowledge about, the extent to which there are blockages such as pair-gains in the Rockhampton network?

Mr Palmer—I do not, Senator.

**CHAIR**—This is almost a dummy's question for me. Would it be common for Telstra to lay down a fibre-optic network in a commercial centre such as Rockhampton? We have not heard of that in either Cairns or Townsville.

**Mr Palmer**—I would be extraordinarily surprised if approaches that they have taken in Rockhampton were not repeated in every other provincial city down the Queensland coast. In Rockhampton it extends to areas like the Rockhampton Hospital, which is at one end of South Rockhampton, and the Mater hospital at the other end of South Rockhampton. It then links Bolsover Street, which is where the council chambers and government offices are, and, to my understanding of it, all areas in the mall, to give access to all those. I saw a map of that, probably two years ago, but it was commercial-in-confidence and for that reason I have not been able to obtain a copy of where the network exists within Rockhampton at the present time. I do understand that it was about 140 kilometres two years ago and has subsequently been expanded. I would be extraordinarily surprised if there were not similar networks in communities like Cairns, Townsville, Mackay, Gladstone and Bundaberg, and further down the coast.

**CHAIR**—Presumably, that would give exceptionally good Internet speeds to people along that cable network?

**Mr Palmer**—My understanding of things in Rockhampton is that they have been positioned specifically for that purpose. They have been deliberately positioned to pick up the major organisational business traffic.

**CHAIR**—You are quite satisfied with your council's broadband access and the facilities you have at the moment?

**Mr Palmer**—We are. Our view is that they are sufficient for the present time. We are obviously concerned that we continue to get the benefits of competition. We would share a concern with Townsville and Cairns if those things, for some reason, did not continue. We are obviously cognisant of the fact that we have one provider within Rockhampton. The committee would unquestionably be aware that until the telecommunications downturn in about 2001 there had been a good deal of interest, in every community along the Queensland coast, in developing some sort of regional telco that would take advantage of the Optus connection on Reefnet and to develop it so that there might be some competition in those things.

With the business landscape in the last two years, at least within Rockhampton—and I understand within other areas—there has been less interest in that. I could not speak specifically for the other areas, but I can certainly say that in Rockhampton there has not been the same urgency for that that there had been previously. It is not coincidental that, at the same time, from both a bureaucratic and a residential perspective, Internet access became considerably easier to obtain via some of the arrangements that Telstra Country Wide have made.

**CHAIR**—Certainly in Townsville the city council is still engaged in discussions to get a regional telco up and running. Obviously Ipswich has one up and running, which is quite interesting. We had evidence from the Bendigo community telco when we there.

**Mr Palmer**—They have probably been having active discussions with every community within Queensland about those issues, and Rockhampton has certainly been one where they have had those discussions. There are a number of commercial strategies that Telstra appear to have adopted, and they have certainly ensured that they have had effective arrangements with larger organisations which are likely to take a significant amount of traffic. It has meant that any regional telco that may have an interest in trying to develop would find it very difficult to get traffic from any of the large organisational contributors and communities, so those regional telcos have probably got to be based pretty much on a lot of residential development and obviously compete with ADSL.

**CHAIR**—Are you aware of any large commercial enterprises which have been able to access the Ergon network?

**Mr Palmer**—I am aware that Central Queensland University has had some discussions with them about that. I am not clear as to whether those discussions have been successfully concluded, but there certainly have been some discussions about whether the university may use them.

**Senator MOORE**—I do not have many questions; you covered my questions in the report that you gave us this morning. Are you aware how far outside Rockhampton City Council boundaries this ADSL network goes? It seems to pick up the city of Rockhampton pretty well.

Mr Palmer—Two of the areas that are on that map are in the Fitzroy shire.

Senator MOORE—Yes, across the border.

**Mr Palmer**—That is right. Alton Downs and Gracemere are both there. I understand that Alton Downs, which is a rural residential area—

Senator MOORE—It is growing, though, isn't it? People are moving there.

**Mr Palmer**—Yes, but it needed some upgrades for other reasons. For those reasons, the exchange might have been in a smaller, more remote area that you would not have expected at first glance; the reason is that it needed some other technical upgrades which were quite compatible with giving it ADSL capacity. As I understand it, Gracemere is due to be provided with ADSL in the immediate future.

**Senator MOORE**—It is the next one off the rank.

**Mr Palmer**—Yes. There is quite a bit of residential development in the Livingston shire in the areas to the north of Rockhampton, north of Parkhurst, but at the present stage, to my knowledge, there is not any ADSL capacity in those areas. Because Rockhampton is constrained by the flood plain to the south and to the west, and by the Berserker Ranges to the east, it is most likely to develop to the north or down the Yeppoon Road corridor. The Yeppoon area would be serviced in part by Parkhurst, but the areas to the north of Rockhampton at the present stage would not be covered by it. I am unaware of the situation on the Capricorn coast. Obviously there is a significant amount of people who work in Rockhampton and reside on the coast—likewise in Mount Morgan. I am unaware as to what the situation there is.

**Senator MOORE**—We will ask Telstra that, because it is just in terms of your coverage area. The area around Yeppoon and west to Mount Morgan is just developing so much.

**Mr Palmer**—From council's perspective, we see the need to have these facilities in an area like the Capricorn coast as being just as great as it is to have them in Rockhampton. It is just that we do not have—

Senator MOORE—Yes, because they are your clients, too.

**Mr Palmer**—Exactly. We do not have an immediate statutory responsibility for them but because Rockhampton, as an economic unit, in a sense starts at the Capricorn coast and ends at Mount Morgan, we have a particular interest from a regional service perspective in ensuring that the people who live in those areas have access to these services as well. We see them as being equally as important as people in Rockhampton.

**Senator MOORE**—It seems from your report that Telstra, amongst others, has done a significant amount of work in this area and that your services are working well in comparison to those in some other places. We have found that local government have taken leadership in talking with their communities about what issues concern them and they have undertaken surveys and held meetings around the issues that affect people. Are you aware of anything that your city council has done on telecommunications? Has that been an issue of import?

**Mr Palmer**—It has been an important issue; we included it in our latest corporate plan. I have spoken at some length about Telstra's achievements, and I am aware of them in some depth. In fact I produced a report in the last two weeks that addresses whether those measures are sufficient at the present time or not, and the council has considered that report. So it is an issue that we have looked at. We were involved quite actively two years ago in the preliminary steps taken to inquire whether there was any opportunity to develop a regional telco. There have been a number of discussions, some of which have been with the Bendigo Bank about the adoption of their model. We have also spoken to other people about those pieces. The immediate need for those finished maybe a year and a half ago.

With the downturn in the telecommunications industry, a concern arose that Telstra would be in such a position that would make it very financially risky to try to develop anything with their existing infrastructure, as it might leave people very vulnerable if they had committed large amounts of money to doing it. Until the downturn came, there were infrastructure providers who were talking to groups within regional Australia about providing them with extensive infrastructure on the basis that they would be brought back in, say, two to three years time. There were some significant financial risks attached to them. For example, you could find in two years time that in fact you were not able to get the money to pay for the infrastructure you had agreed to purchase from the provider. You had a number of providers who were looking at that sort of model. The discussions that took place in Rockhampton were certainly concerned about the financial risk that that might engage.

In the last year and a half, there probably has been less pressure about where those pieces are. As I mentioned to Senator Cherry previously, it is not coincidental that at the same time Telstra improved their facilities significantly. I think that the same pressures that saw communities looking at the opportunities of regional telcos also saw Telstra improve their facilities significantly and improve access to them. I think that Telstra will have been extraordinarily aware of the wish of regional communities to look at some competition for those sorts of things. To be fair to them, their response to it has been to try to improve the services, and Country Wide as a division has obviously been a response partly to that.

Senator MOORE—You have a Country Wide service in Rockhampton?

Mr Palmer—Yes.

Senator MOORE—That is where Mr James is?

Mr Palmer—He is one of the people who work for them.

**Senator MOORE**—Rockhampton used to be a Telstra town.

Mr Palmer—Exactly.

**Senator MOORE**—It had a very strong Telstra relationship—PMG, Telecom and Telstra. On another issue, what does a 'critical projects officer' do?

**Mr Palmer**—My interest is principally in economic development, but it is not only in that. The council has provided significant moneys to Rockhampton Tourist and Business Information, Rockhampton Regional Development and Capricorn Tourism to undertake a number of economic development initiatives on its behalf. My role is one of coordination, but I am also involved in a lot of the political process within council about handling those sorts of issues.

**Senator MOORE**—You have already answered questions regarding the discussion we have been having about councils talking to each other about best practice. These issues come up all across the country, and we know that councils are struggling with these issues. You indicated previously that there has been discussion between councils about how they work, what is best practice and stuff like that.

**Mr Palmer**—We have had a close liaison with two groups. One group covers the other cities down the Queensland coast, and we have been talking about having some discussions about where those things go. Reefnet gives us some common interests with regard to how those things fit together and how we access them. We have also spoken to some of the regional telcos that were interested. The ones that we particularly had discussions with were those on the Sunshine Coast and in Wide Bay.

Senator MOORE—I will let Senator Tchen ask the question about massive service disruption.

**Senator TCHEN**—I will ask that later. Mr Palmer, you said that Telstra has an extensive broadband network in Rockhampton. Is that a copper wire based one?

Mr Palmer—The ADSL one is a copper wire one.

**Senator TCHEN**—You also note that Telstra has developed a comprehensive fibre-optic network of something like 200 kilometres within Rockhampton. Do you know how extensive that actually is? I take it that it would be a last-mile connection.

Mr Palmer—You are quite right.

Senator TCHEN—It actually goes into the households?

**Mr Palmer**—As I said, a year and a half to two years ago I saw a map of where the network existed within Rockhampton at that time. From my memory, it linked together the major organisational and business users. It is not something that has been particularly designed for people to pick up from residences. My interpretation of what Telstra has done is that it has the fibre-optic cable to pick up business traffic—which has been sufficiently large to enable that to take place sensibly—and it has then backed that up with ADSL, which is being used for residential traffic.

From my knowledge, there are no residential connections into the Telstra fibre-optic cable. It has been designed for business, particularly bureaucratic organisations. You would find that the Queensland government departments that are here would be carefully linked. The hospitals have both been linked. The centre areas of Rockhampton, where businesses that provide services are predominantly based, have been carefully linked to it. Some areas of North Rockhampton which have particular interests were also carefully linked.

I understand that, in the intervening year and a half, that network has been expanded. I am not totally aware of exactly where those things are, but I would expect that it has been expanded for further business customers of Telstra and that the ADSL connection is then relied upon to provide broadband for residences. That is the way that I see the strategy that Telstra has adopted.

**Senator TCHEN**—You said earlier that that strategy enables Telstra to take a position against any competitors because it has basically cornered the major users, which would be the most profitable customers.

**Mr Palmer**—Certainly. My understanding is that it is extraordinarily easy in any of the cities in coastal Queensland to identify who the top 20 users are. We would not even need to look at Telstra's billing to know who those people are. What happens is that you enter into contracts with them to tidy up their coverage for a period of time, which makes it very risky for someone to compete because they have to pick up a large coverage of the residential business to do it. It is no secret that, within Rockhampton, there has not been a massive uptake of ADSL. That has meant that there are even more significant financial risks for a regional telco that may try to provide the last mile and come in and connect into Optus's Reefnet.

Senator TCHEN—Is that a situation peculiar to Rockhampton?

**Mr Palmer**—To my knowledge, it is not. As I said, my personal expectation would be that Telstra would have used that strategy certainly throughout provincial Queensland and probably throughout provincial Australia. From discussions I have had with people who have been interested in starting regional telcos, I know that their assessment of the financial risks has been that those factors have applied in their areas as well as in ours.

**Senator TCHEN**—While we were in Victoria, the committee heard evidence from a Victorian company called Neighbourhood Cable Ltd. It is not a large company, but it sets up networks particularly in regional cities. I think it has networked Mildura and Ballarat, it is doing Geelong and it plans to go to Wodonga. It is tied in with the Optus cable television network. Is there any similar interest in Rockhampton? It does not have to be from the same company.

**Mr Palmer**—If we have seen a model that could work and that we have given some very cursory thoughts to, it would be the SP Telecommunications model in northern New South Wales. That would probably be the model we would have been more interested in. As you would be aware, they have used the NTN microwave link, as I understand it, as part of their telecommunications infrastructure. In fact, they have used the NTN infrastructure established between Newcastle and Tweed Heads as part of their telecommunications infrastructure. We would have liked to have looked at some of those pieces, but we have not gone any further. We have not looked at the Victorian examples.

We have also seen what happened with the Green Triangle, which was a group of local authorities in Victoria and South Australia that ended up having some difficulties, in spite of fairly extensive moneys that came from NTN that enabled feasibility studies to be undertaken and the provision of some infrastructure. We have seen that there is some fairly significant financial risk associated with this. It is a risk that the community would be happy to undertake if in fact it saw that the services presently being provided were not sufficient. If the services that are now being provided are sufficient, there is no incentive to take the financial risk of trying to establish a regional telco that Telstra could easily undercut.

**Senator TCHEN**—The question of the difficulty with finance was also raised with us by the representative from Neighbourhood Cable Ltd. I am not so concerned about technology, because technology changes all the time. I am more interested in whether any institutions or companies are interested in taking on Telstra in this last-mile distribution. You have had no experience in that in Rockhampton?

**Mr Palmer**—No. We have been advantaged because Ergon have run out their service in only two areas, to my knowledge, and Rockhampton was the second area, after Dalby. The intention is to run the things out in other centres, certainly in Townsville. We see the services presently being provided as sufficiently effective, and there is some substantial financial risk in trying to develop a regional telco.

We are very conversant with and aware of the fact that, sometime in the future, we may need to have competition to enable the telecommunications infrastructure to be maintained to the best and appropriate levels and to ensure that the prices are compatible with those in other areas—in particular, urban Australia. We do not see our needing to have that at the present time, and we see a significant financial risk in trying to become engaged in the provision of services over the last mile when we do not see any particular need to do so.

Senator TCHEN—You are describing to us a picture that has been pretty well emerging that basically, as far as Telstra are concerned, they are introducing newer technologies, in particular high-capacity technologies, particularly for major users. But underlying that—you have described this as being the case also in Rockhampton—they are relying on the copper network to provide the last mile into residential areas for users there.

Mr Palmer—That is right.

**Senator TCHEN**—That brings up the question of how reliable that copper network is and how long it will remain reliable. That has been the focus of a lot of the issues that have been raised. In Rockhampton, according to the story we have just heard from you—and it is unusual—you seem reasonably happy with the reliability and the efficiency of the copper network.

**Mr Palmer**—At the present time, that is a fair observation. As technology changes or as the network becomes older and vulnerable, that is when we need to try and find a way of ensuring that Telstra continue to provide modern and price-efficient services to our community. We feel that potentially there is a role for the federal government in that area. One of our suggestions is that, by bundling some services together, it may be possible to develop some of those alternatives. Obviously what has happened is that the Australian government has withdrawn many of the services that existed in communities like Rockhampton 15 to 20 years ago. The truth is that there would not be a lot of federal government traffic that goes through our systems. The state government are in a different position. They have considerably more traffic, whether it be in areas like health, education or police et cetera, and they have been able to use that very effectively. The federal government has probably been less active in trying to use its spend to improve the telecommunications infrastructure throughout the nation or the state.

**Senator TCHEN**—I have some more questions about your perception of Telstra's copper network. You have made a comment about the federal government 'bundling services'. That probably would not help the situation a great deal because, again, it would be bundling major users rather than delivering an alternative to the last-mile connection.

**Mr Palmer**—Reefnet was used by the Queensland government. Fewer federal government services exist within Rockhampton or within provincial Australia because many of them have been centralised in particular places. There are some places where that strategy may work reasonably effectively; within Rockhampton there are not as many federal government activities. Obviously, during things like Defence exercises in Shoalwater Bay, there might be a lot more traffic than there would be at other times.

Senator TCHEN—But they would be using dedicated military networks.

Mr Palmer—Precisely.

**Senator TCHEN**—Coming back to Rockhampton's copper network, is it likely to be more efficient than other regional cities' copper networks?

**Mr Palmer**—No. In the same way that I would expect Telstra to have adopted similar strategies throughout at least provincial Queensland, I would expect our copper network to be similar to what exists in other areas of Queensland.

**Senator TCHEN**—Have you experienced any incidence or frequent incidence of what Telstra call 'massive service disruption' in Rockhampton due to weather conditions?

Mr Palmer—No, I am not aware of it.

Senator MOORE—Are you aware of the term 'massive service disruption'?

Senator TCHEN—From other cities, we hear stories which are quite different.

**Mr Palmer**—I am just saying that it is something that is not within my personal knowledge; that is the only thing that I am saying. Certainly, to my knowledge, that has not applied within Rockhampton. But I may not be accurate about that. Maybe other people would be in a better position to know that than me.

**Senator LUNDY**—I go to the submission tabled today. It refers to the ADSL coverage that is identified on the map for the soon-to-be five exchanges in the Rockhampton area. It states that Mr James advised you that 90 per cent to 95 per cent of customers within that 3.5-kilometre radius would be able to be serviced by ADSL if there were no pair-gain systems.

**Mr Palmer**—That is not quite what it says. It says that it is 90 per cent to 95 per cent within 2.5 kilometres—

Senator LUNDY—I am sorry; you are quite right.

**Mr Palmer**—and that obviously some of the people within the 3.5-kilometre radius will not be able to get ADSL because it is physically longer than  $3\frac{1}{2}$ . So it is the inner ring of 2.5 where there is the 90 per cent to 95 per cent reliability, as I am advised by Telstra.

**Senator LUNDY**—That has come from Telstra?

Mr Palmer—Yes.

**Senator LUNDY**—Do Telstra claim that that means their exchange is provisioned to serve 90 per cent to 95 per cent of customers within the 2.5-kilometre radius?

**Mr Palmer**—When I got those details, I was interested in trying to find out what areas of Rockhampton were covered by ADSL. Part of council's corporate plan is to look at some provisions of the last-mile facilities. I was asked to look into those issues as to how well that was being provided. It really was not any claim of Telstra's; it was more about my asking them and part of their explanation to me of the coverage. It was not their claim.

Senator LUNDY—But did they use the figures 90 per cent to 95 per cent?

Mr Palmer—Yes, that was given to me by Telstra.

**Senator LUNDY**—I am curious because Telstra have told this committee that they only provision exchanges for up to 25 per cent of all of their potential customers in the area of that exchange. So at any one time only 25 per cent of their customers could actually get ADSL

anyway. This issue has been raised in the state government submission—the way Telstra use statistics to imply there is a far wider reach of ADSL than in fact there is. That is why I am picking your brains about how they have come to that figure. When you read that, you can reasonably assume that within the 2.5-kilometre radius, if 90 per cent of Telstra's customers wanted ADSL, they could probably get it. That is not true.

**Mr Palmer**—The only proviso about that—and I would read that exactly the same way as you have suggested—that was advised to me—

Senator LUNDY—Was the pair-gains.

Mr Palmer—was if any other impediments stopped it. It may be that it is the impediments.

Senator LUNDY—That is part of it, but it is also what they provision their exchanges with.

Mr Palmer—I am not trying to defend Telstra, if that is what the issue is.

**Senator LUNDY**—No. I am just curious whether it is your statistic or Telstra's statistic, not what your understanding of it was.

Mr Palmer—No. Quite clearly it is Telstra's statistic.

**Senator LUNDY**—Do you know how extensively Telstra have used a kind of subexchange called a RIM in this area?

**Mr Palmer**—I am not aware that that has been used here. My knowledge of the thing, from the map provided by Telstra, is that they have just used or will use the five exchanges within the immediate proximity of Rockhampton.

**Senator LUNDY**—Are you aware that the use of a RIM, which is like a mini-exchange—a big box on the end of a piece of fibre—prevents ADSL connection?

Mr Palmer—Yes, I have heard that transpires.

**Senator LUNDY**—Have you had any conversations with Telstra about their use of RIMs in the area?

Mr Palmer—No, I have not.

Senator LUNDY—Do you think that is an issue you ought to be concerned about?

Mr Palmer—Yes.

**Senator LUNDY**—I go back to the council's general involvement with the infrastructure in the area. I note that in your submission you talk about Mr James providing some advice. Does he provide independent advice to the council about regional telecommunications and infrastructure?

**Mr Palmer**—No. He is very clearly an employee of Telstra. There is no pretence in any sense that that is independent or evaluated advice.

Senator LUNDY—I am sorry. It just says, under the subtitle Telstra, 'regional technology specialist'.

Mr Palmer—That is his title within Telstra.

**Senator LUNDY**—But it did not actually say he is with Telstra, so that is good to know. Is council able to source advice independently of Telstra about the state of the network and current infrastructure in the region?

**Mr Palmer**—Certainly we have that capacity. At this stage it is not something that we have done. Obviously there are a number of issues where we are looking at those things. At the moment we might be reasonably happy with those things, but that happiness may be either very temporary or of a longer duration. We certainly have the opportunity to do that and, if we felt there was a need to do so, we would access such advice.

**Senator LUNDY**—I missed the earlier questions and came in on the tail end of your saying that there had not been a business case for alternative infrastructure or an alternative supplier of broadband services established in this region. So you do not have any other competitors looking at either reselling telecommunications services or, in fact, investing in the construction of an alternative local loop service?

**Mr Palmer**—What I said was this. A year and a half to two years ago there was considerable interest in looking at the issues you have spoken of. A number of models were examined, and the reseller model was certainly one of those that we looked at to see whether it was a way of being able to move things forward. At that stage another model we looked at was where infrastructure providers would build a last-mile network, with a regional telco being able to buy it from them at a later time. The sorts of time lines we very briefly spoke about were two and three years.

With our interest in these things as a community, we then felt we needed to make sure there was some competition to ensure that we got the best possible services at the best possible price. Probably the urgency of that really came back to us. We had Reefnet, and that gave us and other communities along the Queensland coast a particularly advantageous opportunity to do the sorts of things that you are talking about. We felt that there was a substantial financial risk in adopting that strategy. At very much the same time, the cost and accessibility of some of the Telstra technology changed and improved substantially—ADSL, for example, became available around that time—and I guess some of the urgency in looking at trying to provide a competitor for Telstra ceased because we were not dissatisfied with the services that they were giving us.

As you have alluded to, it is not quite as blunt and bald as that, and those things need to be continually reassessed as to where the situation stands. But we felt there was a substantial financial risk in trying to develop any regional telcos. As a defence mechanism, our understanding of where the thing stood was that Telstra had signed up a large number of larger customers, one of which was the council. Senator LUNDY—Was that around that time?

**Mr Palmer**—It was not particularly around that time. It is a process that they have probably developed over a lengthy period of time. Optus has no—

**Senator LUNDY**—Mr Palmer, as far as you can remember, do you think Telstra responded to the competition presented by Reefnet, looked at their local pricing and perhaps became a little more active in competing in the local market? Did you get a competitive response from them?

**Mr Palmer**—No. My feeling was that it was a national response rather than a local response. I felt that what happened was that there was a lot of pressure on Telstra to address those sorts of issues nationally. Those issues were not particularly related to Rockhampton and Central Queensland. Telstra Country Wide was partly a response to where those pressures were. One of the responses that Telstra Country Wide also made was to make provision to enable some of those technologies to become available to people in provincial and rural Queensland. Obviously, there are some political imperatives that relate to any possible further commercialisation or privatisation of Telstra. I felt that what was happening was a response to those sorts of issues rather than to anything that related to Rockhampton or Central Queensland per se. So I did not think it was a local response; I thought it was a national response.

Senator LUNDY—You said that Telstra had signed up the council. When did that occur?

**Mr Palmer**—I am not immediately aware of exactly what those dates were. I have the impression that we have probably had some arrangements with Telstra over a period of time and that they have probably been renewed and reassessed at various times.

Senator LUNDY—That makes sense, given their practical monopoly.

**Mr Palmer**—Totally. They have an active sales force that continues to do that. The point that I was going to make before was that Optus do not. Optus's team is in Brisbane, as far as I am aware; there are few people here. But what we have is an active Telstra work force that helps those things to take place. I did not see that as being in any sense unsatisfactory; I saw that it was about how you try to ensure that your community is not disadvantaged as a result of it. Obviously, the hearings of the inquiry are another method by which those pressures are continued. I expect that Telstra have been very interested in and very aware of the discussions that have taken place within the community about things like the development of a regional telco. I do not think that those things have in any sense passed unnoticed or been ignored. I think Telstra have been aware that throughout provincial Australia there are, in a sense, some sleeping issues that might arise and that—if they do not go and address some of those—they could have a lot more competition, even if it is from much smaller players. I guess SP Telecommunications would be a very good example of how some of those pressures have come to some sort of fruition in the area between Newcastle and the border.

Senator LUNDY—Did Telstra contact you about your submission to this inquiry?

Mr Palmer—No.

**Senator MOORE**—I have some quick questions for both of you. We were lucky enough to see COIN this morning and we spoke with Mr Upton then, so the committee has had a chance to look at that. Mr Palmer, the submission you have given is very much focused on business and what is available. I am trying to get my head around this situation: I am sitting in a house somewhere in the suburbs of Rockhampton with my PC; what is my speed, access and drop-out rate? They are the kinds of practical issues, particularly if I am trying to run a business from my PC using some kind of Internet process. We know that the kinds of systems you have told us about are coming into the region. What will the speed, access and drop-out rate be if I am sitting at home in any suburb?

**Mr Palmer**—There may be other people in a better position to provide you with that information. I really do not have the detail that would enable me to answer that.

Senator MOORE—Mr Upton, do you have any idea?

**Mr Upton**—I have a couple of small comments to make: one is that I do not have any statistical data, but certainly the empirical information I am getting from people who are coming through—

#### Senator MOORE—It is all anecdotal?

**Mr Upton**—Yes. There are certainly peak times when the reliability of the system and the speed of the system are tested, but the speed and reliability are at an acceptable level most of the time within the region. We are currently in the process of establishing a wireless network for the city. It will provide free access to the closed network and, hopefully, we will have arrangements with a couple of ISP providers for external access. That will work around the existing Telstra system. But the existing Telstra system seems to be servicing the community reasonably well at the present time. The issue here in Rockhampton is traffic. There is not the traffic that you get in some of the bigger centres, and I do not think the system is tested that rigorously locally.

**CHAIR**—That was a question I was going to ask as well: the whole notion of the residential network. We have not asked much about mobile coverage. How are you going with black holes in mobile coverage in Rockhampton and new areas?

**Mr Palmer**—Because Rockhampton city is, in a sense, constrained, as I was talking about before, there are no immediate issues within Rockhampton itself to my knowledge. There certainly are with highway network access in areas that are adjacent to it. Obviously you would be aware that Rockhampton is a major service centre for Central Queensland, and for people then to utilise the highway networks there are areas where it is extremely difficult. The digital coverage finishes 45 kilometres west of Emerald. It is intermittent; by no means is it 100 per cent before then. So it stops at the gemfields to a foot, and then CDMA gets coverage from there west. So, obviously, anyone who ends up in central western Queensland with a digital mobile will wait until they get back to find out whether anyone has been trying to contact them—and vice versa, to a degree. There certainly are some areas on the highway systems which are not in any sense ideal. Obviously, mobile coverage in those sorts of areas is a very important issue from a number of different perspectives: safety, the need to communicate for business—all of those sorts of issues apply. There has been a move obviously that has seen it improve, but it is certainly short of ideal.

**CHAIR**—Although there is an argument, of course, that the less people drive and talk, the better off and safer the highways probably will be.

Mr Palmer—I had taken it, Senator, that we all stopped.

**CHAIR**—Mr Palmer and Mr Upton, I thank you for your time this morning. Mr Upton, thank you for your tour of your facility this morning. It was a very impressive facility from our point of view. Thank you both for your contribution. It is very helpful to the committee.

#### [12.09 p.m.]

#### **REEVES, Mr Cyril Patrick, Managing Director, Purely Electronics Pty Ltd**

**CHAIR**—I welcome Mr Cyril Reeves, Managing Director of Purely Electronics. Thank you for giving your time here today; it is very much appreciated. The committee prefers all evidence to be given in public, but should you at any stage wish to give your evidence or part of your evidence or answers to specific questions in private we will consider that request. You are reminded that the evidence given to the committee is protected by parliamentary privilege. I also inform you 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 we move to questions. Again, thank you for your time here this morning.

**Mr Reeves**—Most of the things I was going to cover have already been covered. However, I would like to put a different perspective on it. I think we covered a lot of residential issues before. I will make it clear from the start that I am not here to crucify Telstra. As a matter of fact, I am one of their staunchest supporters, albeit a bit disillusioned at this point in time. I own a company in Rockhampton that was established in 1979, and we primarily distribute sales and support telephone systems and networks. I have 13 staff. We run a fleet of cars, and I have a Cessna 182 aeroplane. We have offices in Rockhampton and Gladstone, and we have an area of coverage that goes from Yeppoon to the east. We go out to Winton, and we even have a customer at Jundah. You can look up your map and find out where Jundah is.

Our customers are diverse. We have small customers—medium enterprise and large enterprise. We look after most of the health in Central Queensland and we have education, which includes the University of Central Queensland. We are a fixed net dealer, so we are a solution seller. We sell our products to those businesses and sometimes bundle them with Telstra products. We sell the standard PSDN, public switch network; ISDN, data services; and ADSL. Most of the focus is on the last one. Because of the spread of our customers, a lot of them do not have access to ADSL. I think the map we showed before missed out Yeppoon, but I think Yeppoon is ready to go. There was a question before about RIMs. Telstra did employ RIMs, primarily for voice, but at this point in time I am not aware that there is any RIM with CMUXs in them for the ADSL provision. However, I imagine that that will happen in time.

We need broadband, although, obviously, it is a bane. I have two brands of ADSL connected at my premises. Our interest in ADSL is to provide services to our customers—this solution selling. We currently have an ADSL link between here and our Gladstone office. We run a network over VPN, and we run voice-over IP over that network. We are probably the first people in Central Queensland to do that, and it is something we want to roll out to our customers. As you probably understand, at this point in time we are sitting with legacy telephone systems. The progression is to migrate so we will have converged systems, and then we will have full voice-over IP telephone systems.

I see the broadband as very useful for e-commerce, and our focus is going to be on VPN and voice-over IP. This allows people to have reduced staff in branch offices, and to transfer calls seamlessly between branch offices. This is not a new concept; this has been around for quite

some time with voice-over data. However, that was limited to larger enterprise because it was quite expensive. The backbone was ISDN, and you had to have some sort of voice compression and quite expensive end pieces of equipment. We do not use the Telstra ADSL for that because Telstra do not guarantee voice over their ADSL at this point in time. They do have trials running; however, I do not think it is as important to them as it is to other providers. We use a company called Rely, which is a wholesaler of the Telstra product. My understanding is that Telstra are the only people who have any infrastructure in ADSL in Rockhampton. All the other suppliers—and there are a number of them, including Rely and SPT—act as wholesalers and retail their product to the end market. They have the same restrictions—2½ and 3½ kilometres.

With regard to the superhighway, ADSL is certainly one of the OnRamps. It is not the superhighway yet but it will get there. It is going to present a lot of opportunities, but that will come as a price because there are certain threats out there. Liability and security are the major threats. We embrace the change. We believe that this sort of technology should be available to all our customers irrespective of their location, and that is certainly not the situation at the moment.

**CHAIR**—We had some evidence about the 200 kilometres of fibre-optic cable that Telstra has laid around Rockhampton. Does that have the capacity to carry broadband as distinct from ADSL? Do you know if businesses have linked up to that on that basis?

**Mr Reeves**—I have a couple of notes here. We have acquired a few customers that are linked up to that fibre. The fibre was provided initially to support OnRamp macros, which are basically voice and data. People like Tropical Auto Group, the Ford dealer in Rockhampton, have an optical fibre link. The optical fibre link was installed purely to service the OnRamp macro service. If you ordered one of those, you got an optical fibre link so it is part of the network. That was provided in the install cost of the OnRamp service.

Senator LUNDY—Can I just clarify something. Is that the cable modem service?

**Mr Reeves**—No. OnRamp is a brand name. You can buy OnRamp 10, 20 or 30. It is a broadband service but primarily for voice. If you buy 10 channels then you could have 10 concurrent voice conversations over that, and it goes up to 30. OnRamp 30 is as large as it goes, and then you have multiple ISDN services. It is an ISDN service.

#### Senator LUNDY—It is ISDN?

**Mr Reeves**—It is integrated for voice and data. You can run either. It is a digital service. Rockhampton Base Hospital and Rockhampton City Council here, at their works depot and at the water treatment plant, use it. The Army uses it. Those are just the ones I know of in Rocky.

Senator MOORE—They are all very big businesses.

**Mr Reeves**—Tropical Auto Group is probably a medium sized business. But I could have it at my premises and it would not matter, provided I had the use.

**CHAIR**—With the fibre-optic system, with an OnRamp or whatever program, what sorts of speeds do you think would be able to be achieved for commercial users?

**Mr Reeves**—Your standard OnRamp is a number of 64 K channels, so it is N times 64, but the full two megabit service gives you 2,048 bits per second if you want to use that for data—and some people do. The university has one dedicated two megabit link just for data, as do some of the smaller ISPs.

CHAIR—So commercial users are not reliant solely on the restrictions of ADSL or ISDN?

**Mr Reeves**—No, they are not. If they are 10 kilometres away and the fibre stretches that far then they have the full two megabits. However, the benefit of the ADSL is that it is a low-cost broadband solution. I believe the uptake in Rocky has been very good. The figures I have are that there are somewhere between 600 and 700 connections in the Rocky-Frenchville area, which I would have thought is quite significant. Telstra address the mass market, so they are not really interested in the business user and that is where these other providers come in.

**CHAIR**—The evidence from Mr Palmer this morning with respect to the ADSL availability in Rockhampton proper was that within 2½ kilometres of an exchange 90 to 95 of customers should be able to pick it up, provided there were no blockages in the system, and that within three kilometres it became not quite as reliable. What is your experience of availability in Rockhampton in terms of blockages or ability to get onto the ADSL even within a three-kilometre range?

**Mr Reeves**—We have had one customer rejected because he had a pair-gain system. We sell the ADSL service for Telstra and we do an online application. We have had one service rejected for that reason, but that is all. We have had a few others rejected because of the distance, although Telstra have a calculator online that we can put a phone number into and that tells us whether or not the customer can have ADSL service. If they cannot, there is no point continuing with the application.

**Senator LUNDY**—Does that service identify the existence of a pair-gain or does that service identify just whether or not your exchange is ADSL enabled?

**Mr Reeves**—It just identifies whether you can have the ADSL. I am not sure how it works but I assume that they have some sort of distance calculator. Incidentally, pair-gains are not the only blockers to ADSL. If you have services such as call metering, you have to have that removed before you can have the ADSL service connected.

**Senator LUNDY**—I will go back for a minute to the OnRamp ISDN service that you described. Can you brief the committee in shorthand what the costs are related to that fixed line OnRamp ISDN? My understanding is that it does involve installation of the connection and that there are significant costs attached based on the volume of data you move. I am not sure that is right. Could you give me a briefing?

**Mr Reeves**—There is an installation cost which I think is fairly reasonable for what you get. I cannot remember what it is. I think for an OnRamp 10 you are looking at about \$1,850 and I think for a 20 it is about \$2,400. That includes the supply of a data cabinet and fibre and fibre terminations and those types of things. As far as usage goes, if you are using it purely for telephony then you are just charged on a per call basis. If you are using it for data you have two options. One is to actually have a capped service to the other point if it is remote, or you can

just use it for data, in which case you pay a data rate, which is a lesser amount than the voice call rate.

**Senator LUNDY**—Is it per volume?

Mr Reeves—Yes. It is timed local calls and it is STD rates if it is an STD call.

Senator LUNDY—You pay for the time you spend actually using it.

Mr Reeves—You pay a rental and then you pay for usage, just the same as you do with any fixed service.

Senator LUNDY—Do you know offhand what the rental is for the 10?

Mr Reeves—Sorry.

Senator LUNDY—We will find it on the web site.

Mr Reeves—It will be there, yes.

**Senator LUNDY**—You mentioned threats to ADSL as you see it. You mentioned reliability and security. Can you go through both of those, please?

**Mr Reeves**—Reliability: when you have these services you rely on them. The world is a browser away, so you click on and there it is. When it does not work you have a problem. If our ADSL goes down, I have got people sitting around twiddling their thumbs. It has proved to be not all that reliable in the past. However, I think it has improved in the last couple of months.

**Senator LUNDY**—I think statistically ADSL is down 12 days per year and the customers actually will be paid by Telstra now if they suffer a service breakdown. So you might want to investigate that. What is the longest ADSL has gone down for your business?

Mr Reeves—A day.

Senator LUNDY—And Telstra were pretty prompt in fixing the problem?

Mr Reeves—We were not happy, but I imagine they were, yes.

**Senator LUNDY**—Do you get many complaints from customers you service about ADSL's reliability?

**Mr Reeves**—We know it is down before they do but, yes, we get the phone calls, because if ours is down theirs is down.

Senator LUNDY—What is the average time that it is down?

Mr Reeves—I would say hours.

Senator LUNDY—As opposed to days. Okay. Security?

**Mr Reeves**—It is like anything connected with the World Wide Web or the Internet. We have static IP addresses on some of our ADSLs so hackers can get in, so you need firewalls. You have to protect yourself against viruses et cetera. It is no different from any other Internet type service.

**Senator LUNDY**—And that is part of your service solution?

Mr Reeves—Yes, we provide firewalls.

**Senator LUNDY**—For the committee's benefit, is that because ADSL is an always on service and with the fixed IP address you are particularly vulnerable?

Mr Reeves—You are more vulnerable because you are always on, correct.

**Senator LUNDY**—A different committee is doing an investigation into the security related matters, so I have my head full of those issues as well. I will resist going down that path today.

Mr Reeves—Good.

**Senator LUNDY**—Finally, obviously there is the work you have done with voice-over IP. The committee has seen a couple of examples of voice-over IP networks; I am familiar with many. It is inspiring to see someone taking the initiative in a regional area, with what I describe as a 'disruptive technology'. You can change the economics of telecommunications at one fell swoop with the introduction of initiatives like that.

**CHAIR**—I have a couple of questions. There are a couple things that I did not quite understand, because I am struggling with some of this stuff, as you can probably imagine. We have had some evidence from technicians in other cities about the take-up of the other alternatives, such as satellite, microwave, shortwave et cetera. Are you familiar with whether that technology is being used very much by commercial operators in the Central Queensland area?

**Mr Reeves**—There is a microwave provider—AusStar have a microwave service. There are some subscribers they bundle with their AusStar TV package. I would not know what percentage, though, but that is an option. I am not aware of any other microwave providers.

**CHAIR**—Looking at Yeppoon, for example, you think ADSL has probably been turned on there. Is there a fibre-optic network in Yeppoon for businesses?

**Mr Reeves**—There would be—I am just not sure where. I think the hospital has fibre optics. Any business that has an on-road macro would have fibre optics, because that is the preferred method of delivery. Incidentally, Telstra do not just finish there. I have a couple of customers in Longreach who have fibre optics into their premises: the Department of Primary Industries, the council and the pastoral college all have fibre optics into their premises at Longreach. **Senator LUNDY**—If we have a bit of time, I have plenty more questions. I want to ask about any feedback you can provide the committee on satellite connections—either one-way satellite services, with landline uplinks, or two-way satellite services. Are they are widely used in the area? Could you reflect on the service quality of those technologies.

**Mr Reeves**—I do not know. We did trial the two-way satellite—compliments to Mr Tony James. His name has come up before; he is a good contact for us. Because we want to use it for voice as well, we found that it is not an acceptable alternative because of the latency. I do not think people would accept the delays in the speech. We are spoiled in Australia—believe me.

Senator LUNDY—So you were looking at the two-way satellite for your voice-over IP?

**Mr Reeves**—As well, yes. It has to be a total solution for us. Just the Internet access was not what we were after.

**Senator LUNDY**—What about the feedback that you get in the industry from people who use the two-way satellite service?

**Mr Reeves**—No, I have not been exposed to too many at all. Most of the people we deal with are in provincial centres and they have some type of Telstra broadband.

**Senator LUNDY**—If you were to nominate a broadband technology that would take Australia where I think, and you obviously think, it needs to go in providing ubiquitous broadband, where would you go?

**Mr Reeves**—That is a hard question. I asked my IT guy the other day, 'How much bandwidth is enough?' and the answer was, 'You've never got enough'! They honestly think that the final solution will be fibre to the doorstep—and we are talking about giga-terabits. I do not see that in the immediate future. The DSL services will go faster and spread further.

**Senator LUNDY**—Relying on your obvious extensive experience, how far can ADSL be stretched in providing services? You mentioned that CMUXs are not going into RIMs here. We found out from Telstra the other day that, where they are doing the pilot CMUX in Canberra, in Gungahlin, only 40 per cent of the RIMs can actually support a CMUX. So, even though it looks like solutions are coming around the corner, as I said at the time, it is one step forward and two steps back for ADSL. With applications and demand for bandwidth growing all the time, when do you see ADSLs' time running out?

**Mr Reeves**—It is a hard question. When I first started in telephony, you used to have to turn the handle and we did not think that would go away, but the rate of acceleration has just increased. It could be next year. If I had a crystal ball I would give you the answer, but I have not found anybody who could give you those sorts of answers.

**Senator LUNDY**—Just while we are there, how much bandwidth do you think is enough for the next 10 years? I will make it easy by putting a time limit on it.

Mr Reeves—For 10 years, a gigabit.

Senator LUNDY—That kind of says it all. Thank you very much.

**Senator MOORE**—What is your customers' biggest complaint when they talk to you? They use you as their service provider and the person they talk to. I know you cover a very big area, but what do they complain about?

**Mr Reeves**—As I said, I am a little bit disillusioned with Telstra. They seem to have taken their eye off the ball. Probably Telstra resolutions are the problem or provisioning, because they give you rubbery dates and there is just no way you can nail them down on dates these days. Bear in mind we used to deal with somebody in Brisbane who was our state representative and now we deal with some faceless person in Melbourne.

Senator MOORE—Don't you deal with someone in Rockhampton?

Mr Reeves—No, we do not.

Senator MOORE—You do not deal with someone in Rockhampton?

Mr Reeves—No. I find that strange.

**Senator LUNDY**—For provisioning?

Mr Reeves—For provisioning, yes.

Senator LUNDY—Doesn't Country Wide do that?

**Mr Reeves**—Not for us, no. We come under FixNet, which is another business unit, and they are in Melbourne.

Senator LUNDY—That is very interesting.

**Mr Reeves**—It is very interesting. I would rather have that local link, and that is why we maintain this connection, particularly with Tony, but if he leaves—

CHAIR—In other cities, their commercial solutions have come through Telstra Country Wide.

**Mr Reeves**—We do have a link with Country Wide and we do assist in some sales with their local representatives, but most of our provisioning is done through Melbourne.

**CHAIR**—Thank you very much, Mr Reeves. Your evidence has been very helpful. I should just note that we have received a document from the COIN Internet Academy from Mr Tom Upton, which he tabled when he was here this morning, and we will admit that as an exhibit.

[12.34 p.m.]

## SLYDERINK, Mr David, Northern Region IT Manager, Australian Provincial Newspapers Pty Ltd

**CHAIR**—I now welcome Mr David Slyderink. Thanks for giving us your time today; it is very much appreciated. We have received your submission. Is it the wish of the committee that we publish that submission? There being no objection, it is so ordered. The committee prefers all evidence to be given in public, but should you at any stage wish to give your evidence or 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 evidence given to the committee is protected by parliamentary privilege. We also inform you 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 we move to questions.

**Mr Slyderink**—Basically, I am a representative for Australian Provincial Newspapers. Even though I am based here in Rockhampton, I have a fairly wide role within the company. APN itself actually owns 14 daily newspapers and 55 non-daily newspapers. We go all the way from Coffs Harbour up to the Whitsundays. I guess my experience, my knowledge, my notes today represent APN as a group, and what I have to say is based on the experiences of a lot of regional cities, not just Rockhampton in particular.

The technology challenge for us is significant. We have about 1,500 kilometres of coastline and we go about 500 kilometres inland, and we have to connect all of those offices together to put out our newspapers and publications. Even though it may seem that Rockhampton put out their paper, Gladstone put out their paper and they are completely distinct, we actually share quite a bit of material and we need a very solid communications network to get various bits of information to different offices.

In my notes, I basically broke our communications down into data communications and voice. Data wise, we have a private wide area network. We actually use ISDN for that network and we have done for six or seven years. We use that, as I said, to communicate editorial and advertising material between our newspaper sites. Most importantly for us, we use our ISDN network to transmit full pages from a particular site to a press site. For instance, Emerald's paper, Biloela's paper and Gladstone's paper make their pages up on screen—which is called pagination—but they do not have a press, so we use telecommunications to actually transmit the full pages to Rockhampton, who have a press. In fact, if you just flick two pages on, you will see that I have done a diagram of APN's press sites down the middle. We have seven press sites and we have many offices that transmit, with the lightning bolt there, over ISDN to those press sites. For us, the reliability of our network is absolutely critical, because the newspaper has to come out the next day. If we have a downtime of any more than a few hours, we are enormously inconvenienced. We cannot just say, 'We'll do it tomorrow.' It has to be put out there. We have a lot of revenue tied up in classifieds and advertising, and people expect the paper.

In relation to our Internet connection, we have several ways of going through to the Internet. We use standard modem dial-up for small offices. Some sites use a 64K ISDN service. We have migrated a lot of sites over to ADSL of course for much faster email and web access. We also sometimes have that as a backup. If our private WAN goes down, we can send limited amounts of material over the Internet, but we certainly do not rely on that because we find that the Internet goes down and we have service disruptions there a lot more often than in our private ISDN network, which is up, I have to say, 99.9 per cent of the time—it is very reliable.

Our other focus is that we are actually concerned with consumers' home Internet connections, because we are trying to deliver the newspaper digitally now. That means you do not have to go to the newsstand to buy the paper; instead, you have the option of downloading it to your computer at home. So we are actually quite interested in and concerned with the speed that people can access the Internet, not just in, for instance, Rockhampton, but farmers out west who cannot get to the newsagent to get the paper every day or who find it too expensive to get it delivered. If they have a fast Internet connection, we can download the paper to them directly. We find that that is a bit of a struggle though, because the infrastructure out there is not conducive to ADSL because of that 3.5 kilometre problem, which I will mention a bit later.

In terms of voice communication, we have a variety of ways that we have voice. We do have some digital cards put in our PABXs so that we can send voice conversations over the ISDN lines, which we use at some of our larger sites. At some of our smaller sites, we lease things like Custom Net, so we can actually have voice technology in an office without that office having to pay for it; they just lease it from Telstra. The brains of it are in the exchange. Mobile phone use, too, is very important to our business. Again, being so spread out, we often have challenges with people in transit, because you tend to get spots of broken mobile coverage in transit. For instance, if I drive from here to Emerald, I can guarantee you that I can talk to you for an hour in total out of that three-hour drive; I have done it numerous times. If I drive to Mackay, I could probably speak to you for an hour and a half to two hours out of that 3½-hour trip. That can be a little bit annoying, but we get by.

As far as issues for us are concerned, with the office-to-office connections using ISDN we find it a little bit difficult, because with IDSN you get charged by the distance you are from another office. For instance, in Emerald, it costs about 19c a minute to be online between those two offices. In Yeppoon, it costs about 2c a minute. If, for instance, I were going to connect a site in Coffs Harbour to one in Rockhampton with ISDN, it would cost me even more—about 25c a minute. We find that one of the challenges is to connect offices that are far apart with our private network. We have to suffer the consequences of being in the banding zones that are far apart and highly priced as well. We realise that is an economy of scale thing. It makes it difficult for sites that are further away to have a good connection to our private WAN, because they are charged so much. In general, I have to say the reliability and availability of ISDN is very good indeed; hence, I guess it is a compromise with the price of it, and we are prepared to pay that.

With the Internet, as I mentioned, the technical limitation of the exchanges means that our offices can be connected because they are often within the CBD area. But our customers really only have two choices: dial-up with a modem—which is fairly slow when you are downloading a 10 megabyte newspaper; it takes 35 to 40 minutes, which is a little bit long—and one-way satellite. We have had some experience with that, and some customers who use it say that the download speed is very good; the upload speed is not because you are communicating through a modem. The upload speed is only 31 K. So as long as they do not send too many things, it is

okay. But, again, the cost factor of it is quite a bit more than ADSL. It is over \$100 a month in general so that can be cost prohibitive.

I have an excerpt at the back about a company called TPG—we just need an example of what we have to deal with sometimes. It does seem like I am picking on TPG in particular, but this is printed from a web page only a few days ago. You can see that they band their pricing according to regions: metro, region 1 and region 2. If you want to connect to ADSL in the city, you will pay \$69.95 a month. If you want to pay for that same service in Rockhampton, for instance, you are hit with nearly \$100 a month for the same service and the same speed. We almost feel like we are being discriminated against with that sort of pricing. Telstra do not have this type of banding, so they are okay from that point of view. But there are still companies out there that think that because they are not in the CBD of a metropolitan area, 'Let's hike the price for them.' I cite that as an example. That is all I have to say.

**CHAIR**—I will let Senator Lundy go first. I remind her that our next witness has cancelled, so she has plenty of time.

**Senator LUNDY**—Excellent. Your interoffice WAN over ISDN; is it fast enough for what you use it for?

Mr Slyderink—No.

Senator LUNDY—How fast do you need?

**Mr Slyderink**—We have several small to medium offices connected at between 128 K and 256 K. It is totally cost prohibitive to go over that. We would prefer all of our sites to be connected with at least 512 K—that is, double or quadruple what they have now—but because of the cost factors of ISDN, which I mentioned before, of 19c a minute or, if you go with an express service, for which you pay a lump sum and you are guaranteed to use a certain amount, it is still cost prohibitive for us. We are looking at frame relay as an option, but that is still quite costly.

**Senator LUNDY**—ISDN pricing plans always intrigue me. You used the term 'economy of scale'. With your knowledge of your business, where do you think those alleged economies of scale lie in the supply of ISDN and bandwidth charging and volume of data style charging?

**Mr Slyderink**—I think it comes back to the basic principle of spending X amount of money to set up a link from A to B. You have a pipe so thick, and you say, 'That pipe is so thick. We spent this much money building that pipe and it is going to be used only 10 per cent of the time. It doesn't add up.' But in the metro areas, that pipe is probably—

**Senator LUNDY**—So you see the logic as the return on the investment of putting in the infrastructure?

**Mr Slyderink**—Yes. For instance, from a telco's point of view, a metropolitan service would obviously make more money on it because that pipe is being utilised a lot more, so your costs can come down. It almost feels like a no-win situation.

**Senator LUNDY**—I am not nearly as confident of the explanations about the return on the investment as you, but I am particularly interested in the pricing differentials based on distance and things like that. I am probably better off doing my own research, not necessarily picking your brains about it, but it is terrific that you have brought those issues to our attention. I was conscious in the past of Telstra's arbitrary differential pricing, and I certainly was not aware that it was occurring with resellers. You mention in your submission the issue of download caps. This is obviously quite a crucial determinant in your plans to push out your newspaper digitally, online. What is your business's current assessment of the presence of download caps on the possibilities you have to take your business to its next logical digital incarnation?

**Mr Slyderink**—To give you an example, if you were sitting at home on a \$60 a month plan—a fairly basic ADSL plan—it gives you about 500 megabytes that you can download in a month. If you subscribe to the newspaper and you are downloading a 10-megabyte newspaper every day, you are more than likely going to go over your 500-megabyte limit. The penalty you get for going over the 500-megabyte cap is usually around about 13c a megabyte. That can fluctuate, but let us take that as an example. If you were to download double the 500 megabytes—say, one gigabyte, which is not difficult to do on a fast service; you really do not have to download a great deal to get to that in a month if you are a regular user—your bill would go from about \$60 to about \$125. That is quite a lot of money. For us, trying to sell a newspaper with those sorts of costs staring our customers in the face, when they have to purchase the newspaper as well, it is a difficult thing to do. If they ask, 'Can we download it with a standard modem of 50 K?' the answer is, 'Sure you can, but you have to sit there for 40 minutes while it downloads.'

Senator LUNDY—And that is if you do not get any line drop-outs.

Mr Slyderink—That is correct.

**Senator LUNDY**—Can I draw upon your general expertise in this area to reflect on the alleged logic behind the placing of download caps. I know everyone does it now, but can you see any logic behind that strategy?

**Mr Slyderink**—I might bring up that horrible term again—'economies of scale'. Again, in America and the UK, you do not hear about download caps.

Senator LUNDY—No-one else does it except for Australia.

**Mr Slyderink**—Yes, we do it. I have a bill in here that I submitted from Capricornia Newspapers which is a \$179 plan. It has gone up to \$880, because Capricornia Newspapers use 7.3 gigabytes instead of 1.4.

**Senator LUNDY**—So this is a monthly plan that has exceeded the download cap.

Mr Slyderink—That is correct.

**Senator LUNDY**—But you said earlier that you cannot really go to a different service, like a higher bandwidth service, because of the costs. Can you just bring those two issues together for me, seeing you are paying big monthly charges anyway because of the download cap, yet the

costs, you say, of actually moving to a faster service—maybe that does not change anything but means you pay more for faster—

Mr Slyderink—Are you referring to the ISDN pricing I was talking about?

Senator LUNDY—Yes.

Mr Slyderink—They are sort of distinct. This bill that I have here is an Internet bill only.

Senator LUNDY—It does not relate to your ISDN?

**Mr Slyderink**—No. It is very distinct to the private network. If we were to use ISDN to get a 1.5 megabit speed, our price would be much higher than this price here. It is just an example of a \$179 plan, but because we exceeded 1.4 gigabytes, that is the result. That is for a business.

**Senator LUNDY**—I am just trying to get a picture of the trade-off. You said that the reliability and availability of ISDN is too good to let go, but you are happy to limit your bandwidth, if you like, or your connection speeds to keep the prices down there.

Mr Slyderink—Yes.

Senator LUNDY—But in an Internet broadband service—that is an ADSL bill, is it?

Mr Slyderink—That is an ADSL service.

Senator LUNDY—In that service, you find it is the download cap that traps you?

Mr Slyderink—Yes.

Senator LUNDY—So there is no perfect solution for your business, is there?

**Mr Slyderink**—No. Three or four years ago, we were getting this sort of bill on 50K dial-ups because of a whole lot of people dialling up. So if I compare that with the speed we are getting now, then that \$880 is actually good compared to a few years ago. But if you think, 'I'm on a \$179 plan,' and then you get an \$880 bill, it feels a little bit misleading. You just have to limit how much you use it. If we use it even more than this, our bills will keep going up and up, because you keep getting penalised each time you use it. There does not seem to be an end to the ADSL pricing. The more you use it, the more you get charged.

**CHAIR**—It is a penalty rate as opposed to a standard commercial rate for that usage, do you think?

Mr Slyderink—This particular ADSL plan is pretty much for everybody.

Senator MOORE—It depends on the plan, doesn't it?

**Mr Slyderink**—There are so many different plans. TPG have their plans, Telstra have their plans. Underlying that, I suppose, is the Telstra technology that would dictate to those wholesalers what they could charge, but in general there are a myriad plans, a myriad speeds. TPG have an unlimited one for \$169. We would not go with that, for instance, because we find TPG not as reliable as we would prefer. We are prepared to pay this money because we find that Telstra services are reliable in general.

Senator MOORE—So what you need is an unlimited Telstra plan at a reasonable price?

Mr Slyderink—Yes. We are not aware of an unlimited Telstra plan.

**Senator LUNDY**—They are making too much money by their download caps. Turning now to mobile coverage, have you ever done a survey of your employees about how many times mobile calls drop out, as opposed to people not getting coverage?

Mr Slyderink—There has been no formal survey, no.

Senator LUNDY—What about anecdotally?

**Mr Slyderink**—Because I am on the road a fair bit in my role—I go from Gladstone to Bundaberg and right up to the Whitsundays—and I talk to other people on the road who do similar jobs to me, I know that the drop-outs due to signal failure are quite regular, although I cannot put a figure on it. If I am in an area that has an adequate signal, I generally will not get a drop-out, but you can go around the corner and it is four bars, and then you go around another corner and it is nothing. So you say, 'I'll call you back later,' and then two seconds later it is up to four again and then back down again. I have a pretty thick car aerial on my car.

Senator LUNDY—That happens in the middle of cities as well, I have to tell you.

**Mr Slyderink**—Okay; there you go. But I will get a total drop-out. I do not know if you get total drop-outs.

**Senator LUNDY**—Sometimes for some seconds, but it is like you describe—it drops down, it disappears for a few seconds and then comes straight back full.

**Mr Slyderink**—One thing our company should do is move more to CDMA because that has got better coverage.

Senator MOORE—It has broader coverage.

**Mr Slyderink**—A broader coverage area. A few people were hesitant to do it because a while ago it did not support WAP and those sorts of things. We are not really using it anyway, so we may look at the CDMA technology for better coverage for those people on the road.

**Senator LUNDY**—Is there anything of note in your mobile telephone bills, apart from them going up?

**Mr Slyderink**—We have got a corporate account with Telstra in Brisbane. Brisbane is APN's head office and we have an account manager there. We have a deal with Telstra for local calls, ISDN calls and mobile calls, whereby all of our employees are put on Telstra mobile plans and all of our offices are connected to Telstra for long distance and local, and we get reasonably good discounts because of that. So I think our pricing is at a pretty good level. Most of our business is done between 7 a.m. and 7 p.m. which is in the expensive range too, so our bills probably are quite high.

CHAIR—Senator Tchen, do you have any questions?

**Senator TCHEN**—No. I am sorry I missed most of your evidence. I cannot ask any sensible questions therefore.

CHAIR—There is a very good submission. Your WAN is held together by satellite, is it?

Mr Slyderink—No, our private area network. Our WAN is held together by ISDN.

**CHAIR**—I am just trying to understand in my own head how the availability of fibre-optic cabling in a CBD like Rockhampton relates to ADSL. Because ADSL, as I understand it, is not full broadband, I would have thought you would have access to that fibre-optic cable. Does that make any difference to you?

**Mr Slyderink**—That is the ISDN cable network that we have for our private network that we are involved in. But our ADSL, over copper, goes into exchange here but it actually goes down to Charlotte Street in Brisbane, which is the control centre for our actual ADSL connections. So how it is all done between the Telstra exchange and there, I am not sure, but we do tap into the optical network with ISDN in all centres that we can. Even out at Biloela and Emerald and little towns like that, we utilise that network with a fair degree of success.

**CHAIR**—You talked about the ISDN costs. From Rockhampton to Yeppoon was 2c a minute, Emerald was 19c and Coffs Harbour was 25c. Do you think those charges reflect the actual costs of that system?

Mr Slyderink—From Telstra's point of view?

CHAIR—Yes.

**Mr Slyderink**—It depends. There are zones. NDD1 through to NDD5 are what they call the zones. I cannot recall the exact kilometre boundaries. For example, Yeppoon is in an NDD1 zone and then there is a certain kilometre boundary—whether it be 40, 50, 60 or 100 kilometres, I am not sure—and you flip into an NDD2 zone and you are all of a sudden charged a different band of pricing, which might jump from 2c to 7c or 8c, I am not quite sure, which is the second tier. There is a magical 100-kilometre line, and you suddenly get charged X amount if you cross that line. So that sort of pricing does lead you to be a bit suspect. You think: 'What? If I step over there, I get charged for that. If I step back over there, I get charged something else.'

**CHAIR**—I find it fascinating that Emerald is 19c, and it is somehow 10 times more expensive to get a signal to Emerald than to Yeppoon. I find that a little hard to come to terms

with. As there are no further questions, I thank you for your evidence today and for your late submission, which is very helpful. That concludes this morning's hearings, and I wish to thank all the witnesses for their informative presentations.

#### Committee adjourned at 12.58 p.m.