

COMMONWEALTH OF AUSTRALIA

Official Committee Hansard

SENATE

SELECT COMMITTEE ON THE NATIONAL BROADBAND NETWORK

Reference: Implications of the proposed National Broadband Network

THURSDAY, 8 OCTOBER 2009

HOBART

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SENATE SELECT COMMITTEE ON

THE NATIONAL BROADBAND NETWORK

Thursday, 8 October 2009

Members: Senator Fisher (*Chair*), Senator Nash (*Deputy Chair*), Senators Birmingham, Ludlam, Lundy, Ian Macdonald and Sterle

Senators in attendance: Senators Barnett, Bilyk, Birmingham, Fisher, Ludlam, Lundy and Ian Macdonald

Participating members: Senators Abetz, Adams, Back, Barnett, Bilyk, Mark Bishop, Boswell, Boyce, Brandis, Carol Brown, Bushby, Cameron, Cash, Colbeck, Jacinta Collins, Coonan, Cormann, Crossin, Eggleston, Farrell, Feeney, Ferguson, Fielding, Fierravanti-Wells, Fifield, Forshaw, Furner, Heffernan, Humphries, Hurley, Hutchins, Johnston, Joyce, Kroger, McEwen, McGauran, McLucas, Marshall, Mason, Minchin, Moore, O'Brien, Parry, Payne, Polley, Pratt, Ronaldson, Ryan, Scullion, Stephens, Troeth, Trood, Williams, Wortley and Xenophon

Terms of reference for the inquiry:

- 1. To inquire into and report on:
 - a. the Government's decision to establish a company to build and operate a National Broadband Network (NBN) to:
 - i. connect 90 per cent of all Australian homes, schools and workplaces with optical fibre to the premise (FTTP) to enable broadband services with speeds of 100 megabits per second;
 - ii. connect all other premises in Australia with next generation wireless and satellite technologies to deliver broadband speeds of 12 megabits per second or more;
 - iii. directly support up to 25,000 local jobs every year, on average, over the eight year life of the project.
 - b. the implications of the NBN for consumers and taxpayers in terms of:
 - i. service availability, choice and costs,
 - ii. competition in telecommunications and broadband services, and
 - iii. likely consequences for national productivity, investment, economic growth, cost of living and social capital.
- 2. The committee's investigation should include, but not be limited to:
 - a. any economic and cost/benefit analysis underpinning the NBN;
 - b. the ownership, governance and operating arrangements of the NBN company and any NBN related entities;
 - c. any use of bonds to fund the NBN;
 - d. any regulations or legislation pertaining to the NBN;
 - e. the availability, price, level of innovation and service characteristics of broadband products presently available, the extent to which those services are delivered by established and emerging providers, and the prospects for future improvements in broadband infrastructure and services (including through private investment):
 - f. the effects of the NBN on the availability, price, choice, level of innovation and service characteristics of broadband products in metropolitan, outer-metropolitan, semi-rural and rural and regional areas and towns:
 - g. the extent of demand for currently available broadband services, the factors influencing consumer choice for broadband products and the effect on demand if the Government's FTTP proposal proceeds;
 - h. any technical, economic, commercial, regulatory, social or other barriers that may impede attaining the Government's stated goal for broadband availability and performance in the specified timeframe;
 - i. the appropriate public policy goals for communications in Australia and the nature of any necessary regulatory settings to continue to develop competitive market conditions, improved services, lower prices and innovation;
 - j. the role of government and its relationship with the private sector and existing private investment in the telecommunications sector;
 - k. the effect of the NBN on the delivery of Universal Service Obligations services;

- 1. whether, and if so to what extent, the former Government's OPEL initiative would have assisted making higher speeds and more affordable broadband services available.
- 3. In carrying out this inquiry, the committee will:
 - a. expressly seek the input of the telecommunications industry, industry analysts, consumer advocates, broadband users and service providers;
 - b. request formal submissions that directly respond to the terms of reference from the Australian Competition and Consumer Commission, the Productivity Commission, Infrastructure Australia, the Department of the Treasury, the Department of Finance and Deregulation, and the Department of Infrastructure, Transport, Regional Development and Local Government;
 - c. invite contributions from organisations and individuals with expertise in:
 - i. public policy formulation and evaluation,
 - ii. technical considerations including network architecture, interconnection and emerging technology,
 - iii. regulatory framework, open access, competition and pricing practice,
 - iv. private sector telecommunications retail and wholesale business including business case analysis and price and demand sensitivities,
 - v. contemporary broadband investment, law and finance,
 - vi. network operation, technical options and functionality of the 'last mile' link to premises, and
 - vii. relevant and comparative international experiences and insights applicable to the Australian context;
 - d. advertise for submissions from members of the public and to the fullest extent possible, conduct hearings and receive evidence in a manner that is open and transparent to the public; and
 - e. recognise the Government's NBN proposal represents a significant public sector intervention into an increasingly important area of private sector activity and that the market is seeking openness, certainty and transparency in the public policy deliberations.

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Committee met at 9.16 am

CONNOR, Mr Andrew, Spokesperson, Digital Tasmania

CHAIR (Senator Fisher)—Mr Connor, you are well aware that the proceedings of the committee are public and that the evidence you are about to give is protected by parliamentary privilege. It is potentially unlawful and potentially in contempt of the Senate for someone to attempt to interfere with evidence that would otherwise be given, as indeed it is for a witness to give false or misleading evidence. If at any stage you want to give evidence in private, please make that request known to the committee and we will consider it. Do you wish to make an opening statement?

Mr Connor—Yes, I do. I would like to say good morning and welcome to everyone. Thank you for coming to Tasmania, to Hobart, for this hearing. I notice that this is the first time you have visited the state for this committee. It is excellent that you have come because here in Tassie is where it is all going to happen over the coming years.

Digital Tasmania are a consumer action group. We were formed to put forward the views and needs of consumers in the digital world, to make sure those voices are heard and we have a seat at the table. The group is currently focused on ensuring that the NBN delivers on its promise of enabling Tasmania for the 21st century—that is, ensuring that customers, both residential and business, have access to the services they need to grow in the future.

Much has changed in the NBN landscape in Australia and the telco sector in Tasmania since I last appeared, in March. Shortly afterwards, in early April, as you know, Minister Conroy and the PM announced a major change in direction for the NBN. Those major changes were an end to the RFP process and a clear change in the underlying technology so that it was not fibre to the node or fibre to the home but solely fibre to the home—or fibre to the premises—for the majority of those connections. The major part that we are interested in is that the rollout would commence in Tasmania. Two of the key changes are precisely what Digital Tasmania were calling for in our initial submission to this committee over a year ago—and that is to have fibre all the way to the premises and to get it happening in Tasmania first, due to the historical disadvantage Tasmania has encountered in telecommunications.

Also, since March, Tasmania has had another fibre-optic link to the mainland. In early July the fibre-optic component of the electricity conductor Basslink was open to commercial traffic. An agreement negotiated between the TAS government and the cable owners, CitySpring, enabled both Basslink Telecoms and Aurora Telecommunications to sell services between Melbourne and Hobart, utilising the underwater section of the Basslink cable and then the terrestrial fibre-optic cable owned by the state government between the north and south of Tasmania.

What we have seen already, and saw even before that cable was commercialised, is drops in backhaul pricing of up to 30 per cent, which is a very good start. That has enabled several ISPs to recommence, or commence, offerings here in Tasmania. We would still like to see further drops in backhaul pricing, as have been seen in other regional markets—approaching 50 per cent—to get us on par with at least those regional markets.

Most recently, in late September, we saw the first new piece of cable laid for the NBN not far from here, at Sorell. That involved a trenching technology unique to Australia whereby minimal disruption is caused and over 600 metres of cable, or conduit, can be laid per day. However, we expect much of the rollout in Tasmania to be overhead. What I would like to talk to you today is about dispelling some of the myths that wireless can do it all. It has a very important role to play in fringe areas, in servicing those fringe areas particularly by satellite, but not for the majority of connections. That is still the realm of wired connection, fibre to the premises. I would also like to clear up some of the misinformation as to pricing and take-up. Some sources have estimated that a take-up of only 14, 15 or 17 per cent will result in a cost of about \$20,000 per connection based on the \$700 million figure for Tasmania.

Senator BARNETT—How much per connection was that?

Mr Connor—Some estimates have been up to \$20,000 per connection. But I have got evidence that I can show you later that, from experience here in Tasmania, it has been as low as \$1,000. Also, I would like to comment on the lack of consumer consultation on and awareness of the NBN process, particularly here in Tasmania. Regulatory inquiries and Senate committees do not often appeal to everyone and they do not often ask the actual consumer what they want at the end of the day. So we believe some studies, surveys and even advertising are needed to make the public aware of what this can do for them and to see what else they want

out of it. I would also like to touch on the secrecy of the overall process, starting with the \$5 million bond for bids in the RFP, confidentiality agreements on those working with the NBN at the moment and confidentiality agreements on the tender for materials to supply components for the NBN. I am happy to expand on those or other issues relevant to Tasmania with your questions.

CHAIR—Thank you very much, Mr Connor. Before I swing to Senator Barnett, I will ask this. You said that much of the structure will be overhead. Do you want to expand on that? On what basis are you saying that?

Mr Connor—We believe much of it will be overhead because Aurora, as the resale power provider here in Tasmania, have an overhead power pole network spanning much of their footprint. I think it is as much as 70 per cent of homes being connected with aerial power, with the remainder being underground. It is logical that they would use that right of way down the streets to homes to install the services in a fast manner and in a non-disruptive manner, unlike what digging up many streets and accessing conduit would be.

CHAIR—Do you have any evidence, other than that compelling logic as you say?

Mr Connor—Yes, and I believe it is has been announced. It is when the Premier has made statements that it would utilise a lot of Aurora assets in connecting those homes and businesses.

CHAIR—Thank you. We will go to Senator Barnett.

Senator BARNETT—Thank you very much, Mr Connor, for your evidence today and a thankyou to Digital Tasmania for its advocacy for and on behalf of its members and indeed consumers across Tasmania. It has been very effective over many months. I put on the record my thanks to you for your efforts in that regard. I want to follow on from Senator Fisher's questions. Is it correct that the tender documentation with respect to overhead wires showed over 95 or over 96 per cent of the 560-odd kilometres to be rolled out was overhead? I think 40 or 60 kilometres was to be underground. That proves that, from what we know to date, in respect of the three towns to receive their connections, over 95 or over 96 per cent would be overhead. Is that correct? Is that your understanding?

Mr Connor—The details for that particular tender for fibre-optic cable are correct, being of those proportions, but that cable is to provide the backhaul to those towns, not the actual connections down the streets in those towns. It is a different sort of fibre-optic cable that will be put down the streets. This type is particularly for backhaul connection. It does not split off so easily as the local connections would. We believe that part is under tender at the moment.

Senator BARNETT—Have you got any advice or any feedback with respect to those tender documents and the likelihood of when commitments will be given and when the government will be finalising that tender or when Aurora Energy will be finalising it?

Mr Connor—I believe the initial tender had a closing date of early August and an announcement date of mid-August. I have not heard anything about that or about who has been selected there. The secondary tender, which has a large confidentiality agreement, is underway at the moment, and that is for the fibre to run down streets. That may be just for those three towns for the initial service areas. I am not sure of the closing date or any announcement date for that tender.

Senator BARNETT—Are you aware of the tender specification documents or the terms and conditions of those documents?

Mr Connor—For the second tender for the local distribution network, no. That is subject to an eight-page confidentiality agreement.

Senator BARNETT—Going back to the beginning, are you surprised that today we do not have before us as witnesses the Tasmanian government, the Tasmanian minister, the Tasmanian NBN or Aurora Energy and that, as late as yesterday, Tasmanian Skills Institute also pulled out? Does that surprise and disappoint you?

Mr Connor—Yes, it is surprising that the key proponents of this network here in Tasmania, the key operators and the owners of much of that asset are not here to explain to you or to the public their current conceptual plans or any further technical details so that businesses can start planning for it, ISPs can start planning to provide their services and consumers can be made aware of what they can expect out of this new network and the services to be made available on this new platform.

Senator BARNETT—Does that frustrate you or members of the business community, for example, who want to find out information about when it is going to be rolled out, at what cost and the equity involved and

want answers to questions relating to their businesses in advance so that they can develop their own business plans and budget accordingly?

Mr Connor—I can speak for very small businesses and consumers. The next witness, Darren Alexander from TASICT, will be able to inform you more about the impacts on large businesses in Tasmania. But it is certainly very frustrating for consumers where they are planning to get a new connection onto their home. They are asking us and they are asking others: what is coming? What sort of connections should I get? Should I invest even \$100 in ADSL or \$150 to set up or should I wait for this magical fibre-optic cable that is coming some day in the next five years? Our advice at the moment is just to get on the net on ADSL. You will be told when you are getting the fibre connection and most likely your ISP will want to get you over to that fibre-optic connection.

Senator BARNETT—I can understand those frustrations. I have asked the minister in the Senate for the equity injection that he has already committed to the Tasmanian NBN and into the future years and he will not answer that question. In your opening statement you referred to an estimate of \$700 million for Tasmania. Can you elaborate on that? Then I want to ask you about your views on the take-up rates. Where do you get that estimate of \$700 million? How accurate do you think that might be?

Mr Connor—That figure is based on media releases from the communications minister and the Premier. I cannot really speak to the accuracy of that figure, but certainly a lot of investment is needed here in Tasmania to connect up a lot of the towns that are off the beaten track and have no competitive backhaul at the moment.

Senator BARNETT—Do you know the equity proportion between the federal and state governments?

Mr Connor—I am not familiar with that.

Senator BARNETT—You mentioned the take-up rates. I think you said 17 per cent up to 20-odd per cent. What take-up rates would you estimate would be likely under this scenario as proposed? What is the likely cost per connection?

Mr Connor—Over time, I believe the take-up rate will be equivalent to that of the public switch network at the moment, and that is approaching 98 per cent—because this will be a replacement for that network at some point in the future. Whether that is five years, five plus five or even 20 years, it will ultimately be the new platform that we are connected with in Australia.

Senator BARNETT—But what about within the next five years?

Mr Connor—It is hard to say. It depends on the promotion it is given and the awareness of the public to the benefits of this new platform to deliver services into their homes. Even if that is only a telephone service, it is provided over a connection that can offer them so much more if they so desire.

Senator BARNETT—But it would depend on the price as well.

Mr Connor—Certainly. We have said previously that a no disadvantage test should apply and that a service that they have now—say, a standard 1.5-meg service, which is about average—on the new platform should cost no more than it does today. In fact, it should cost less.

Senator BARNETT—The government has a commitment to commercial viability. If they are spending \$700 million in Tasmania to make it commercially viable, have you done your own assessments as to the cost per connection and the likely cost per user if it is to be commercially viable?

Mr Connor—We have not but I can point to a report from the TasCOLT fibre-optic trial here in Tasmania, a report issued by the TECC, the Tasmanian Electronic Commerce Centre. They initially estimated the connection to be about \$1,800 per property based on a full-scale deployment but in fact that figure actually came down to about \$1,000 per property. That is still about \$200 million, I believe, but it is far less than the \$20,000 per connection if you take rather small percentages, and I believe those percentages could even be based on this trial or on the broadband over power lines trial. It is a bit of an apples and oranges sort of comparison and even with the TasCOLT trial it is very hard to compare because the service offering on the TasCOLT fibre-optic trial was hard to compare with just the internet service alone. It is very hard to compare with an ADSL based intranet service. I cannot give the exact pricing but for \$40 per month, for example, you got a two- or four-megabit connection each way but with a very small download quota that you would run through in a matter of hours or minutes at that connection. That is compared to an ADSL service where you can get up to eight or even 20 megabits in some of these areas for not much more than that—for \$40 or \$50 per month. If someone just wants internet, the choice is clear—just go for the current ADSL service. For them

to take up the TasCOLT trial it is an additional burden on them if they want to still have a lot of flexibility in what they are doing on the internet.

Senator BARNETT—In your opening remarks, though, you mentioned the figure of up to \$20,000 per connection. I presume that is based on the \$700 million figure?

Mr Connor—Yes, dividing that by 14 or 15 per cent.

Senator BARNETT—So if the take-up rate is 14 or 15 per cent then that is what it would cost per connection?

Mr Connor—Yes, if you are working it out that way. But, similar to the sewerage network and the freshwater network, if you are within X metres of a service pipeline you are obliged to pay a service charge. Some people here in Tasmania at the moment are not very happy about getting new water bills but it is a service that is there for the greater community good. Even if you do not want a freshwater connection or a sewerage connection, maybe because you have your own freshwater and septic tank, if there is a pipeline there it is still an option for you to connect to it in the future. If you do not want it, maybe the next owner of your property, even when you pass along—

Senator BARNETT—But are you suggesting there will be a levy? The state Treasurer in Tasmania has implied that that may be a possibility, saying that Tasmanians will not be able to not afford it—meaning that they will have to pay this charge to be connected. Do you think it is a possible outcome that there will be some sort of levy where basically everybody has to pay it if they have a house on the street? Or will new houses have to pay for it? How will it work?

Mr Connor—We believe that all premises should be connected free of charge to this new network and the levy comes about through general taxation for the greater good—that all premises are connected so that at some point in the future if you want an additional service it is there ready and waiting for you. And to deploy it on a large scale and get it in there when it is ready rather than per request is a much cheaper proposition.

Senator BARNETT—I understand, and I appreciate the objectives of Digital Tasmania, but the government's stated objectives are that it should be commercially viable. That means they will need an investor to get a return on funds invested. If that is the case then it would blow the proposition of the take-up rate being 98 per cent because, as you are saying, it has got to be affordable. Can you see the conflict there between your objectives and those of the government?

Mr Connor—Certainly, but it is up to their investigations to prove their business case.

Senator BARNETT—Okay. You are probably aware of the objectives of both the national NBN Company, which is to be commercially viable, and the Tasmanian NBN, which is to have affordable prices and to have a role in setting prices. The constitutions of the two companies are different. Do you see a possible conflict of interest between those two objectives?

Mr Connor—Certainly, anyone's definition of 'affordable' is different, but we go back to the no disadvantage test that we proposed earlier that equivalent services cost no more than they do at the moment. Whether to make that commercially viable is still up to the proponent to prove or not. As for the monthly cost, some figures have been touted of \$200 per month just for an internet service, but what you are getting is a platform to provide you with a wealth of services, which I am sure you know about. I will just run through a couple of them. If you add up current services into a home, you have phone, internet for data and pay television, and there are other services we do not even have yet. When it makes videoconferencing available and when it makes hosting of your own femtocell for your mobile phone in your own home possible, that is another value-adding, so it will value-add to the proposition.

I will just explain 'femtocell' if you like. You have mobile phone base stations working down from macrocell, microcell and picocell to femtocell. That is a box you plug into your internet, whatever it is—ADSL or fibre NBN. You plug it in, and it provides you with an area of good coverage around your home that can support two to four phones. It would resolve a black spot if you were currently sitting in a black spot for your mobile phone operator. The operator can also give you incentives such as lower costs, higher download speeds and the convenience of using just one handheld device for roaming about within your home and elsewhere. So the NBN is enabling that sort of proposition to occur of hosting this little microcell, femtocell, for your mobile phone system in your home. It is adding up all those things that make it a value proposition.

Senator BARNETT—I have one final question. I know other senators have questions, and I have many more, but in the time available I just want to finish with the reference you made to the Bass Strait cable and the

fact that has now come on line and is reducing backhaul costs. It is encouraging to hear your comments about up to 30 per cent. Is it correct that the state government were paying an estimated \$2 million a year from about 2004 for that cable and it was not being used until—I think you mentioned—earlier this year?

Mr Connor—Yes, that is correct. The CitySpring annual report revealed that at the beginning of last year—that a facility fee was being paid, and that was negotiated as far back as 2002. In April this year, the Treasurer of Tasmania confirmed that that kind of figure had been paid up until earlier this year.

Senator BARNETT—Do you know exactly how much money has been wasted by the state government in paying that amount per year without being able to use it or without any Tasmanian consumers being able to use it?

Mr Connor—The commitment was \$2 million initially, with indexation. If a representative from the government were here, they might argue that it was a facility fee to ensure that they have access to it and not another operator that might monopolise it.

Senator BARNETT—Do you know when it first started and what the total cost was up until it started?

Mr Connor—Of the fee?

Senator BARNETT—Yes.

Mr Connor—It was from the first date that the Basslink power cable was active, late April 2005 or 2006.

Senator BARNETT—April 2005.

Mr Connor—It could be 2006.

Senator BARNETT—I thought it started in 2004.

Mr Connor—It was when the cable went active.

Senator BARNETT—So we are talking about at least four years of \$2 million, with CPI.

Mr Connor—A little over three, I believe.

Senator BARNETT—A little over three. Anyway, we can do our own calculations on that. Thanks very much. I will pass back to the chair. I appreciate the feedback.

CHAIR—I will pass to another Tasmanian, Senator Bilyk.

Senator BILYK—Thank you, Mr Connor. I suppose my first basic question is: does Digital Tasmania support the development of NBN in Tassie?

Mr Connor—We most certainly do, and this precise outcome is what we have called for.

Senator BILYK—Can you just tell us why you support it—what some of the positive impacts economically might be, for example?

Mr Connor—Just looking at the current situation for broadband and telco services in Tasmania, it has been severely constrained by monopoly connections into the state and then monopoly connections around the state and into homes, whereas other states have had competing infrastructure. The advantages for consumers, particularly residential and then business, are clearly that they will be offered competition through the separation of wholesale and retail ownership on this new network—that is, there is not a wholesale provider competing with other retailers on that network in Tasmania. Also, from a more technical point of view, the current copper consumer access network is almost rotting in the ground—that is, it is becoming more and more expensive to maintain as failures increase.

Senator BILYK—Thank you. I am not quite clear who your group is—who you represent. For my clarification, can you just explain that?

Mr Connor—Yes. It represents residential consumers and small businesses—that is, people with one or two employees that are doing business and are reliant on a telecommunications service to perform their business.

Senator BILYK—How do people apply to join your group?

Mr Connor—At the moment it is a partnership of like-minded individuals. It does not have a formal structure but we have garnered quite a lot of support through various online channels, such as Facebook and Twitter.

Senator BILYK—Thank you for clarifying that. Is Digital Tasmania aware of overseas developments with regard to rollouts specifically in the Asia-Pacific region? That question probably has a yes-or-no answer.

Mr Connor—To some degree, yes.

Senator BILYK—Which areas would have the most fibre-to-the-premises connections? Tasmania really seems to be lagging at the moment, so the intent is that we will be able to pick up our game and improve a whole lot of things for the people of Tasmania. You have already said that you support the rollout, so obviously you would think that it is appropriate that Tasmania improve the services.

Mr Connor—Most certainly. I have spoken about the disadvantages we have faced here, so it would be good if we could get up to and even ahead of other countries, such as Japan and South Korea, where they have extensive ADSL and VDSL connections as well as fibre in many places and where they have connections starting at 100 megabits or even up to a gigabit. We believe that when the network is launched here it should immediately provide a gigabit of bandwidth into homes. That may seem like a phenomenal amount for now—the jump is 10 times—but essentially it is just a different chip set in a box in the home and a chip set in the head-end equipment. We already have the trial here with TasCOLT—it is 100 megabits to the home—and that is relatively mature technology. I think it is time we took the leap to gigabit fibre connections into the home.

Senator BILYK—So you think Tasmania can be a leader in this area?

Mr Connor—Yes, most definitely.

Senator BILYK—Thank you. The reason I ask that is that the TCCI seem to have waxed and waned a bit in their comments and I just wanted to get the views of some other organisations on how Tasmania could go. The TCCI have said it can be disruptive, but I would think that any change is probably a bit disruptive. To be able to improve should be a benefit for the whole of Tasmania.

Mr Connor—Yes, it is. It may be disruptive, and any disruption needs to be explained to the community and to customers. The physical disruption of seeing trucks in the street, a few corners dug up or an extra wire on the powerlines needs to be explained.

Senator BILYK—How about an education program?

Mr Connor—Most definitely. But the disruption to and confusion in the market also needs to be explained in terms of what this is all about and what we can get out of it. You may have some questions for the TCCI later this morning.

Senator BILYK—Yes, I do.

Mr Connor—It may be said that 12 megabits is enough for anyone—who needs 100 or even 1,000? But you may recall that Bill Gates famously said in the early 1980s that 640K should be enough memory for anyone, and that is a memory component of the computer. Now the standard computer comes with billions of units of memory, when 640K is what he was proposing then.

Senator BILYK—Thank you for that answer. I am happy to pass on to someone else, Chair, and if I have anything else for this witness I will let you know.

CHAIR—Mr Connor, what does your organisation think of aerial cabling? You are essentially saying that it will be the dominant form of rollout. So what do you think of it?

Mr Connor—It is a necessary rollout method to get the rollout happening within a timely period. If streets had to be dug up to lay new conduit or if existing conduit had to be accessed, that might be a very high cost. The aerial cabling is a non-preferred option for many. That is because it is slightly more susceptible to disruption by mechanical interference—that is, car crashes, floods and storms, as we have seen recently here in Tasmania. But what can be done to ameliorate that potential issue of reliability is ensuring that at least each town and each suburb has more than one backhaul connection in there so, if a town is cut off from one direction, the connection will still come through in the other direction. Whether that be aerial or underground, it will provide a backup to a connection should it fail.

CHAIR—Is that one of the reasons why earlier in the year you suggested new fibre paths to the east coast to form a new route between the north and the south?

Mr Connor—Correct.

CHAIR—You said earlier that it is necessary but a lot of people do not prefer it. Are you saying it is necessary simply because of who has got the gig and how their existing infrastructure is already built?

Mr Connor—It remains to be seen how Telstra assets can be played into the NBN. That may take a year or two to play out. But, if you are designing a network, you want fault tolerance redundancy from point A to point B. Given that the NBN in Tasmania will be based in the Hobart area, we would want to see a fault

tolerant connection to other areas of Tasmania. Running the cables around the east coast is perhaps about 400 kilometres. It serves a dual purpose of connecting those towns in between, up a certain route, and also providing a redundant connection to other areas of the state.

CHAIR—With respect, I do not have the answer to my question. On what basis are you saying aerial rollout, and potentially 70 per cent, is necessary?

Mr Connor—For the speed of the rollout and the right of way. There is a power pole network around much of Tasmania, whether that is low-voltage wooden poles or very high-voltage type towers. Utilising those assets is a much quicker alternative to ploughing new cable into the ground or utilising existing conduit.

CHAIR—Might that not be quicker in the short term, in the very short term?

Mr Connor—To go aerial?

CHAIR—You have said it is quicker.

Mr Connor—Very much so.

CHAIR—So is it quicker in the short term as opposed to the medium and long term? As everybody knows, at this stage there is a splendid absence of a cost-benefit analysis of the entire proposition, so it could be penny-wise but pound-foolish, could it not?

Mr Connor—Certainly, and that must be taken into account in any cost-benefit analysis—the cost of X towns being disconnected for X days while first their power is reconnected and then their fibre-optic connection, their backhaul. That is what needs to be taken into consideration.

CHAIR—In any cost-benefit analysis, which we still await. Do you think there is one happening?

Mr Connor—I hope so.

CHAIR—Minister Conroy, in regional New South Wales, in Tamworth, a week or so ago made a comment about prices. I want to ask you about that, reflecting on your saying that Tasmania, as a disadvantaged and underserviced region, should be the first to have NBN rolled out and that there should be no disadvantage, particularly for rural and regional consumers. Minister Conroy suggested that the network would be cross-subsidised, with one wholesale price averaged across the country, with the aim of having the same wholesale price for every household for the same speed across satellite, wireless and fibre. Do you agree with him? If so, how does that sit with your recommendation that there be no disadvantage for any consumers?

Mr Connor—It should be a nationally average price so that all Australians are on an even footing with the services they are provided with. Those are essential services such as phone, and the internet will soon be considered an essential service.

CHAIR—It looks like what you were about to say would have been interesting.

Mr Connor—It would be interesting for me. We need to see nationally average pricing. At the moment with some telephony services, there are up to four bands of pricing. It goes from a couple of dollars in metro areas to \$140, I believe, in regional areas. Some ISPs just flatly do not service those regional areas or they offer a regional surcharge for those customers that are beyond these imaginary borders of distance, where distance really should not be a factor in telecommunications. Your signal, whatever the signal is, is going to the box at your end and it is going as photons down this fibre and basically popping out at the server that you are connecting to. So nationally averaged pricing is necessary to provide equality across all Australians.

CHAIR—How do you see it being delivered?

Mr Connor—That is still up to the cost-benefit analysis of the NBN—

CHAIR—There is a lot hanging on this cost-benefit analysis that is not happening.

Mr Connor—There certainly is. A lot of money has been proposed for this network, up to \$43 billion, but I think additional statements have been made that up to half of that will be contributed by other entities—private consortiums. Particularly if companies are unable to chip in their assets, that is an additional amount that does not need to be funded by the taxpayer.

CHAIR—You are saying you agree with the minister this cross-subsidisation must happen of necessity, effectively. Where do you think it fits in the system?

Mr Connor—I would probably go back to the previous comments that it is coming from general revenue and that it is analogous to the piped network we have for sewerage and water in that, even if you do not use it,

it is there and it is available to you. You are contributing to it in some way, whether that is through council rates, through a direct supply fee or through some other form.

CHAIR—So it is taxpayer funded, essentially—government provided?

Mr Connor—Yes.

CHAIR—Are you familiar with the evidence given by Mike Quigley, NBN Co. boss, to the Senate committee last week, I think it was? He was not drawn on the pricing for which NBN Co. would offer the wholesale services to wholesale customers, other than to say it is yet to be determined in the large. So where do you think that the NBN Co.'s provision of services should fit?

Mr Connor—It is very difficult to say and very difficult for them to come to that figure for a given service, because there are so many factors that play into it, then adding in that national averaging. It is really a matter for them to work out that figure.

CHAIR—Yes, but the minister has essentially said there is going to be cross-subsidisation and his right-hand man, the boss of the show, is not able to paint the picture of how. We do not have a cost-benefit analysis that would help us and organisations of the likes of yours are properly saying it has got to happen.

Mr Connor—It does need to happen, yes, and it is perhaps something that the ACCC needs to have input on as well. You could look at the current access prices that have been negotiated for ordinary telephone services and for basic internet services. They have been agreed based on prices from Telstra, and where that has not been seen as fair by other operators the ACCC has been asked to come in and work it out. Unfortunately, that takes some time, but we hope from the start there will be an attractive price for consumers—an attractive wholesale price that retailers can then provide to consumers.

CHAIR—Presumably, as my colleagues have just pointed out, NBN Co. will be seeking to make a profit, although Mr Quigley was not all that convincing on that point in the evidence he has provided to the committee thus far. So that is hardly going to assist in the outcome you are seeking.

Mr Connor—Yes. Certainly there are a lot of conflicts that need to be resolved in obtaining a profit and servicing the consumer need for affordable connections for a given service. So, yes, there is a lot that needs to be worked out.

Senator LUDLAM—Given that we are here in Tassie today and this is the only place in the country, that I am aware of, where people are actually starting to dig holes and hang cable, when are you expecting that you will know what the wholesale price for access is going to be.

Mr Connor—I am not sure what indications have been given so far. Hopefully we will see some clarity before or soon after Christmas this year, and that is in the lead-up to a service being provided in the three initial roll-out towns by mid next year. ISPs would need to have some clarity on the business model and support systems to enable them to set up a service to provide to customers in those three towns in a six-month time frame.

Senator LUDLAM—Regarding your proposal for a no-disadvantage test whereby nobody is at least being forced to pay more for an equivalent service to what they have now, what has been the response to that idea so far from government?

Mr Connor—Not a lot so far. This is perhaps the only forum we have been able to promote it to. So, there you go. It perhaps reflects on the lack of consultation on the NBN, at least down to the consumer level and what they want out of it.

Senator LUDLAM—Right. That leads me to my next question. You are being very polite and diplomatic here. I guess as one of the lead organisations in this sector in Tasmania you seem to be working as much in the dark as anyone else about what it is going to cost people and when it is going to be online. How high do you think awareness is in the general community or in the business community—in your membership—of what services this system will carry and what people will be able to do with it.

Mr Connor—I think that generally in the community the awareness is quite low. They see that a huge amount of money is being spent on something fibre-optic wise and perhaps that means that it is coming to a home near them. That magical cable will be rolled out down the street and into their home. Hopefully they will like that coming in. But there needs to be an awareness campaign to make sure the public is aware of that—a campaign along the lines of the Digital Ready program where we saw a few ads saying that all this great stuff is coming. That is what we need to see for the NBN.

Senator LUDLAM—Was that around digital TV?

Mr Connor—Yes. That was a branding program.

Senator BILYK—Have you done any study to validate those comments? Because from what I am hearing, and I am a Tasmanian senator, people are very excited by it and people do understand at least the basics of it and they see that there is great potential for it. So I am just wondering what information you base those comments on. Have you done surveys or is it general—

Mr Connor—I am afraid we do not have the resources to conduct any surveys of great magnitude—

Senator BILYK—So it is just hearsay.

Mr Connor—It is a lot of anecdotal evidence, and from what we see in the 'letters to the editor' they are saying: 'What is all this money going to do. Why are we going to see ugly cables here or have our shrubs or lawns dug up.'

Senator BILYK—I do not disregard those comments but what I am saying is that most people have an understanding that it would improve technology for them both at a personal level within the home and at a business level. Is that not correct?

Mr Connor—We may have miscalculated there but it is good to hear that people are encouraged and excited about this. But we need to see that grow and grow until it is available to them in their homes.

Senator BILYK—I just wanted to clarify that it was hearsay.

Senator LUDLAM—I have two quick questions as I think we are out of time. In response to a question Senator Barnett put to you, you mentioned a figure before of \$200 million. Is that for every property in Tasmania, or the 90 per cent that fibre will go to? What does that figure relate to?

Mr Connor—That would be based on a figure of about \$1,000 per home as calculated by TECC based on the TasCOLT trial and then multiplying that by the 200,000 premises that are likely to get a fibre-to-the-premises connection in Tasmania.

Senator LUDLAM—What percentage of total premises in the state is that?

Mr Connor—I believe there are 240,000 to 270,000 premises.

Senator LUDLAM—So we are in that realm. Have you done much thinking about what will serve the people who fibre will not reach?

Mr Connor—Some, but it is probably more in the realm of the Tasmanian NBN Co. to resolve that. We believe that wireless does have a place for those fringe areas. There are a lot of telco towers in Tasmania owned by the state government and their businesses, such as the power companies, that can be used to get wireless out to those points and then get it into those towns and villages that are in the digital black hole. They will get a service to them that is adequate but still not as preferable as a fibre-optic connection, which offers so much more. For the very, very remote, there remains a satellite service that we have not heard much about on the NBN front.

Senator LUDLAM—My final question picks up on some of the issues Senator Fisher raised about whether we bury the cables or hang them overhead. You mentioned that you foresee an eventual take-up in the high 90 per cents—that it is an essential service and so on. At the moment, these services, such as they are, are delivered by a copper network, which is largely underground in Tasmania. Is that correct?

Mr Connor—Yes. There are areas of suburbia which have overheads for the last few meters of connection.

Senator LUDLAM—We took evidence in Canberra that it is more expensive to bury the cable but it is then more resilient to natural disasters, accidents and so on. Did your group lobby, at all, the government or the providers of this infrastructure to at least consider the option of burying the backhaul cables?

Mr Connor—No, we did not.

Senator LUDLAM—For what reason?

Mr Connor—We have not had many opportunities presented to us to lobby, at least in the very technical areas, such as those. Certainly, many in the telco industry—including us—would prefer that the cables be buried, simply because of the higher fault tolerance it provides. But even as you have seen in Sydney, it is very easy to slice through a lot of cables that should be well marked and known about. In Tasmania, yes, a lot of the current copper network is underground. But one of the reasons for going to fibre network is that the copper

network is approaching the end of its feasible life and we have squeezed as much out of it as we can, without additional nodes being put out to shorten the distance of copper between that node and the premises.

Senator LUDLAM—Does that not mean that all the ducts are there—that all the trenching has effectively been done?

Mr Connor—Yes, it does. But that would then come back to what assets Telstra is willing or coerced into providing to this NBN. There is still some uncertainty there as to where those ducts are, because the type of cable being made at the moment is for each power pole. It is made to premeasured lengths within, say, half a metre so that you can split out at a certain point to within half a metre. That allows for power poles to be replaced and moved over time. But if you are putting that underground, you are not exactly sure where those conduits go or if they are still intact. If they take a non-straight route—

Senator LUDLAM—If they wriggle?

Mr Connor—Yes, and having those connectors pop-out in the right places could be quite challenging.

CHAIR—Mr Connor, in relation to aerial cabling, will it look like more? There may well be 70 per cent of infrastructure built here—Aurora is not showing to tell us—but will it look like more? Will there need to be, in your view, more poles? Fibre itself is not huge but will there be more poles and more routes? Will it took to people like there are more?

Mr Connor—I do not believe there will be more poles put up just for the NBN. Where there are no poles, I am sure the other option is to go underground for those segments. What you can utilise there is horizontal directional drilling, even in short routes—which is being utilised for gas rollouts—and this rather recent trenching technology, where there is a big circular saw on the back of a truck. That is a minimal disruption technique to putting in fibre when no other option is available.

Senator BARNETT—Will the poles have the ability to carry the additional and heavy infrastructure with the new wire? Will they have to be upgraded or improved in some way?

Mr Connor—I do not believe so. I believe there is still sufficient capacity there for them to hold a small amount more of cable and related patching infrastructure. These power poles have to withstand winds of up to 150 kilometres an hour. One of the specifications offered in one of the first tenders was that the fibre cable has to withstand wind speeds of up to 150 kilometres per hour. The power poles should be sufficiently strong to handle that wind loading and the existing power lines, so an additional cable should not pose too much more load for them.

Senator BARNETT—But we do not know for sure because Aurora Energy is not here to tell us.

Senator IAN MACDONALD—Just on that point, do you know if there is anywhere we could get details of the cost to Aurora—or whoever—of maintaining their overhead power network? For example, there was some evidence given to us that the mere cost of cutting back trees was an enormous ongoing cost. I assume you do not have those details.

Senator BILYK—I do not think Mr Connor is supposed to comment on Aurora.

Senator IAN MACDONALD—My question is if he could refer us to somewhere that might be able to give us those details.

Senator BARNETT—But Aurora Energy is not here.

Senator BILYK—He could write to them.

CHAIR—Mr Connor?

Mr Connor—I am certain the annual report for the Aurora Energy GBE can provide some insight into those costs. I believe they are undertaking a long-term power pole replacement project and there is a figure of up to \$900 million across Tasmania for new power poles over the next decades. I am not sure of the time frame but it is likely to be substantial. That is something that they are undertaking proactively to make sure the power pole network is secure for the provision of electricity and as a by-product for network cables.

Senator IAN MACDONALD—What impact do bushfires have on overhead cables?

Mr Connor—Not a very good one. They tend to knock them over one way or the other and that is not a very good outcome for the power service or a telco service.

Senator BILYK—Just to interrupt there, a lot of the poles are now being replaced with steel poles. A lot of the older poles are of wood.

Senator IAN MACDONALD—But my question was about the cable, not about the poles.

Senator BILYK—Sorry, but it is the poles that cause the problem. In bushfires it is the poles that cause the problem.

Senator BARNETT—But we do not know how many poles. We have no idea because Aurora Energy is not here to tell us.

Senator BILYK—You can always write to them, Senator Barnett.

CHAIR—Senator Macdonald has the call.

Senator IAN MACDONALD—I really am asking Mr Connor rather than Senator Bilyk.

Senator BILYK—Mr Connor does not represent Aurora though.

CHAIR—Senator Bilyk—

Senator BILYK—Is that not correct, Chair?

CHAIR—can the witness please attempt to answer the question.

Senator IAN MACDONALD—Fire does impact on the cable, doesn't it? Is that right? It would melt.

Mr Connor—I am certain it would not be serviceable after a fire has swept through.

Senator IAN MACDONALD—I do not know whether you can see this but I am showing you a map that we have got that seems to be done by Aurora. It has a line effectively from Hobart to Launceston and up to Smithton and out to St Helens and all around there. How is the rest of Tasmania serviced from those trunk routes to other parts?

Mr Connor—I imagine fibre would be distributed along the lines of the power network. That most definitely goes into most towns of Tasmania.

Senator IAN MACDONALD—So it would come off these trunk lines, so to speak?

Mr Connor—Yes. I imagine that at most townships you would be able to split off the backhaul to then service another few towns down the track. It is a web. Like with the power network, you can link in at many, many places.

Senator IAN MACDONALD—You have been through this with a lot of questions from my colleagues but I have another question. It is being said that not only will Tas NBN Co. have standard Australia-wide pricing but also they must operate at a profit and 49 per cent of the capital is supposed to be provided by private investors, who obviously want a return on their investment as well. Does that all stack up for Tasmania? I would have my doubts elsewhere in Australia. Perhaps it will all work in Tasmania?

Mr Connor—They may very well be contradictory objectives in that it is cost positive and profit positive and that it provides an affordable service. That is for the government and for the NBN company to work out and to provide that service.

Senator IAN MACDONALD—Will there be a choice in Tasmania to continue to use Telstra's or Optus's existing network or that of anyone else that operates on a large scale in Tassie?

Mr Connor—I imagine their networks will not be pulled up or will not be converted to be an NBN asset in full. It may be along the lines of the individual fibre strands in the fibre cable. You have at least 12 to 24 in some long-distance runs and in more recent runs you have up to 72 cores in a cable. With just one pair of cores you can service a town or many more. They could divest themselves of some of those cores in the cable and still maintain their own services on existing cores in the cable.

Senator IAN MACDONALD—As always you give very precise technical answers which sometimes go over my head. If I am a Tasmanian and I do not like the cost that there will be for connecting up to an NBN through a retailer—and we have got no idea what it is going to be, but this is if I do not like it—would I have an alternative?

Mr Connor—If you are not going to use the NBN entirely you may still have the option of something like ADSL through the copper network for a period of time. It is still to be defined how long that will be available for once the fibre-optic network is fully installed.

Senator IAN MACDONALD—What can you get out of the ADSL network?

Mr Connor—It is 24 if you are within a kilometre of your exchange.

Senator IAN MACDONALD—And most of your members would be pretty happy with 24 megabits?

Mr Connor—Yes, but you may find that in Tasmania lot of people are beyond that distance and typically they get no more than eight megabits. The average speed that is utilised in Australia is little more than 1.5 at the moment.

Senator IAN MACDONALD—Okay. Thank you very much, Mr Connor.

Senator BARNETT—Perhaps you could take this question on notice, Mr Connor. You have mentioned TasCOLT a number of times. Do you have any evidence or information about that TasCOLT study? If so, could you forward that to the committee? Is that it possible?

CHAIR—Yes, if you could take that on notice, Mr Connor.

Mr Connor—Yes, I will.

Senator BARNETT—Is that something that you could forward to the committee?

Mr Connor—I will seek their permission to forward that on to you.

Senator BARNETT—Thank you.

CHAIR—Thank you very much, Mr Connor, for your evidence prior to this and for today as well.

[10.10 am]

ALEXANDER, Mr Darren, President, TAS ICT, and Chief Executive, Austech

CHAIR—Welcome, Mr Alexander. I think you were in the room earlier so you would have heard the formalities. Do you wish to make a brief opening statement?

Mr Alexander—Yes.

CHAIR—Fire away.

Mr Alexander—Thank you, Chair. Firstly, TAS ICT is the peak industry body for the ICT industry in Tasmania. I have come here this morning to highly recommend TAS ICT's support for the National Broadband Network, especially in Tasmania to give Tasmania the first opportunity to roll it out but also for the ICT industry in Tasmania, as it will help it to continually grow. We look forward to participation in the network in the near future.

CHAIR—Thank you, Mr Alexander. That was a very brief opening statement. We will go to questions.

Senator BARNETT—Thanks, Mr Alexander, for being here today and thanks for your advocacy for TAS ICT in Tassie and for what you do in promoting more industry for Tassie. I know that is well appreciated around the state. To kick it off, are you surprised that the main players—Tas NBN Co., the state government, Aurora Energy and, as of late yesterday, the institute—have failed to appear at this committee hearing today?

Mr Alexander—Firstly, I was not aware of it until you said it. Am I surprised? Yes.

Senator BARNETT—You have previously talked about the importance of getting information and becoming more aware and of the importance of education of your members. Likewise, are you frustrated, annoyed or disappointed that they are not here to provide further and better information about the rollout of the NBN in Tassie?

Mr Alexander—As I said, I am surprised they are not here. I am not aware of the reasons why they are not here. Apart from that, I, like everyone else in the state, would like to have some transparency around the actual rollout, how it is going to happen and when it is going to happen. So, as I said, I am surprised that they are not here.

Senator BARNETT—To pursue that in terms of consultation with, let us say, the state government or the Tas NBN Co. or Aurora Energy, have you had communication and consultation with them? If so, can you tell us about it or if not can you confirm that?

Mr Alexander—I actually met with Senator Conroy in my office in Launceston. He came to speak to me and a couple of key stakeholders in the Launceston area.

Senator BARNETT—Was that in April or in June?

Mr Alexander—I cannot quote the exact date. I cannot remember it without looking in my diary. It was maybe two months ago. Basically, we asked questions similar to those that have been asked here today around how it is going to happen, when it is going to happen, where it is going to happen first—those sorts of things. It was explained by the state government about the three so-called smart towns that will be starting first. I do remember seeing *Stateline* on a Friday night when Doug Campbell, the chair, was questioned. He was asked the same questions around when it was going to happen. There was no fixed terms, but he was talking of some time next year, of July right up until Christmas. That may change. I am not sure. So, like all of you here, I do not know a lot other than from conversations with other people in the local community as well as a few conversations with other people.

Senator BARNETT—So, apart from what you have seen on *Stateline* on the ABC and the meeting with Senator Conroy, you have not had anything official meetings or briefings and you are not fully aware of the rollout—when it is going to be, costs and that sort of stuff?

Mr Alexander—No. The costing question has been asked by not only the previous speaker, Andrew Connor, but also members of TASICT are quite interested to find out when that information is coming. I have a meeting this afternoon, with another hat that I wear. Like most of us in Tasmania, we have many other hats. One that I am wearing is for the DIAC group. It is one of the other areas that we will be talking about this afternoon. DIAC is one of the industry councils but it has a new name. It is not an industry council anymore; it is called DIAC.

Senator BARNETT—Can you give us the full name?

Mr Alexander—I cannot—it is DIAC.

Senator BARNETT—Is that a local government entity?

Mr Alexander—Yes. It is an industry council, like a tourism industry council and that sort of thing. Instead of calling it the ICT, we changed the name to a form for digital. Andrew Connor is on the same committee as me.

Senator BARNETT—You will be discussing the—

Mr Alexander—We will be discussing a number of issues around the NBN and the ICT, and we hope to be briefed a little bit more.

Senator BARNETT—By whom, though?

Mr Alexander—By the department.

Senator BARNETT—Which department?

Mr Alexander—The department of economic development.

Senator BARNETT—The state department of economic development?

Mr Alexander—Yes.

Senator BARNETT—It seems that they might be there to brief you but they are not here to brief us?

Mr Alexander—No, they are briefing the digital economy around a number of questions that were asked by the council and part of it is NBN. We are not sure about the answers we are going to get.

Senator BARNETT—We are all in the dark, frankly, Mr Alexander, and that is one of the frustrations that certainly I have and I think others have around the table. Were you surprised—or you may not be aware—that Mr Quigley appeared before this committee in Canberra last week and repeatedly referred to the rollout in Tasmania as a 'pilot'. I am surprised at that and disappointed because we have been led to believe by the government that this is an official rollout and that it will continue to 200,000 households and connections in Tasmania. Frankly, the use of the word 'pilot' gives some cause for concern, perhaps implying that there may be further delays or they will be using it for other purposes. So I am just wondering whether you are surprised about the use of the word 'pilot'.

Mr Alexander—I am surprised about the use of the word 'pilot' because I was under the same assumption as you. The rollout to 200,000 households is quite a large pilot if it is a pilot.

Senator BARNETT—In terms of the length of the cable, we are aware of the tender documents showing that basically over 95 per cent of the fibre and 60-odd kilometres of rollout to the three towns is above ground. That is based on the tender documents that were released some months ago. Can you provide any further and better particulars with regard to the rollout of further cable and any terms and conditions attached to those tender documents?

Mr Alexander—No, I cannot. Clearly the information is not something our membership would be looking at specifically because it is not to do with the rollout. What we have been engaged in is to try to find out where it will come in, if there is a fourth cable and where it will come from. We have asked those sorts of questions.

Senator BARNETT—In terms of Bass Strait?

Mr Alexander—Yes.

Senator BARNETT—We had evidence this morning. We talked about the new Bass cable that has come on board with City Spring and the fact that the state government were paying about \$2 million a year for that. I thought it was four years since 2004, but Mr Connor says it was a bit over three years. Do you have any further evidence on that?

Mr Alexander—No, I have no evidence—only hearsay like most people, but I do not have any evidence.

Senator BARNETT—So you do not know what the total cost was to the Tassie taxpayer?

Mr Alexander—No.

Senator BARNETT—The take-up rate has certainly been debated in the public domain and the TCCI has put a figure out of, I think, up to 20 per cent. Do you have a view as to the likely take-up rate as a result of the rollout of TAS NBN?

Mr Alexander—I think that is about how it is deployed. It depends on how it is actually offered to the consumer market. It can be seen as quite naive to think that it will be 10 per cent, 20 per cent, 40 per cent or 100 per cent until we understand the detail. We do not know enough about the detail yet or the model of how it is going to work.

Senator BARNETT—And it is fair to say that the price for the consumer would be a critical determinant in terms of the take-up.

Mr Alexander—Correct. If it were \$1,000, I am sure that the take-up would be quite low. If it were \$15, I am sure that the take-up would be quite high.

Senator BARNETT—There has been an estimate of some \$700 million to roll it out in Tasmania. Are you familiar with that figure?

Mr Alexander—Somewhere between \$500 million and \$700 million, yes. That is the number I have heard on numerous occasions.

Senator BARNETT—Has Senator Conroy ever confirmed that figure with you?

Mr Alexander—No.

Senator BARNETT—Have you asked him?

Mr Alexander—I did ask.

Senator BARNETT—And what did he say?

Mr Alexander—There was no answer in the overall picture on exactly how much it was.

Senator BARNETT—Did you ask him how much the federal government was putting into the rollout of NBN in Tasmania, to date and in future years?

Mr Alexander—No. The question was raised around Tas. NBN Co. That was something they would be doing and the information would be eventually be made available, but as at this stage I have not seen anything.

Senator BARNETT—So he did not disclose the figures to you.

Mr Alexander—No.

Senator BARNETT—That is something I have asked him in the Senate. He has not answered the question in terms of the federal government taxpayers' equity injection into Tasmania. Likewise with the state government: have you ever asked them how much they are investing in the rollout of NBN in Tassie?

Mr Alexander—No—again, only what I have seen reported in the papers, and those figures of somewhere between \$500 million and \$700 million have been quoted on numerous occasions. I am not sure what—

Senator BARNETT—And you still do not know the federal government proportion and the state government proportion.

Mr Alexander—No.

Senator BARNETT—So we are still in the dark there. I will just go back to the take-up rate. Mr Connor said there should be a no disadvantage test. If the prices were about the same as they are at the moment, have you got any idea of what the take-up rate would be, or a best estimate?

Mr Alexander—I would like to use the analogy of the first mobile phone I purchased, which was a handbag. I am sure anyone that has had mobile phone would remember the old handbags. That cost me about \$1,000, which back then was probably worth about \$3,000 now. But now you can buy a phone for \$50. I think at the end of the day it will be based on the consumers' take-up and the period of time and then of course the price will come down. But again I have no idea. I have as much information as anyone else in this room. I do not believe there have been any announcements. I look forward to the announcement when it does come. But I would assume, using what I call common sense, that there will be some sort of analysis of how the price would be priced around people taking it up.

Senator BARNETT—Mr Connor referred—based on the scenario of a \$700 million investment and it being commercially viable, which the government is committed to—to figures of up to \$20,000 per connection. He is also saying that it should be available to everybody at a fair and affordable price. But he is saying up to \$20,000 per connection based on the \$700 million investment and it being commercially viable. And everybody is scratching their heads and thinking, 'People can't afford that.'

Mr Alexander—Is that what Andrew Connor said?

Senator BARNETT—Yes. Mr Connor said that, based on the \$700 million, it will be up to \$20,000 per connection. But he also said that the TasCOLT study was \$1,800 per property, and he thought that it could be as low as \$1,000 per household.

Mr Alexander—My comment, and TASICT's comment, on that would be: this is infrastructure. We do not look at this on a commercial basis; we look at it as infrastructure. And infrastructure is based on a commercial rate over a number of years. For instance, if it is ports, it is 50 years. If it is rail and road, it could be 25 years. I do not imagine that that \$20,000 figure would be correct. It is not a simple matter of saying: 'There are 200,000 households. Fourteen to 20 per cent are going to take it up. Divide that by the \$700 million and that equals \$20,000.' I think that is the wrong approach. I assume that it would be like infrastructure over a period of time. By the time that period is up, I imagine that the take-up, if it was 20 per cent to start with, might go to 50 per cent. Again, that will then decrease the actual investment.

Senator BARNETT—Sure, and I do not want to misconstrue anything that Mr Connor has said. Please refer to the *Hansard*, because I think his evidence was very credible. My final question, in light of the time frame, is this: you have referred, in the public arena, to the break-up of Telstra and its possible impact on the Tassie rollout; could you elaborate for the committee your views with respect to the break-up of Telstra and how it might affect the rollout in Tasmania?

Mr Alexander—When Senator Conroy announced the structural separation of Telstra one of the first things I was asked was: 'What do you think about it?' Because there still is not enough information it is very difficult to make an assumption, but my concern was that if it was done and it was done quickly then the first-mover opportunity in Tasmania could change simply because the fibre in the ground in other major capital cities already with Telstra is quite large and in that case we would lose that opportunity to be the first mover.

I also said in the article that if there is a structural separation of Telstra—I am not naive enough to believe that it would take a number of years for that to take place—it would be good to have more detail to actually understand how it is going to work. But, you are right, my concern is for Tasmania, and the opportunity for this state was based around the information when we applied for and invested the \$5 million from the state Premier in the NBN. I understood at the time that while the Tasmanian submission may not have been the best it was the one that the federal government looked at and with that taking place Tas NBN Co. was born. What I am concerned about is that eventually the rest of the country will catch up. The great analogy for Tasmania was we were going to be first and anyone that knows anything about coming first knows is you have the best opportunity to start with, certainly for investment, for capital investment and for the growth of industry that is here now.

Senator BILYK—Mr Alexander, thank you for your submissions and for the work you do on behalf of Tasmanians. In fact, I am quite aware of a lot of the work you do down there and of your links with CSIRO and others. I think it is really important to the future of Tasmania. You have actually answered some of my questions in response to Senator Barnett's questions but I am pleased that TASICT supports the NBN. Can you expand on why you support it? What benefits do you think it will bring to Tasmania, not just business-wise but to homes and things?

Mr Alexander—Certainly. From an industry point of view, last year we commissioned a report for ourselves, which is our 2009 annual report, and we investigated the industry to find out exactly how big we were, what contribution we made to the state economy and also the skills areas that we might be looking at in the future. As an organisation we realised we needed to have better links with educational institutions and that if we were going to have an industry that was going to grow we needed to take a stronger role in that area, not only with the people we were employing but also with employing them the way that we would like them to come out. So we have engaged with the universities, the TAFEs, the skills institutes, the polytechnics and the like to see how we can improve the outcomes of our employees in the future. Secondly, we also realised that we currently employ about 8,200 people in the industry, as at 2009, and that we contribute about \$1.4 billion to the state's economy. So from an industry point of view we are quite a large sector of the Tasmanian economy—

Senator BILYK—Sorry, can you just repeat how much? I did not catch that.

Mr Alexander—About \$1.4 billion we contribute to the state's economy. With that investigation we realised we played quite a major role in that area. We wanted to engage with governments—state, federal and local—to make sure that the ICT industry is recognised. I think the unfortunate thing we had was that for a number of years after Telstra was sold everyone thought of the \$40 million that was given to the Intelligent Island Program: 'That's it—go away. You've had your money. Go away.' But we want to continue growing the

industry and we need to be looking at developing programs that are going to enhance and foster the industry and make it grow.

When the National Broadband Network and Tas NBN Co. were announced we were as excited as anyone because what that did was to provide us with the opportunity not only to continue the work that we had been doing but also to grow. We have seen some real opportunity for investment locally. Let's be honest: the actual fibre in the ground, to be very clear, is just point to point, and it is going to be the highway. The services and benefits around it are what we are excited about because in the research we did in this state we found that our software services area had increased by over \$300 million in the last five years. There is really strong growth in that area that we are developing. As the National Broadband Network comes in it will only give us a bigger opportunity to expand in that area and grow. We see an opportunity for the state, where we may have small businesses relocate to Tasmania because they are in the IT area and they may see the opportunity of being first in a market as quite attractive. The fact that it is a nice place to live and it is quite cheap—

Senator BILYK—It is a wonderful place to live, isn't it?

Mr Alexander—Yes, a wonderful place to live. You clearly can see the opportunity for the state in that area. So for us it was quite exciting to get behind it. But—and I am going to say this very clearly—the devil is always in the detail. That is why we have been asking over a period of time and I am sure that is why the Senate inquiry is on now—to find out more about it and what the benefits are going to be. But I must admit I am concerned about the noise that continually comes out about the actual uptake itself. This is like any other piece of infrastructure: when it starts it takes time for people to use it. We do not build a brand-new freeway, have only 35 cars go across it and realise that we have made a mistake. It is for the future. We are talking about future proofing Tasmania's economy, and this is really going to do it.

Senator BILYK—That is wonderful. Thank you for that answer. Specifically, how do you think the areas of Smithton, Scottsdale and Midway Point will benefit from being the first towns to receive the NBN rollout?

Mr Alexander—I am assuming—and again I do not know a lot of detail—the opportunity in those regions is to allow the community to understand what is possible. As I said, I think we need to understand what the widget is, from a consumer's point of view. It is simple with a mobile phone because it is a device that you hold in your hand.

I think this will bring opportunities in health. There will be a device in hospitals where, if your mother hurts her hip and she is in hospital for a few days, she will be able to go home and be monitored, and there will be a cost saving to the hospital and the insurance industry. I think you can see the possibility in the future that people in Strahan could have a consultation with an eye surgeon in Hobart because of the high-definition technology they will be able to use in those areas. So I see a lot of positives in those areas in the future and certainly in those small regions.

Would I like to see more towns in the business districts receive this? Absolutely. That is something I would really like to see. There will be benefit to places like Launceston and Hobart. Launceston is where my office is, so of course I would like to see that area receive it. In actual fact, I think it should be first and I would like to go on record and say they should do it—

Senator BILYK—No parochialism!

Mr Alexander—I would like to see it start there tomorrow afternoon, if I could.

Senator BILYK—It is great you are so enthusiastic about it. Going back to your comment about the potential split of Telstra and the potential for a negative impact on Tasmania, I want to clarify that you are presuming, as I think most people would presume, that those sorts of things will take time to happen, so Tasmania should not be at any disadvantage immediately. Is that correct?

Mr Alexander—The statement I made at the start was that I had some concerns, and then when I finished up I said that clearly it is not going to take five minutes for this to take place. If that is going to happen, then you would have the assumption that we should not be affected. I am sure that the state government will be pushing very hard to make sure that that does not happening, because that was the reason they invested the \$5 million in the first place—to be first into the market.

Senator BILYK—We heard from the previous witness that there appears to be a lot of negativity around. Have you experienced that?

Mr Alexander—No. It is not so much negativity, I think; it is transparency. I think the problem is that, if you are left to your assumptions and you have a lot of us so-called experts making comments, you will find

that a lot of us end up assuming enough and then all of sudden the story becomes real in people's minds. There is a lot of confusion in the marketplace. If anyone does not know about the NBN, they have been living under a rock. We have been talking about it—let's be honest—for the last six months.

Senator BILYK—In Tassie, that is right.

Mr Alexander—I think the issue is clarity on the rollout itself—when it is going to happen, how it is going to happen and what the costs are. These are all questions that people are asking and will continue to ask until it is laid out. I would assume—and it is a big assumption—that eventually a plan will be laid out and will be provided to all of us, and I would really strongly hope that industry is involved in that, from a state point of view, because at the end of the day whatever happens and whenever it happens the industry should be aware of it so that we can adapt or create opportunities around it ourselves. As I said, this is a piece of infrastructure that goes from point to point. The services and the applications around it are the things that people should be getting excited about, because that is where the real opportunity for investment is.

Senator BILYK—I have one last question, because I know—

Mr Alexander—I am wondering if I have bored everyone. They have all left.

Senator BILYK—No, certainly not. You have given very concise answers—thank you. But we have heard concerns that there are not enough fully trained, skilled ICT workers. You talked about your links with the university, the colleges, the polytechnics and things. What are your views on bringing more immigrants with ICT skills into Australia, which is one thing that has been suggested?

Mr Alexander—I would like to see anything which would bring population to the state. Yes, if we can actually attract skilled ICT workers to Tasmania I think it would be a good thing. I think over the last couple of years there has been a decline in some of the ICT graduates coming out of the university. That is why TASICT has taken a strong role in engaging with those educational institutions to make sure that we are working with them. We are also continually talking with our membership about companies understanding how important it is to have skilled, trained people. So much so that we did a skills audit about two years ago on each of the businesses in the organisation to see what we needed and what sorts of areas we should be pushing for in traineeships, apprenticeships and also scholarships in institutes of education. In all those areas we were pushing really hard to look at what we needed. That was probably our first step. The reports continue to grow and we are continually monitoring that. But, again, we use that in conjunction with the university.

Senator BILYK—That is wonderful. Do you have a copy of the 2009 report?

Mr Alexander—I do. It is the only one I have. I would be very happy to make them available to the committee

Senator BILYK—That would be wonderful. Thank you.

CHAIR—Mr Alexander, you talked earlier about the knowledge of the Tasmanian population and made some comment that they must have been living under a rock if they don't know about the NBN.

Mr Alexander—Yes.

CHAIR—Living under a rock might be quite a nice place. Leaving that aside, they do not know about the NBN. You are in the industry. We are in the business. NBN just of itself means something to us. If the discussion in Tasmania—and I do not want to trivialise it—has been about the NBN, people will not even understand that that stands for National Broadband Network, let alone everything else that comes under it.

Mr Alexander—My opinion is that it has certainly been discussed across the state and federally. In the last four or five weeks it has been heavily discussed. I believe a lot of people understand it is faster internet, because that is what people see. But, you are right, maybe some of the consumers think that they will be able to download a movie, or get their music or look at Facebook faster. You are right, I do think we need to have some education around the possibilities of what this could do for the state, but it is very rarely out of the papers. It is very rarely out of the news. On a weekly basis something is discussed around it.

CHAIR—Your predecessor, I think, Mr Gartland—

Mr Alexander—Yes.

CHAIR—in July was talking about the two stages of the Tas NBN rollout being the installation stage and the exploitation stage, going on to explain, I think, that the exploitation stage would generate more enthusiasm around the network. Do you think that was based on his view at that time that Tasmanians may be reluctant initially to embrace the new network?

Mr Alexander—I cannot speak on behalf of Peter, but what I can do is assume that—he is right—the second stage is the more exciting part. That is what I have actually said as well. You have talked about the 'exploitation stage'; I have talked about software and services being delivered.

CHAIR—They were his words, I think.

Mr Alexander—Yes. I am talking about the same thing. That is where I see the opportunity for the state.

CHAIR—People might have come out from under the rock by then, you reckon?

Mr Alexander—An example would be—and this is, again, my personal view—if I were to walk into any community and knock on the door and say, 'For \$10 you can have 375 new TV stations directly pumped down the line', my assumption would be that a lot of people would take it up. What they really need to do is understand what the actual product is. I think you are right: people are confusing the network versus what the services are. Like I said, the actual infrastructure is just like a road or a building being built. People do not see it until it is actually on the ground and built. It is not until afterwards that the services come on that people may take a lot more interest. That is when they can see the availability of what will be there.

Senator BILYK—Or when they can actually use it.

Mr Alexander—Yes, when they can use it. Right now it is just talk about putting cable in the ground. Let's be honest, it is not that exciting. It is just digging a hole—

CHAIR—Except to people like us and industry tragics. In her questioning of Mr Connor, Senator Bilyk drew attention to his comments based upon anecdotal evidence. Surely you are basing your expectations about take-up—and benefits, indeed—of the NBN rollout in Tasmania on anecdotal evidence?

Mr Alexander—All I can do is talk about this on behalf of the membership, who we deal with on a regular basis. We all see the excitement. We survey our members. That is evidence in itself.

CHAIR—Do you have any surveys you can provide to the committee that might be informative in an empirical way? Are there any survey results?

Mr Alexander—I would be happy to talk to my committee. If the answer is yes, I would be happy to provide it. I will investigate that and come back to you.

CHAIR—Surveys on what sorts of issues?

Mr Alexander—Issues around understanding the NBN itself. We ask a number of questions. Do you think it is a positive move for the industry? Yes, no, and the rest of it. Do you see an opportunity within your business? We then ask people to provide information around the way they see it.

CHAIR—Have you asked those sorts of questions at regular intervals or is that an example of a one-off thing?

Mr Alexander—No, we did that when it was first announced and then halfway through the process. Then we asked people whether they were frustrated, and the answer was yes, because we are continually frustrated trying to understand when this is to happen. I think the problem is—and, again, this is my interpretation, as Darren Alexander—that the bar gets lifted on people's expectations when announcements happen. It is announced that it is going to happen. Then you go through a period of time where you start talking about the possibilities—when is it going to happen? As consumers and general, everyday people, we don't want to talk about it; we just want to get on with it. So our expectations are quite high. To be honest, given the complexity of building a national network, I couldn't even start to imagine how difficult it would be to actually do this. But I am going to be very selfish. All I care about is Tasmania. So what I want to do is just get on with it and do it here. What the rest of the mainland does is their problem.

CHAIR—This is my final question before I will invite Senator Macdonald to remind us all that he cares a lot about Queensland. In a piece published by your predecessor in the *Australian* on 17 August he talked about the Tas NBN lacking the critical mass to become the focus of service delivery. He went on to say that it would require a take-up of 80 to 90 per cent to make a big enough difference. His words were:

'It needs a very good percentage of take-up to make sure you have the benefits of a high-speed connection and for government and industry to leverage it effectively', Mr Gartland said. 'For critical mass it has to be pretty high—up to 80 to 90 per cent.'

Do you think that is going to come about?

Mr Alexander—Yes, I do. As I said to you, I think it is very simple. If you look at mobile phones, when they first came out, it was only yuppies who had them. Now the average household has, I think, three or four.

I think the noise around uptake will happen eventually. What people are concerned about is the price—how much is it going to cost?

CHAIR—Thank you. Senator Macdonald, before we go to the next witness.

Senator IAN MACDONALD—Mr Alexander, my apologies for being in and out.

Mr Alexander—That is all right. I just wanted to make sure that I was not boring anyone.

Senator IAN MACDONALD—No, some of us are involved in another committee that is supposed to be having a teleconference. I do apologise for that. I am reluctant to ask you anything for fear that you may have already been asked it, but perhaps I will just in the broad. Could I start by saying that I do love Tasmania, too. Senator Barnett never stops promoting it. I used to spend a bit of time down here in a former life.

Mr Alexander—We would be very happy to educate you.

Senator IAN MACDONALD—I looked after all your forests and fisheries at one stage of the game.

Senator BILYK—How could you not love it?

Senator IAN MACDONALD—I guess just a general question then—and I appreciate that you are rightly excited about the prospect of getting a decent system up and running: is there anything you are unhappy with? If you were in charge, would there be some things being done that you are aware are not being done?

Mr Alexander—That is a very good question. Being from an industry organisation like TAS ICT, I would assume that it would be in the best interests of all parties to talk to our organisation to make sure that the industry itself is engaged enough to understand what is about to happen, when it is about to happen and the rollout, and not only that but to ask us our opinion about what we see from the organisation and how we can adapt to this. At the end of the day—and I have a saying that will be quoted until the day I die, I am sure—there is no point building a four-lane highway between two small towns if no-one is driving on it. The really important thing now is the educational process in the marketplace to make sure that the uptake is there, and that is something that I would like to see a little bit more of in the future and as we move on. But I am assuming that that will take place. Quite obviously, the reason the questions have been asked is that we do not know when it is going to happen. As I think Senator Guy Barnett said, I am surprised that a few people are not here to perhaps answer some questions—but, again, I cannot speak on behalf of them. All I can say is: am I optimistic? Yes. My glass is half full—even though it is empty there!—so I look at the opportunity and see that it is good.

CHAIR—There is a jug in front of you!

Mr Alexander—Yes, I know! I would like to see probably a little bit more transparency in the way that the organisation and the industries are involved in it—and the business community as well. I think that this is a really exciting time. Remember, this is the single biggest investment of infrastructure in the state's history. It can only be a good thing for the state as long as we handle it correctly—and, I am sure, in a bipartisan approach that we should have to make sure this works for the state.

Senator IAN MACDONALD—Thanks for that. That is useful comment for us, and I am sure we will make some reference along the lines you have said in the report. I suspect others are not here because I suspect they are a bit like us all: although they are running it, I do not think they know quite how they are running it yet, because it is—

Mr Alexander—I am sure they are still dotting i's and crossing t's to make it work, but, as I said, the one thing I can certainly understand is that it is probably a very complex area for this to be done. But it does not make it wrong that we want to make it right.

Senator IAN MACDONALD—Indeed, yes. Thanks very much for your evidence, Mr Alexander.

CHAIR—Thank you very much, Mr Alexander. As you are departing, I welcome Senator Birmingham to the committee, who was not absent because of lack of interest; it was lack of flight facilities to get him here as proposed. Thank you very much for your evidence today.

[10.48 am]

REID, Mr Stephen, Economist, Tasmanian Chamber of Commerce and Industry SCOBIE, Mr Andrew, Managing Director, Tasmanian Chamber of Commerce and Industry

CHAIR—Welcome, gentlemen. I will run through some of the preliminaries. The evidence that you are about to give is public. It is subject to parliamentary privilege. It is potentially unlawful and, indeed, in contempt of the Senate for a third party to attempt to interfere with evidence that a witness might otherwise give, as indeed it would be were a witness to contemplate providing false or misleading evidence to the committee. If at any stage you wish to provide your evidence in camera, please request that of the committee and we will consider it. Do you want to make a brief opening statement before we fire questions at you?

Mr Scobie—Absolutely. Thank you very much for inviting the Tasmanian Chamber of Commerce and Industry to appear before you today. The Tasmanian Chamber of Commerce and Industry infrastructure committee has developed a draft NBN policy, which we would be happy to table today, at your convenience, after our submission.

The Tasmanian business community clearly embraces the opportunity of increasing connectivity in whatever format for the benefit of all Australians. However, it is quite clear that the Tasmanian business community is also seeking certainty and clarity over the Tasmanian plan and the Australian plan for the rollout of NBN. We are clearly interested in what the rollout plan is. We are clearly interested in what the anticipated outcomes of NBN are. We would like to understand what the success of NBN is, what the measures of success of NBN will be, because we know absolutely for certain what the cost of NBN to the future generations will be.

Over recent times, the public debate and discussion about and presentation of NBN has been a constantly moving feast. It has been presented as resolving constraints on competition for broadband provision on the one hand and, on the other, as increasing competition across Bass Strait—though, of course, to increase competition across Bass Strait and resolve the cost of backhaul data across Bass Strait would be a capital cost of about \$30 million, not \$780 million.

It has been presented as delivering a first-mover competitive advantage for Tasmania—though, of course, if structural separation were to be forced on Telstra and those assets to be included into NBN nationally, there would be effectively no first-mover advantage for Tasmania. So we would like clarification that Tasmania is still going to be the recipient of a first-mover choice. That goes back to the original point of clarity around the timetable to rollout—the where, the when and the what of rollout.

It has also been presented by many as addressing equity of access for Australians—the digital inclusion strategy delivering better government services, better health services and better education services. We are told, I understand, that dark fibre stapled to the bargeboards of households is going to bring Google and other international brands of significance to Tasmania to make use of this ubiquitous connectivity, which the delivery of dark fibre to the bargeboards of Tasmania does not actually deliver.

Our history in this approach is littered with successes—successes like a techno park without broadband in a silicon Derwent. And Tasmania became the Intelligent Island under another former top-down policy with regard to the delivery of broadband connectivity in Tasmania.

Australian business needs certainty to encourage investment and employment. There appears to date to have been a whole lot of vapour and not a lot of where or when about the NBN. Recently, Professor Larry Smarr, one of the founders of the internet, on a visit to Tasmania, explained that FTTP would deliver wall sized plasma screens to Australians, with a killer application of virtual birthday parties, and that was a form of social inclusion. I for one prefer to eat my cake than to watch somebody else eat the cake.

As we are the Australian population with the lowest GSP per capita and the lowest level of productivity and the lowest level of educational attainment, wall sized plasma screens for virtual birthday parties do not appear to be our most pressing policy priority. Household access to broadband is still clearly determined by socioeconomic circumstance, with Tasmania sustaining a very high degree of correlation between GSP per capita, educational attainment per capita and uptake rates of internet connection.

Clearly economic priorities of productivity and educational attainment are a primacy. Virtual birthday parties and plasma screens can be seen as the outputs of a more prosperous community, not the principal drivers of a more prosperous community. With an anticipated uptake rate in the teens under a user-pays model

for access, surplus bandwidth does not appear to be the most significant inhibited productivity gain in Tasmania.

In a public forum at the Tasmanian Chamber of Commerce and Industry's annual Joseph Aloysius Lyons Lecture in August this year, Professor Smarr explained to the Head of the Australian Innovation Research Centre, Professor Jonathan West, that with the introduction of the NBN Tasmanian business will need to simply compete or die. The NBN can be seen in another paradigm as competition at the speed of light. Optic fibre is bidirectional by its very nature. It opens up all Australian business to competition internationally and could also be seen as one of the great free-market revolutions of our time. It is absolutely free-market reform in that it opens the market to information.

So ensuring the propensity of Australian business to be able to address both the threats and opportunities of competition at the speed of light is quite clearly a major policy priority to minimise the market disruption and maximise the innovation and productivity that the NBN can deliver. Some recent statistics—

CHAIR—Before you proceed to that, Mr Reid: gentlemen, we will have a lot of questions for you. I note that this is very good information. You are reading some of it, and you may care to provide us with some written information or, alternatively, wrap up your opening statements so that we can fire some questions at you and you can volunteer the statistics.

Mr Scobie—I am almost at conclusion.

CHAIR—Thank you.

Mr Scobie—Policy needs to maximise utility of investment with fairly limited resources. If government were determined to address equity of access and deliver health and education services, then dark fibre to the bargeboards of Tasmanian homes would be like water and sewage without taps or toilets. Equitable access would be premised on an additional investment in optic fibre termination boxes for every home and user devices such as PCs or interactive TVs for all households currently without computers.

This investment would likely double the cost of the NBN nationally. This needs to be understood as the NBN in its current form is being presented as delivering equitable access to education and health services. Ubiquitous access to the network is clearly a huge driver of potential productivity and social inclusion. The how and what of that connectivity is surely the real question at hand.

Resource allocation to achieve tangible outcomes needs to be the policy objective at this time. What does a future Australian community actually need? Is it a 20th century technology configured to a 19th century schematic of wiring households or is it ubiquitous connectivity for individuals? The market experience internationally of mobile phones over the last 20 years indicates that consumers want ubiquitous connectivity of individuals. We are undertaking significant market research at this time into the market choices and would be happy to share the research findings before Christmas. To that end, we have now concluded the opening statement.

CHAIR—Do you wish to table that opening statement? I invite you to do so.

Mr Scobie—Yes.

CHAIR—Thank you very much.

Senator BARNETT—Perhaps while we are getting a copy of that via the secretary I will ask some questions. Thank you for that information in your opening statements, Mr Scobie, and thank you for being here, Mr Reid. It is very much appreciated and it is important that the views of the business community across Tasmania and the need for commercial viability are reflected. You have asked a whole range of questions as well, which brings to mind concerns that I have, and I think others have, as to why these questions have not been answered, and you have indicated in your opening statements the need to try to get some of these answers on the table. Are you surprised that the Tasmanian government, the Tasmanian NBN, Aurora Energy, and, as late as yesterday, the Tasmanian Skills Institute, are not here providing evidence to this committee? And are you disappointed that they are not here giving evidence so that you can get the answers you are seeking?

Mr Scobie—Quite clearly answers to the questions are an absolute imperative. Investment by the business community is the principal driver of both prosperity and employment. Market information is the most important element of making those investment determinations. Having open access to information which will allow for those determinations to be made is critical.

Senator BARNETT—So your members and other businesses around Tasmania obviously cannot plan or budget ahead because they do know the timing, they do not know the cost—there is a whole range of things they do not know, so they cannot plan ahead. Is that the point you are making?

Mr Scobie—Absolutely.

Senator BARNETT—You mentioned in your opening statement the figure of \$780 million cost. I have seen estimates of between \$500 million and \$700 million. When do you get that from? Has either the state or federal government, for example, told you that that figure is accurate?

Mr Scobie—Not at all. Like you, that number appears to be in the range of \$700 million. Given that capital budgets blow by in excess of 10 per cent under normal circumstances, \$780 million appears to be about the number for the capital cost of the rollout of the dark fibre to the barge boards in Tasmania.

Senator BARNETT—But is that your estimate or is it based on—

Mr Scobie—That is based on information which has been put into the marketplace. Then of course there is an inflater associated with what the likely blow-out of the capital budget is.

Senator BARNETT—Sure. I have asked the previous witnesses and I want to ask you whether you have had any official meetings or consultation with either state or federal government with respect to the rollout and to answer the questions that you are putting to this committee today?

Mr Scobie—No. We have sought engagement and had some limited engagement but at this time there do not seem to be effective formal channels for the flow of that information.

Senator BARNETT—Is that something you would have preferred to have occurred to date?

Mr Scobie—I believe it is very important that we have the best possible information we can to base investment decisions on.

Senator BARNETT—But it has not occurred to date.

Mr Scobie—No, it has not occurred to date.

Senator BARNETT—Many of us are in the dark and that is one of the reasons we are here, and we were hoping to get some of these questions answered. You are aware of the federal government's position of commercial viability, that that is a key requirement of the rollout?

Mr Scobie—Understood.

Senator BARNETT—Based on that analysis or that requirement, do you have a view and can you advise the committee of your estimated assessment of the take-up rate in Tasmania for this service? You do not know exactly what it is going to cost, but what is your best estimate? I have seen reports in newspapers and other media reports in terms of previous views that you have expressed, but I was wondering if you could put those on the record for us in terms of the take-up rate.

Mr Scobie—The information that we have, both commercial-in-confidence information and information of precedents elsewhere for similar technologies, leads one to believe that it is in the mid-teens to high teens in uptake rate under a user-pays structure. When that number was raised with Professor Larry Smarr as one of the leading experts in the world on these things, Professor Smarr suggested that was a very optimistic number.

Senator BARNETT—Is that right? He said it was an optimistic number?

Mr Scobie—Absolutely. He said that in the initial stages this was clearly cutting-edge technology and would be taken up in fairly low numbers.

Senator BARNETT—Did he say that in one of these briefings with other key stakeholder groups in Tasmania?

Mr Scobie—This was in answer to a question put to him by the head of the Australian Innovation Research Centre in a public forum.

Senator BARNETT—Can you recall when that was and where it was?

Mr Scobie—It was in August of this year at the Joseph Aloysius Lyons lecture in a formal series of questions. It was 10 August.

Senator BARNETT—So he is a world expert and he is of the view that it would be less than 20 per cent. You are advising the committee that you received evidence, did you say some that was in confidence and some that was perhaps not in confidence, and that has led you to the view that it is less than 20 per cent.

Mr Scobie—Correct.

Senator BARNETT—Okay. Have you done your figures based on a take-up rate of less than 20 per cent, let us say 20 per cent, as to if it is commercially viable? If you are spending \$700 million, have you done an estimate on the back of an envelope in terms of what the cost is to connect per household?

Mr Scobie—I think the maths are reasonably simple. If one takes \$700-odd million and divides that by 180,000 households and multiplies that by an uptake rate of less than 20 per cent, you derive a range of numbers. They are fairly substantial.

Senator BARNETT—They are very substantial.

Mr Scobie—Yes. Equally, though, at the end of the day if those who seek the right and responsibility to govern Australia make public policy determination to make that investment in capital infrastructure, with or without a commitment to a rate of return on the capital infrastructure, there remains a residual question, and that is what is the cost of connectivity. Connectivity to the 3G network today requires a piece of capital equipment for the end user which may be in the vicinity of \$1,000 a piece of hardware. That is typically dealt with financially by including that into some kind of package with the provider. I understand that the cost of connectivity per household in the user pays environment is going to be in the vicinity of a couple of thousand dollars per connection. So ubiquity of access for those who live in the lowest GSP per capita population in Australia and justifying spending what would be a couple of thousand dollars for connection on a piece of equipment with an asset to be depreciated over a period of about five years, and with an anticipated shelf life of about five years at maximum, then that is a fairly substantial cost of access to the network for a 100 megabyte connection when high definition television requires two megabytes of bandwidth.

Senator BARNETT—Let us cut to the chase. In terms of it being commercially viable, is it possible?

Mr Scobie—The national broadband more broadly?

Senator BARNETT—I am talking about in Tasmania. Let us say it is \$700 million they are investing here. You have got an estimated 200,000 homes that they are trying to connect to or thereabouts, and then 20 per cent uptake. Frankly, can anybody afford the prices that are going to flow through as a result of that? Based on that analysis, I just cannot see that that is possible, but I am asking you the question.

Mr Scobie—The actions of the federal government with regard to attempting to find an alternative way of structuring the underlying assets would indicate that they do not think it is viable, through the acquisition of Telstra's existing assets to reduce the capital investment and therefore increase the probability of a commercial rate of return on the balance.

Senator BARNETT—It is just what the government has indicated that they are seeking up to 50 per cent or 49 per cent in equity from elsewhere, as in private investors, who will ordinarily want to get a return on funds invested, as you can understand.

Mr Scobie—And under those circumstances it is difficult to believe how that capital investment shows a normal commercial rate of return.

Senator BARNETT—Let us move on. Thanks for that feedback. For your interest, earlier witnesses to this inquiry indicated that they wanted to see it as affordable, and I think we would all like that. But the government's plan is for it to be commercially viable. So that is why I am asking my questions based on what they have committed to the public to date. Have you got an understanding in terms of the cable and the length of the cable that will be needed to roll out in Tasmania? To date we have got tender documents which show I think about 560 or 580 kilometres for those three towns, with over 90 per cent of that above ground. Do you have any understanding in terms of tender documents or advice that you may have received in terms of the rollout in addition to those three towns through the rest of Tasmania and how much cable will be required? Of course, Aurora Energy is not here to answer that question, so I wonder if you have advice that you could advise the committee.

Mr Scobie—No, I am sorry. While we understand that there are supply constraints over the provision of cable and we have had some dialogue with tenderers in that process who have indicated that they are able to get appropriate volumes of cable to deliver on the capital requirements, we have not gone any further. We are principally concerned about focusing what limited resources the Tasmanian Chamber of Commerce and Industry has on ensuring that the business community has the optimum capability of responding to both the threats and the opportunities that ubiquitous access will deliver.

Senator BARNETT—I only have time for one final question. For the Bass Strait cable that was connected some months ago, the state government was paying an estimated \$2 million a year—I thought it was from 2004, but I was advised this morning it was probably from 2005—for a bit over 3½ years. Do you have a figure in terms of exactly how much the state government spent on that undersea cable prior to it becoming live?

Mr Scobie—Yes, I understand it was precisely \$2 million a year for rental access to the cable, or as financial support, if you like, for that cable to exist. Clearly, access to a third cable introduced the possibility of competition. Optic fibre across Bass Strait is not, and never was, capacity constrained, though there were limits to the competitive pressures on the monopoly provider of those cables and, therefore, the cost of data across Bass Strait was a significant issue for the delivery of high-volume data based businesses in Tasmania. However, a third cable, while it provides some competition, does not provide fully redundant competition. There would be a very solid argument for a fourth cable to deliver a fully redundant competitive set to Telstra, and we would certainly welcome that investment. However, the investment to deliver that component of a competitive environment for the delivery of internet access in Tasmania would be in the order of \$30 million.

Senator BARNETT—For a new cable?

Mr Scobie—For a fourth cable, yes.

Senator BILYK—Mr Scobie, I am a bit confused as to whether the TCCI still support the development of the National Broadband Network in Tasmania and recognise the positive impacts that will flow from it.

Mr Scobie—We made it very clear that we welcome broadband access for all Australians, not just Tasmanians, and believe that it will be a significant increase in the likely productive future of Australia. But broadband in and of itself is not broadband—is it wireless, is it through mobile technology, is it through optic fibre or is it through the existing optic-fibre connectivity? Many of the proposed services that would be provided over optic fibre can currently be provided over existing infrastructure. There are very few people who take up the opportunity to make use of optic fibre today, even where it is available. It is 100 megabytes per second or faster, and technology is already extant both in Tasmania and elsewhere in Australia which exceeds the current market demand.

Senator BILYK—The reason I am confused is as follows. On 8 April, when the Prime Minister was here and made the announcement—and I cannot remember whether or not you were there; maybe you were even photographed with the Prime Minister—you issued a media release saying that it was absolutely wonderful for a small economy like Tasmania, that it would be an enormously 'productivity enhancing investment', and:

...for too long poor quality infrastructure has put artificial speed limits on the Tasmanian economy.

You were also quoted as saying:

"If we want grow the economy then we must provide world class infrastructure that enables business to innovate and become more productive.

"How can Tasmanian business compete on the world stage if cannot access the best technology.

But then today I think I heard you say—and please correct me if I am wrong—that business will not take it up, that there are going to be other problems and that the separation of Telstra might cause problems. So I am just a bit confused. I would really like clarification today of where the TCCI stand in regard to that.

Mr Scobie—I am sorry, Senator, that you are confused.

Senator BILYK—I am happy to be corrected.

Mr Scobie—You seem to have just paraphrased a number of things which I do not appear to have said.

Senator BILYK—It was in your media release on TCCI letterhead.

Mr Scobie—No, Senator, I am not talking about our media release; we stand by that media release. I am talking about your interpretation of what I have actually said.

Senator BILYK—Well, I am asking for clarification. That is what I said: I may well be confused; please clarify.

Mr Scobie—World-class technology and the allocation of resources is the point I would like to speak directly to in these circumstances. What does world-class technology mean and what form of technology is that? Is it WiMAX, 4G or optic fibre to fixed end points? Overcoming access to the network more broadly is an absolutely laudable intent, a productivity-enhancing economic imperative. In fact, I opened the speech by saying we welcome the National Broadband Network. But, once we get beyond that threshold question, the

question becomes about the how as well as the why—about the cost constraints as to the allocation of resources. If you are talking about what is perhaps an entirely laudable intent—to provide ubiquitous access to technology to allow for overcoming issues of social inclusion, for example—if one invests \$40-odd billion in the rollout of the National Broadband Network, will those funds still available to be repurposed to deliver against accessing the dark fibre to ensure that those people have the social inclusion, which was the explicit purpose in the beginning of that premise? Our questions are as to the prioritisation—

Senator BILYK—Okay; today is about us asking the questions, to be honest.

Mr Scobie—I am trying to answer your question, Senator.

Senator BILYK—We have heard those comments previously in your submission so I would just like to move on. There is a shortage of time. You mentioned the cost to future generations, and a previous witness compared the cost to that of mobile phones when they were first out in the late eighties or early nineties. Not only were they huge brick type, handbag type—

Mr Scobie—devices?

Senator BILYK—They were also very expensive, and now most households seem to have three to four, maybe even in Tasmania. Do you not agree that the cost is the cost for the infrastructure and that, moving down the track, in time, it should become cheaper for people to access?

Mr Scobie—It may well become cheaper with the accretion of time. Certainly today, if one wishes to commercially access optic fibre in Tasmania, the capital cost is in the vicinity of \$25,000. That is to get access to the existing optic-fibre infrastructure. So it would appear that a broad uptake of optic fibre is going to be consistent with the performance of all other markets in the world and bring down the individual capital cost of a unit item through economies of scale.

Senator BILYK—Okay, but at the minute we do not actually know the cost, do we, so—

Mr Scobie—No, we do not—

Senator BILYK—it is a bit of hearsay.

Mr Scobie—but if it performs in line with normal economic processes that would be the case. So I am agreeing with you, Senator.

Senator BILYK—Also, is the TCCI aware of developments overseas regarding fibre-to-the-premises rollouts, particularly in the Asia-Pacific region? What sort of impact would that have on businesses within Tasmania? Do you think that Tasmania can compete fairly if we do not have it?

Mr Scobie—I did not understand there was a premise in which we were not going to have it.

Senator BILYK—Do you think Tasmania will lag behind if we do not keep up with the other Asia-Pacific countries? We have heard evidence previously today from other people in regard to this.

Mr Scobie—We are deeply committed to the value of an increased commitment to increased bandwidth. It becomes a matter of the methodology of that and how you get the highest and best return from invested capital to meet the needs of the marketplace. Will we be left behind? The current uptake rate across those populations is within a few percentage points of the total population of Asia, so there are incidences of high uptake rates, be they Japan or South Korea. Clearly they are archetypes of a framework that we may well be going down the pathway of.

Senator BILYK—On 29 August, in another media release, you commented that although this is undoubtedly great technology it can also be disruptive, and I presume—and, once again, correct me if I am wrong—you are talking about the actual development of it, the building of the network. Is that what you were talking about there or were you talking about something else?

Mr Scobie—Not at all; what we were talking about there is that competition exists in particular environments or fora. So, across a network, competition exists. If you were to provide unlimited access to optic fibre—and that would be fantastic—the consequences of that would be both threats and opportunities. This is simply economic theory—that markets are full of creative destruction. And there will be both creation and destruction with the implementation of competition at the speed of light across optic fibre for Tasmanian businesses.

The survey work, the empirical work, that we have done shows that 91 per cent of Tasmanian businesses believe they need more information about the threats and opportunities that will confront them in a future in which they have connection to optic fibre or in which their marketplace has connection to optic fibre. The

provision of products and services for sale in Tasmania will now be in competition—much more effectively in competition—with competitors all over the globe for the provision of products and services. So if you are a retailer today in Swansea or Hobart or Launceston or Burnie or Devonport or Scottsdale or any of those places, you are going to be competing for market share with businesses who are online in an optic fibre enabled world as of the day those lights go on. That will increase competition for those services. As a free-market organisation, the Tasmanian Chamber of Commerce and Industry would welcome an increase in competition in Tasmania. But there will be threats to those existing businesses unless they adapt. And one of the issues we were calling for today was appropriate resources and education of—

Senator BILYK—You bring me to my next question, Mr Scobie.

Mr Scobie—those very businesses.

Senator BILYK—You mentioned also in that same press release of 29 August that small business is going to have to change rapidly if it is to take advantage of this major infrastructure development. What is the TCCI actually doing to ensure that Tasmanian businesses will be able to take advantage of the NBN?

Mr Scobie—The Tasmanian Chamber of Commerce and Industry continues to do research with its members to understand what the market need is. The Tasmanian Chamber of Commerce and Industry has engaged in formal discussions with Skills Tasmania, the Tasmanian Skills Institute, the state government and the department of economic development on the provision of improved education and training. The Tasmanian Chamber of Commerce and Industry has put in a bid for the federal government funding for training on information technology for business that is being rolled out nationally. So we have embraced the opportunities that exist for us to be able to assist our members and the business community more broadly to avail themselves of the benefits of a new environment.

Senator BILYK—I need to wrap up because of the time, but can I just clarify: have you done any surveys of your membership in regard to what they think about the broadband rollout?

Mr Scobie—I quoted from that research a little earlier, and we have now in fact—

Senator BILYK—And have we tabled that?

CHAIR—Yes, we have.

Senator BILYK—Okay. Is that the only research, the only survey, you have done in regard to that?

Mr Scobie—We have done one study to date and, as I suggested earlier, we are undertaking a major study as we speak, which we are more than happy to share with the Senate.

Senator BILYK—Could that be tabled when it is complete?

Mr Scobie—Yes, of course.

Senator BILYK—I think we are due to report at the end of November, so what is the likely timetable of it?

Mr Scobie—It will be towards the end of November that we finalise it. It is a much more complex piece of research that we are undertaking, around choice modelling of consumer behaviour.

Senator BILYK—Thank you.

CHAIR—Senator Lundy has two questions she wishes to put on notice.

Senator LUNDY—My first question is: could the chamber of commerce provide to the committee a list of the Tasmanian companies that operate in the ICT sector which have been recognised—at either a state, national or international level—for their achievements. I am certainly aware of a very strong legacy and culture in Tasmania with their innovative ICT sector, so I am keen to see what that looks like—perhaps going back at least five years, but longer if you would like the opportunity to brag about the sector here!

The other question relates to the prospects of sectoral growth as a result of the NBN. I would be very interested in what you have at your fingertips in relation to the relative growth of the ICT sector as compared to business growth as a whole, so we can ascertain as a committee the likely proportional growth of ICT as a result of the National Broadband Network.

Mr Scobie—Is there any particular focus on ICT that you would like us to—

Senator LUNDY—On the ICT sector, given that is the sector that really knows how to leverage high bandwidth and has a track record for doing so here in Tasmania. I am keen to see what data you have about that

Mr Scobie—We have very limited data, as do most of those organisations who collect statistics in these matters. We will do our very best to provide you with what we can.

Senator LUNDY—I am going to leave it with you. If you need to reference with other industry organisations to collect that—

Mr Scobie—We are happy to try to do that.

Senator LUNDY—This is your opportunity to write the brag book. Congratulations for the wonderful work the ICT sector has been doing here in Tasmania.

Mr Scobie—Thank you.

CHAIR—I have three points for clarification. In response to Senator Bilyk talking about your optimistic receipt of the news that there was to be rollout first up in Tasmania: why would you not be so optimistic, particularly at a time when you would be entitled to expect that a government had done a cost-benefit analysis to underpin the delivery of exactly that in Tasmania? Why would you not be so optimistic?

Mr Scobie—We are universally optimistic. Anybody who is in the—

CHAIR—At that time?

Mr Scobie—At that time.

CHAIR—In your evidence today, in your opening statement, in bemoaning the lack of a cost-benefit analysis, you said that it was not clear what the benefits of the NBN would be but the costs were clear in terms of future generations. I suggest to you that your subsequent evidence suggested that the costs are not clear either. Can you clarify that? You said the costs are clear effectively for future generations. Are they?

Mr Scobie—You are right to pull me up on that. It is true to say, I think, that the scope and scale of the cost to future generations is reasonably clear for the rollout of the infrastructure of optic fibre—or dark fibre, at least—to the home before it is lit, if that is what the government is committed to currently rolling out nationally. Within that framework, I think you can put a set of parameters around the outside of what it is likely to cost future generations. We have experience here in Tasmania of being the beneficiary of a number of investments over time in the public sector in the ICT space, be that Technopark or Intelligent Island. There has frequently been a lack of clarity as to what the definition of success was likely to be. We are enthusiastic to have a little more clarity around what that would be, as that may assist us to learn from the mistakes we have collectively made in the past and allow us to make the most of this wonderful opportunity that is being put before us at the moment.

CHAIR—This is my final question, and it has not been covered yet. What lessons did your organisation learn from the unforeseen and unfortunate cancellation of a seminar that you offered to business during August? If the press is correct, I understand you got about 25 expressions of interest. What does that say for the 'build it and they will come' mentality?

Mr Scobie—We were surprised, having surveyed the members as to what their concerns were and what their lack of information was—and I do not mean 'concerns' in a negative sense; I mean their interests, focus and intention—and having put together a package of seminars by leading Australian experts on the subject, by the lack of interest. The lack of interest gave us some concern as to how much of a priority, in isolation, increasing bandwidth—as opposed to necessarily increasing connectivity or reliability of connectivity or a whole lot of other factors—is for those businesses. In reality, though, it probably does not come as a surprise, because the Tasmanian business expectation survey that the TCCI has run for the last 13 or 14 years connectivity has not been one of the top 10 constraints to business. The top 10 constraints to business over the last six years have been topped by a lack of access to skilled labour and, as a consequence, it is advisedly that we put evidence before you today as to what we believe the principal drivers of productivity and prosperity are for all Tasmanians.

CHAIR—Unfortunately, the Tasmanian Skills Institute will not be here today to expand on that and reassure us about the skills issue into the future. Thank you very much, gentlemen.

Mr Scobie—It was a pleasure.

CHAIR—Thank you for your time today.

[11.31 am]

GARCIA, Mr Allan, Chief Executive Officer, Local Government Association of Tasmania

CHAIR—Welcome. The proceedings of the committee are public. Your evidence is subject to parliamentary privilege and it is potentially unlawful for a third party to attempt to interfere with evidence that you might otherwise give. If you wish to give evidence in private, please request it at the appropriate stage. Do you wish to make an opening statement?

Mr Garcia—A very brief opening statement.

CHAIR—Good.

Mr Garcia—I think it is fair to say that we have not conducted surveys. In terms of local government in Tasmania, I am here representing my councils who speak not necessarily on behalf of but certainly in support of communities in the state. In relation to matters of major or key infrastructure, certainly my entities are supportive of anything that will improve the lot of those communities in this state. What the National Broadband Network seeks to represent for Tasmania is greater access and greater capacity for those communities, and we have had mention of social inclusion. We want to make sure that our communities in this state have the opportunity to be on par with communities in the rest of the country and, indeed, the rest of the world. Largely, we are interested in supporting infrastructure that will benefit those communities and give them access to services and facilities that they do not currently have. That is my opening statement.

Senator IAN MACDONALD—How many of your member councils would be highly literate in the electronic telecommunications area?

Mr Garcia—If we talk about councils as a whole, few. If we talk about people within councils, a significant number. It depends on what we are talking about. If we are talking about councillors, as in the elected members, some will be and some will not be, based on their own personal life in terms of what their occupation might be. If we talk about the organisations, the organisations have been the beneficiaries of significant funding and have generated their own funding to provide online services and direct relationships with the community through electronic technology and IT. The organisations are at a very literate level, but I am not suggesting that every elected member would necessarily—

Senator IAN MACDONALD—It was the councils as a whole that I was—

Mr Garcia—I would suggest then that they would be. They would be on par with other councils around the country. We have facilitated over the years online service delivery through portals, so they have been brought forward and are always seeking to improve in that space.

Senator IAN MACDONALD—Are the more remote council areas in Tasmania equally able to interact and communicate with their constituents?

Mr Garcia—There are limitations around dial-up. That is highly problematic. You have probably travelled around the state enough to know that we have a lot of hills and a lot of gullies, and of course that in itself makes communication more difficult, so we have some limitations in some areas. Dial-up, obviously, has its own set of limitations with regard to bandwidth and certainty. So, yes, there are limitations. But certainly, to the extent that those councils can, if you will, play in the pond, they seek to do so.

Senator IAN MACDONALD—Did many of those councils in Tasmania take advantage of a government program to build their own towers or aerials, or to try and fix black-spot problems?

Mr Garcia—I am certainly aware that some have. They have made the various contributions that are required, whether they have been made on a matching basis or whatever—certainly in those particularly remote areas where there have been calls largely from the community as well as from council business. I think a lot of those programs invited community participation and support. It was not just a case of 'here is some money'. There were some numerics around having numbers of support from the community. Councils did not wait to be asked. They certainly got out amongst their communities and sought to demonstrate that, with community will and community horsepower, you can actually get some of this done. I cannot tell you the exact number but I certainly know there were council participants in some of those programs.

Senator IAN MACDONALD—What part has LGAT had in the design implementation of the network in Tasmania? Have you been closely consulted or closely involved, or were you not involved at all?

Mr Garcia—Not so much. Design probably goes beyond our capability. However, let me explain what we have been involved in. We have been involved in, I suppose, more briefing ex post facto. In the lead-up to the bid by the state government into the process, there was very little consultation other than words of wisdom like: 'We are going to have a crack at this'—whatever 'this' means. There was no real detail about priority, the fundamental backbone or where we would see this being built, except for some broad base information: 'We are going to try to bring a network to Tasmania, we want to make it cost-effective and we want it to have greater coverage and greater access for the community.' In a general sense, the attitude of the association is 'Hey, we are for that,' without any real detail.

Subsequent to the announcements by the Prime Minister, there have been a number of briefings of all councils—at the general manager level rather than at the elected level—about what can be talked about currently within the scope. There are, I think, three areas at the present time: Sorell, Stockdale and Circular Head. Those are the areas that are the first cabs off the rank. There is clearly a lot of intricate, technical detail occurring between the state and the federal governments in terms of contract negotiations, expectations et cetera. I know nothing about that.

Senator IAN MACDONALD—Were you consulted? Where you asked what you needed, what you thought should be provided or how it should be provided?

Mr Garcia—Not directly, Senator. Not in that way. The answer is no.

Senator IAN MACDONALD—Was your view sought on things like underground or overhead cabling or on capacities in various parts of Tasmania?

Mr Garcia—We had a brief discussion with the state. We previously had a trial down here, through Aurora, of a thing called TasCOLT, which was about putting wires up on the poles. In fact, I live in Macquarie Street, just around here, and it goes straight past my door. In that context, we at least had some vision of what could occur up on the poles. We also had, in recent times, the rollout of natural gas through council streets. One thing that the councils were half-excited about was: 'Do you mean you have a solution that is not going to knock the crap out of our roads and our footpaths? We have just put them all back together after the gas guys came through.' I would not say 'excitement', but there was certainly no concern about the fact that poles and wires were being contemplated as a methodology to enhance distribution. To the extent that councils were supportive one way or another, I do not know that we took any poll on that.

Senator IAN MACDONALD—That is a good example you raise. Was any thought given, while you were digging up the footpaths putting gas through, to the idea that you might at the same time drop down a fibre-optic cable?

Mr Garcia—In many cases that did occur. Indeed, Aurora has been laying optic fibre everywhere and anywhere. I think we have had a collaboration with the state government that if we are opening a trench or if we are doing a pipeline, at the same time as we are doing that, why don't we contemplate putting optic fibre in? There has been a collaboration to that extent with the state government.

Senator IAN MACDONALD—Sorry, but I understood you to say that you were happy with the overheads because it would mean that you would not have to dig up your footpaths again like you did for gas?

Mr Garcia—What I am saying to you is that that optic fibre is not everywhere where you might want it. That optic fibre is in places where it has been opportune to put it. So if you had a network around the state, you would not necessarily have optic fibre everywhere at the current time. Local government was not in charge of driving the gas process. The gas process was driven by a state government-let contract, or by a facilitated process. So, to the extent that the gas guys were putting through their work, council was not physically doing that. But if council had been doing it, council would have contemplated putting optic fibre through at the same time.

Senator IAN MACDONALD—Really my question is, were you involved in the planning process? Using what you raised as an example, it is your streets that the gas company were digging up, even though they were the ones digging it up. Was there no overall coordination between councils as a whole and the state government to say, 'Hey, the gas company is digging up a street there. Why don't we get the TNBN to put in a cable there while we're at it to save having more ugly, overhead cables hanging around?'

Mr Garcia—That might have been fortuitous if that company had existed at the time. We are talking about a period, say, three or four years ago. If it had been last week, I think we would be running optic fibre everywhere. Sorry, I did not mention the timing. That process of rollout was some couple of years ago, not in relatively recent times.

Senator IAN MACDONALD—I misunderstood.

Mr Garcia—Sorry, I misled you.

CHAIR—Mr Garcia, I have a question coming out of one of your answers to Senator MacDonald, before I invite Senator Ludlam to ask you some questions. In respect of underground cabling et cetera, I understand that the state government has recently made some moves to exempt underground cabling and potentially some above-ground infrastructure from local planning rules that would otherwise apply. Can you confirm or clarify that and talk about the consequences of that for your councils and local residents in the context of the National Broadband Network in particular?

Mr Garcia—Under the Telecommunications Act, the cabling is likely exempt anyway. At the present time the federal Telecommunications Act, I think, exempts it, at least underground. Most of the council planning schemes tend to replicate that exemption in schedules. A planning directive that is currently being put out by our Tasmanian Planning Commission says it again. So it is belt, braces and, seemingly, buttons as well. My reading of the planning directive as it currently stands is that there is also a proposition that above-ground infrastructure relating to telecommunications could be exempt, which would suggest that poles and wires could be exempt. From a council perspective and a planning scheme perspective, we gained some experience with the TasCOLT trial, which was done in Hobart city.

The process of approval required literally every household that was going to be impacted by a wire that would be quite a way up to at least be offered the opportunity to make representation. I do not think it elicited any representation at all. If it did, I will stand corrected. But the process was quite drawn out, and the consequence of the need to go through it was significant. The TasCOLT wire—I am just trying to think outside the house—is yea wide. For the purposes of the record, I do not expect it is much more than 40 or 50 millimetres. If it is different, I apologise. From an eyesight perspective, I do not think it created significant concern for people.

My understanding of the wire process as it relates to the proposed NBN rollout is that that level of visual pollution, if we can call it that, will be minimised even further, with some desire to get the current wire, which would probably be three-quarters of the way up a pole, even closer to the wires that currently exist. So I do not think Tasmanians who are used to having wires up in the air are necessarily going to be particularly concerned about another wire being added.

CHAIR—That may or may not be, but why should there be a planning directive that deviates from the law that used to apply in Tasmania? Why should there be a planning directive that deviates from the law that used to apply and still applies except for things that are covered by the planning directive? Why should that be so? If the laws were good enough back then, they are still largely good enough now. Why should it be any different right now with the prospect of the NBN, do you think?

Mr Garcia—I could say that is something you should ask the government, but I will try and respond by saving—

CHAIR—Were councils asked their view before this took place?

Mr Garcia—Let me finish. In terms of planning policy, you have to understand that local government is the policy taker, not the policy maker, in many circumstances. So there is a planning directive that has been put out by the Planning Commission, obviously following some instruction or guidance from ministers of the Crown—the Minister for Planning and maybe other ministers. My understanding of the proposition for this exemption as it relates to the power poles is that, whether it is telecommunications in the ground or telecommunications up the pole, what is the actual difference?

The other matter is that currently electricity supply is also exempt from planning approval. Aurora and Transend in this state run poles and wires, and there is no requirement for them to adhere to planning requirements. There would be a requirement for them to adhere to various standards, I expect, in terms of safety et cetera. If you contemplate that the wires that are already up there are exempt, the cable that is going in the ground is exempt and you have this other thing that is going to sit between there and there that is not exempt, is it logical, given the exemptions everywhere else, that that particular piece of fibre or whatever it is should not also be exempt? I think that is the logic behind the proposition.

CHAIR—But, if you apply your earlier logic, people would not object to it anyway because it is unobtrusive.

Mr Garcia—Let me say to you then that it is in a planning directive at the moment that is out for consultation until, I think, the middle of next month. So we are currently in this process under the planning directive wherein my member councils and indeed the public can respond. I suppose out of that we will get some semblance of whether or not the proposition that I put forward—that people did not worry before—indeed proves valid.

CHAIR—So the planning directive is still prospective.

Mr Garcia—It is a draft, yes.

CHAIR—It is a draft. Will councils like yours be voicing a view on it?

Mr Garcia—My member councils will, I expect, take a position on that, and their position might not necessarily be as I have stated here today. That is my understanding of the position I think they will take. My expectation is that that is likely to be the outcome. I anticipate that members of the community will take various stances.

CHAIR—Will your organisation be expressing a view on behalf of your member organisations?

Mr Garcia—Absolutely. But we do that on an informed basis. I am not godlike. I do not hand down things. I generally consult and bring them to us.

CHAIR—Have you had member councils express concern to you or to your organisation about this proposal?

Mr Garcia—Probably the contrary. I am not saying that they are lathered with excitement, but they see it as being important and significant infrastructure for the state. They are not aware of pricing issues. Pricing has not been an issue at this stage. But they see it as certainly being a prospective opportunity. As it rolls out and they become more informed, they will probably make better judgments.

Senator LUDLAM—Let us follow up on that thread. On behalf of the councils that you represent, what do you expect local governments here to do with 100 megabits per second fibre connections everywhere, either from a council perspective or through how you interact with your ratepayers?

Mr Garcia—I suppose lots of things, but probably I have not contemplated it. Trust me when I say that this is not my area. I anticipate that, where we have councils that have got limited capacity currently, the ability to be able to do things that they cannot presently do in terms of online services or providing services to the community that they have not been able to provide before will be paramount. In all this process—and this was mentioned by the previous witness and you were asking questions about it—I do not think that enough people not only in this state but in this country understand what the hell that they are going to do with increased bandwidth. The questions my councils ask are: what will the government do about attracting new business to take advantage of this increased bandwidth? The answer is that that is an element but there is also what we need to do to inform and educate those businesses currently here on how to better use the bandwidth and what opportunities it provides for them.

If you take that to the next level of the community, I do not believe that the community are hanging out waiting saying, 'You beauty; bring it on.' That will not be the case. It will be an iterative process. It will be a process in which they will learn from their daughters, their brothers, their other workmates. It will be an organic process. The benefit of having that bandwidth come on as quickly as it does is that you miss a whole lot of steps in the process. You get to a point where your uptake is going to be accelerated and as a member of the community your benefit from that should be greater earlier. What will those services be? I do not know. I expect that councils will be able to do a whole lot of different things, but it is not my space and I am not exactly sure what they desire to put in there. But if you work on the basis that we now have councils with dialup that have the capacity to do literally nothing, imagine what that sort of bandwidth will be able to do for them in terms of transforming their ability to interact with their communities. It will be massive.

There is another issue. There is no point doing all that if the community is sitting there saying, 'I'd never use it because I don't understand it.' There are significant tranches of education and awareness and capacity building in the community and within businesses required so that we can take advantage of all those hopeful outcomes.

Senator LUDLAM—Whose job do you think it is to provide that level of awareness?

Mr Garcia—That is what I am talking to state government about. It is largely their job. Councils will do some work. There is an enterprise level thing which I think largely needs to be driven by the state government in terms of improving their literacy and their capacity. The member of the TCCI will take a role there as well.

In terms of the broader community, while we represent communities, I do not know that councils have the ability to necessarily get down to every community member. We will play a role in that process, as will education facilities. Services will be provided through the state government, such as online access centres, libraries and a whole range of other facilities. I do not think that is any one level of government's responsibility; it is a broad range. The issue that we need to resolve is how we are going to do that, whose responsibility it will be, what the matrix will look like, whether there are resources to undertake that sort of thing and so on.

We are going to have this infrastructure built, but the really important thing is for us to then get people to use it, use it efficiently and use it well. There needs to be acknowledgment that, if we are going to maximise the outcomes and the benefits fro that type of infrastructure, we need to have people educated about and aware of what it is beyond online gambling and quick download porn. That is the sort of stuff that we need to make sure that people understand. There are industries in this state that are server focused and provide outsourced server facilities. That may not be a business that exists in this state in the future, because you might be able to do things in a different way. Businesses, councils and other enterprises may not need hardware in their place but be able to have it in another place. These types of things are the applications that people have not turned their mind to at the moment.

Senator LUDLAM—Turning to something a little bit more pragmatic, we heard yesterday in Melbourne from Whittlesea Council, who told us that new greenfield developments that are going in there on the suburban fringe, I suppose, are going in with ducts in place and in some places ducts and fibre in place. Are you aware of what the state of play is with new developments in Tasmania?

Mr Garcia—Are you asking that in the context of a subdivision or in the context of houses?

Senator LUDLAM—In the context of a subdivision, they are installing underground ducting for fibre and they have two developers who have installed several thousand houses with fibre.

Mr Garcia—I am not aware specifically of that being the case. I know that certainly some councils have been proactive, as I indicated to Senator Macdonald, in trying to put fibre where they can. So if they are digging, they are putting fibre in. At however many cents it is a metre, they see it as being an investment even if it never gets taken up. The extent to which that is occurring and whether or not it is an absolute in terms of new development I am not able to tell you. But I am certainly happy to find out and let you know.

Senator LUDLAM—If that is possible, that would be good. It would be good to know whether it is state planning policy or whether it is just being left up to individual councils who are more or less innovative.

Mr Garcia—I can tell you that it is the latter. If you need to know the extent of that, I am happy to let you know.

Senator LUDLAM—That would be helpful. What we are really looking at is a large scale national retrofit program to back fit fibre into the existing building stock of the country. It would be good to know that new subdivisions and new developments are not also going to have to be subject to retrofitting in five years time.

Mr Garcia—I am happy to at least make an attempt to give you some indication.

Senator LUDLAM—Yes, if the information exists. I will have another go at drawing you out on what you think that this technology can be used for and how it can be used, if there is anything that comes to mind, to improve local governance and local democracy—put it how you will.

Mr Garcia—I suppose in terms of the actual council function and its interaction with the community, there is a range of online activities that local governments throughout the world use. They use online forums, they have online chats, they have polls, they have comment posting—a whole bunch of mediated and in fact unmediated processes. If we were looking at local democracy and how to manage it, perhaps this can provide some of that. There is the technology and then there is the issue of having the people who can manage and get the best utilisation from the technology. One of the things about local government—and I think that this is a national phenomenon—is that there is so much effort put into to doing all the things that you have to do that the things that you would like to do become quite secondary.

The technology provides significant opportunity to provide all the things that you think would be really wonderful and magnificent for the community. At the end of the day, while this provides that capacity, the question is: is this something that the community is prepared for in terms of the council providing the service? There is significant opportunity for improving that interaction with the community through any number of services that already exist. We do not even have to be clever and think about empowering the community,

because there is evidence all over the world of that. The real issue is whether this is something that people are going to be prepared to pay for.

Senator LUDLAM—I will leave it there. Thank you very much.

Senator LUNDY—The Australian Local Government Association has for many years identified connectivity and higher bandwidth as a key plank of their aspiration for economic infrastructure, particularly for regional areas. How familiar are you with the Australian Local Government Association's advocacy for higher bandwidth networks?

Mr Garcia—Very familiar. Obviously the Local Government Association of Tasmania is a member of the ALGA, so we feed into that policy-setting environment. We consider ourselves in Tasmania to be part of that regional network. So we are very familiar with what it actually can achieve for those regional communities.

Senator LUNDY—So do you concur with ALGA's view that high-bandwidth networks do represent key economic infrastructure for Australia's regions?

Mr Garcia—Absolutely, because we can demonstrate what we do not have by not having it, as I talked about. The previous speaker sought to demonstrate that there are significant opportunities for business to compete in markets where presently—I will not say they are restricted—their full potential is not being reached because they do not have access to the technology that could actually put them on the same playing field as their competitors either within the country or in the export market. From our perspective, at the moment we have a little milk issue, as you might have noticed, and I am not sure the technology will fix that—or maybe it will. But, as an example, we in this state have issues around some of this technology in relation to how we compete with the rest of the country and more broadly internationally. So, yes, it is a key indicator of economic activity.

Senator LUNDY—I was very interested in your conversation with the chair about capacity building and the relationship between the technology and having the bandwidth and what you described as an iterative process to really leverage the benefits of that bandwidth. I was interested that you saw that capacity building as primarily a state government responsibility. As a local government association, what would you like or need to improve local government's capacity to help make the most of it? Here is your chance to say what would help you as an association to support your member local government councils to extract the optimal benefit from the presence of a high-bandwidth network first in Tasmania.

Mr Garcia—Of course, the traditional response from local government on this is, 'Just give us the money and we'll show you.'

Senator LUNDY—I trust you will give me something a little more sophisticated than that.

Mr Garcia—I hope I can. I think we do have a responsibility—it is not just the state's responsibility. It is like a range of issues we are dealing with nationally and statewide, like climate change. Whose responsibility is this, this and this? It is about negotiating how we fit and how best to do it. We do not want to replicate. I look to the state because of the school activity and because of the way they do things through their access networks and the way they support business through economic development. The real question for local government is: where come the gaps? What do we need to step up on? If it is purely becoming a local government thing, if you take my smallest council, which is Flinders Island, in the middle of Bass Strait, how do I get them to roll this out in a way that is going to benefit the 700 people who live in the Flinders shire? If I am leaving it to that council and I have concerns about it meeting current statutory obligations, what about this thing?

So perhaps it is not an individual council thing. Perhaps it is something where we need to understand what it is that local government can add value on. Where within that matrix are the gaps and what we can do? I do not know what it is. It is a team bus driving around? I think it is not, but I am not sure what it is. I think we do have a role, but that role is not express. We are in the community; we are dealing with youth; we are dealing with elderly people; we are dealing with a whole range of community organisations. So we are in touch and we do have a role, but what we do not want is for us to be filling that role in one area and somebody else doing it somewhere else.

I think we are seeing a movement to place based services. It is not a question of it being the state's responsibility, the federal government's responsibility or the local government's responsibility. There is a place that needs support—how do we collaborate to provide the place with the services they need and to what level should each of us contribute? It is not very sophisticated, but you know that, when you get two levels of government in a room, it is hard to communicate; when you get three, it is just a little bit more difficult. We

need to look at this a little bit more holistically than having piddling little programs and just sifting out where I can make an application on a priority basis to the Australian government or there is another pot. We know how all that works, and I know that is what will happen anyway. But, if we start focusing on the needs on the ground then I think we can come up with something not even very sophisticated about how best to deliver that. I do not know what they are and I do not know how to do it, but we could probably approve on what we currently do in a range of other areas.

Senator LUNDY—Thank you. I really appreciate your answer. I think you are heading into an area where you are exactly right. It is about having joined up government—all three spheres of government, local, state and federal—working together to provide a more citizen-centric style of service—

Mr Garcia—Exactly.

Senator LUNDY—hopefully utilising the higher bandwidth networks. To what extent are you in a position in your role with the Tasmanian Local Government Association to start that conversation, if you are not confident that it is already occurring as it should?

Mr Garcia—We are, I suppose, in other areas, so there is some ability to be able to say, 'Here's another thing.' So we are doing it. We have this conversation with the state quite frequently and we have it with the Australian government quite frequently. The community does not care who gives them what they need; they just want it.

Senator LUNDY—Yes. And they do have an expectation that you will be able to work across the spheres of government to deliver a high-quality service.

Mr Garcia—Absolutely. Out in more remote, regional or rural communities, the anticipation is likely that the council is the place to go to get the service. When the state government rolls into town, sets up a new facility and delivers service as a one-stop shop, it is suddenly a two-shop stop because there is the council as well. People say, 'What's going on here?' They do not need that. What they need is a door to go through to be able to do that. We are commencing that dialogue with the state at the present time. They are concerned about their own multiple heads and departments doing things in one place but all differently. In a community, five people walk through in a week and they are offering this service, that service and the other service, and they say, 'Why didn't the bloke who came here yesterday tell us that?' So we are having that dialogue with the government at the beginning and saying, 'What you're doing is really important and we support it 100 per cent, but let's understand what you are doing and when you are doing it so that we are not turning up the next day offering something similar but something different.' We are commencing that dialogue. In Tasmania, we have local government that is working closely with the state government. We do not agree on everything—we agree on many things—but we do have a relationship, so there is the capacity to have those debates in the context of this infrastructure.

Senator LUNDY—Thank you for that. I do not know whether you are able to answer this, but I will give it a go. There is the issue of young people moving away or people with prospective careers feeling compelled to move into the bigger cities. Sometimes—and we hear this more and more—that is related to the absence of a reliable and affordable high-bandwidth network that would allow them to telecommute, run a home business or, indeed, educate themselves further via an online education service. Do you get any sense of how important having a reliable and affordable broadband service in particularly the smaller towns and more sparsely populated regions will assist in stopping that depopulation or that trend away from living in lovely regional areas?

Mr Garcia—The easy answer is no. It is probably a nice throwaway statement. People say it; I do not know whether they have evidence to support it. Two of my best friends work in Sydney and commute each week. They could do their jobs sitting here, but there is the preference of their employer to take them—

Senator LUNDY—It is more in the context of sea change and tree change, where there is a trend, but often bandwidth is the other part of the equation in people making the decision to opt for a tree change or a sea change.

Mr Garcia—But I think the people we have got making those decisions that are coming here are finding ways around that issue. So there are people here, there are authors here, there are people who are making their living or their careers living in the place they want to and they are working within the limitations here. If they are reliant on broadband they are certainly not going to be sitting up in the central highlands in their trout shed writing their book. If they want that they will go to another place. Will this enhance that? It enhances the ability to do it. Is it a big issue? I do not know the answer. We lose a lot of young people out of our universities

and the like because in Melbourne the major law companies say, 'We will take the top five. We'll start them on this salary and away they go.' They do not even ask the question twice. So we lose a lot of people that way. Whether or not you can relate that back to other things like lack of broadband or lack of bandwidth is actually taking our people away, it is news to me. I would not be as comfortable thinking that is the case. But if people are telling me that and they can demonstrate it, I will stand corrected.

Senator LUNDY—I just did not know whether that was something that crossed your purview.

Mr Garcia—It has not been an issue. I mean, I appreciate the fact that in areas of ICT, in that particular industry, there may be limited choice or ability here because, while the industry has, as we were talking about before, been fairly innovative and has been quite buoyant, if you are a big fish in this little sea you may choose to go elsewhere because of the limitations of the industry working with other sectors. That could be an issue certainly within that sector. Beyond that I really could not say.

Senator LUNDY—Thank you. It is a long way to say no.

CHAIR—Thank you very much, Mr Garcia.

[12.12 pm]

BALL, Mr David, Regional Vice-President for Asia-Pacific, Intelsat Corporation

CRAM, Mrs Gail, Sales Director Australia, Intelsat Corporation

CHAIR—Welcome. You have been up in the backblocks for today, so you have heard the nuts and bolts of the proceedings. Do you wish to make a brief opening statement?

Mr Ball—I would like to thank the committee for the opportunity to present this morning. I have provided a submission previously to the inquiry. From our perspective, we are very keen to see the National Broadband Network implemented, and implemented such that it will benefit all of Australia. A little background on Intelsat for those of you who are not familiar with the company. We are the largest fixed satellite service operator in the world. We have today 50 satellites in orbit and another 11 in development. We are also working closely with the Australian Defence Force to launch and operate a UHF payload for the ADF on a hosted basis.

Today I would like to focus our conversation on the satellite aspects of the NBN that how satellite can facilitate the rollout of the NBN to the remote and rural areas of Australia. There has been a lot of discussion to date in the NBN debate about the metropolitan areas and the built-up areas and the fibre rollout. I think it would be a shame if the NBN focus was purely on the metros and we ended up with a result where the metros were overbuilt and the rural areas were still neglected and not well served with broadband. I think there is a role that we all should play to make sure that there is an equitable basis for distribution of the service. There are a number of ways in which satellite can play a role: direct to consumers, to backhauling content to wireless points of presence in remote areas. I believe a lot of discussion should take place about the most appropriate technology to implement the NBN and we look forward to engaging further with government, with NBN Co itself and also with DBCDE as this process continues.

CHAIR—Thank you, Mr Ball. I will ask Senator Birmingham to kick off.

Senator BIRMINGHAM—Thank you, Mr Ball, for your time and appearance today. In terms of satellite, you have highlighted the potential of satellite to pick up the underserviced areas of Australia. What work as a provider have you undertaken to look at the potential for that and how quickly it could have been done over recent years or could be at present?

Mr Ball—As a company we are already providing broadband via satellite in many parts of the world in conjunction with direct to consumer equipment or through wireless providers through backhaul services, in Africa, in South Asia, in the Middle East and so forth. The Australian broadband guarantee here in Australia has provided some satellite element. I do not believe that that has been particularly well implemented by all service providers, and that is where having NBN Co as the benchmark to establish a framework for quality of service provision I think would be helpful to make sure that the satellite-served customers are getting adequate level of service.

Senator BIRMINGHAM—What do you estimate would be required to provide satellite services to the remote areas? What would be the best mix? I think you have indicated in your submission potentially two multispot KA band satellites.

Mr Ball—That could be the ultimate end solution, and there are a number of steps that could be taken by government to get to that end solution. One of the first activities that has to be undertaken by the department or by NBN Co is truly defining where the 90 per cent is geographically and where the 10 per cent is in terms of the 100 megabit and the 12 megabit definitions that have been provided. Geographically that gets to be a very difficult problem. If you look at the person 20 kilometres outside Hobart, I think it is unlikely we will be running fibre all the way out to a farmlet outside of Hobart or outside of Albury or outside any area in Australia. As you start to boil down that population base of potential users, that is when you get to the solution we need to pursue. Is it a traditional satellite that is in orbit today can provide that service to customers, or is there a much larger number of customers that need to be addressed that lead you to putting up a KA band satellite which would be dedicated to NBN?

Senator BIRMINGHAM—If you start excluding farmlets 20 kilometres out of Hobart, the likelihood of us talking on a 90 per cent and 10 per cent basis is fairly slim, I suspect. That issue aside, have you approached the government at all in terms of that 90-10 split and where that geographic domain may be?

Mr Ball—We have had a number of consultations with DBCDE about that sort of topic. We in fact provided a briefing to them on satellite 101 and the benefits and implementation options for satellite. We also

provided a demonstration for them with a 12 megabit service coming from a hub that we have ourselves in one of our US teleports into a small dish in Canberra and had that set up in about two hours into a wireless POP, which then fed a number of computers in the room, just to provide a demonstration purpose. There are a number of things you can do simply to achieve early wins in terms of bringing broadband to remote areas that are not served well today.

Senator BIRMINGHAM—How quickly could you get services on the ground to rural and remote areas?

Mr Ball—I think it depends on what you define as service, whether it is a ubiquitous service to everyone. That is where you end up looking at what the dimension is. The satellites in orbit today are limited in terms of bandwidth. There are more coming. We are building one that will provide additional capacity over Australia. Once you get that satellite in service, which for ours is about two years away—it is under construction now—then you look at service commencing. Shorter term things could be done in other frequency bands in conjunction with Wi-Fi services to provide that last mile. Direct to consumer services could be implemented on that new satellite we are building in about two years time quite simply.

Senator BIRMINGHAM—So for the ultimate potential answer two years. For the short term there are alternative possibilities that could be put in place if there was a willingness to do so. Have you had discussions with the government about both those short- and medium-term options as well as the longer term option?

Mr Ball—We have laid out the broad options. We have not had detailed discussions about potential implementations as yet.

Senator BIRMINGHAM—This satellite that you are putting up in two years time—it is a given that your company is launching it?

Mr Ball—Yes, we are already providing service to Australia today on this satellite for several small DTH, direct-to-home, television platforms and for a couple of commercial ventures as well as some ethnic language groups with ethnic demographics. We are expanding the capability on that satellite with new and additional capability. The satellite is under construction today. That will be in the Ku band, which will provide coverage over all of Australia. We have tailored that to focus on remote and rural areas to make sure that we are providing a good power level into the outback and so forth.

Senator BIRMINGHAM—Operationally, does that see you providing services directly to customers in rural and remote areas?

Mr Ball—As a company we do not do retail level fulfilment; we are effectively the carriers' carrier. We would look to an ISP or an NBN Co. or someone to do that end-consumer fulfilment, management and subscriber operation.

Senator BIRMINGHAM—In this type of model it might be that the NBN Co. took a certain amount of space on your satellite and then, given that they are only going to be a wholesaler, farmed that out to retailers on whatever their mysterious pricing principles end up being.

Mr Ball—That is correct. They would establish the service offering into the consumer's home, and the applications and services would be layered on top of the pipe that would be provided into the consumer's premises.

Senator BIRMINGHAM—Right. For what type of cost can you deliver at a wholesale rate?

Mr Ball—It is a difficult question to answer. It depends upon how that pipe is implemented, on the specific space that was leased, on how many subscribers are loaded on there and on how much oversubscription takes place on the retail level service delivery to the end consumer. There are a vast number of variables in that, so it is hard to pin down a specific number for you.

Senator BIRMINGHAM—What are the costs of satellite type services that are currently available to people in rural and remote areas?

Mr Ball—My understanding from the market is that it is somewhere around \$70 to \$100 a month for many of the ABG providers for the services that are on satellite today. We do not operate an ABG service ourselves, obviously, so I do not have direct knowledge of it, but that is my understanding from the market—that there are some services available out there in terms of the ABG product.

Senator BIRMINGHAM—Thanks, Mr Ball; that will do for now.

Senator IAN MACDONALD—You are not the only service provider for Australia of satellite services, are you?

Mr Ball—That is correct.

Senator IAN MACDONALD—How many are there?

Mr Ball—SingTel Optus provides satellite services to Australia; AsiaSat, out of Hong Kong, provides some Ku band coverage of Australia; and SES World Skies—it has just changed its name from SES New Skies—out of Holland, also provides services into Australia.

Senator IAN MACDONALD—But you would be the biggest, wouldn't you?

Mr Ball—No, SingTel Optus is the largest provider of services into Australia for satellite delivery today.

Senator IAN MACDONALD—Are you bidding to NBN for the right to be part of the 10 per cent of their network?

Mr Ball—We will be in discussions with NBN about where satellite can play a role and how we as a company may play a role. I think it is still unclear how NBN addresses the satellite element: whether it acquires its own satellites or whether it leases capacity from other operators. I think that is still very much an open question.

Senator IAN MACDONALD—They would not require their own for what would turn out to be a couple of thousand users. You would have some idea: how many users are currently served by satellite in Australia?

Mr Ball—I believe it is less than 100,000.

Senator IAN MACDONALD—And it is likely to be less, one would imagine, when the 90 per cent get fibre to the home?

Mr Ball—I do not know. I think the 100,000 today are in very remote areas which would probably fall outside the 90 per cent geographically. Again, it gets back to my opening question as to how the NBN Co. defines that geographically.

Senator IAN MACDONALD—You are saying that you are in discussions, and you mentioned NBN Co. buying their own satellite. That would not be a feasible alternative, would it?

Mr Ball—I do not know. I do not know if that has been decided by them or they will lease capacity from someone else.

Senator IAN MACDONALD—But you could not buy your own satellite for 100,000 users, could you?

Mr Ball—If 100,000 is the right number—it would be an interesting economic question.

Senator IAN MACDONALD—What if it were 500,000?

Mr Ball—If it were 500,000 subscribers it may be a different question. Again, it depends on that definition of which is the 10 per cent. What of the 10 per cent could you serve by wireless terrestrial means? What is the residuum that gets served by satellite beyond that? That is the indication that we have to have.

Senator IAN MACDONALD—NBN is talking to you. Are they talking to others as well, that you know of?

Mr Ball—I assume so.

Senator IAN MACDONALD—But there is no call for tenders at this stage?

Mr Ball—Not that I am aware of.

Senator IAN MACDONALD—Any idea of when they might do that?

Mr Ball—No, I do not know.

Senator IAN MACDONALD—That has not been indicated to you?

Mr Ball—No.

Senator IAN MACDONALD—I think satellite is marvellous, and I have a sat. phone which serves well where nothing else works, but the common complaint, of course, with broadband is that it is intermittent and affected by weather and various other things. Are there continual improvements in the technology or will it always be affected that way? I mean, are the current constraints on the quality of the service through satellites likely to be there forever?

Mr Ball—I think there are two sets of constraints in terms of quality of service. If you look at the ability to download webpages, to do file streaming and so forth, we have dealt with a lot of those issues with ground technology today. With the demonstration we did for the department we were downloading webpages in eight

to 10 seconds typically—very quick downloads and very quick file transfers of high-definition video streaming. So a lot of those technical issues in terms of the quality of service have been addressed. The physical issues in terms of the effect of rain on signals—that is something which is very difficult to overcome in full. There is a lot of technology that has gone into reducing that impact but that is still something that has to be engineered into the total solution in looking at the overall availability in higher rain zone areas and so forth.

Senator IAN MACDONALD—As a result of NBN Co., is your organisation anticipating that your services will be more sought after or less sought after?

Mr Ball—We believe that they may be more sought after, depending upon the implementation of that 10 per cent—how many are in the 10 per cent in terms of geography and what the end service offering is to that community.

Senator IAN MACDONALD—Thank you for that.

Senator LUNDY—We heard evidence yesterday in Melbourne from a company called O3b which has made a decision to invest in some low earth orbit satellite technology, and some of the discussion turned to the issues of latency with geostationary satellites. I was hoping you could provide the committee with some commentary from Intelsat's point of view about latency issues with respect to satellite service and how that reflects on the quality of service that you are able to provide to, particularly, retail broadband subscribers.

Mr Ball—Thank you for the question. I was aware that O3b appeared yesterday, I believe by telephone to the inquiry. From Intelsat's perspective, we already do this today—we already provide broadband services via satellite around the world. As I mentioned earlier we provided a demonstration to the department which showed very good quality of service—eight to 10 seconds for downloading a webpage; interactivity; file streaming and so forth. There have been a lot of advances made with a number of technical issues to overcome as much of the latency impact as possible, with pre-storing services, webpages at hubs, and a number of other techniques that their engineers have worked on. Where you get down to highly interactive services such as gaming, if we are building NBN to help teenagers do online gaming, there is probably an impact there on that quality of service. But, for broadband interactivity, webpage surfing, email, file transfer and streaming video there is absolutely no issue whatsoever.

Senator LUNDY—Thank you for that. Another issue that has come up—not so much in the context of this inquiry but in previous inquiries—relates to footprint of satellite services. I know you have covered this comprehensively in your submission, and I will not cover that again, but I would like to ask you about the specific challenges of some of Australia's more isolated territories—for example, Cocos (Keeling) Islands and Christmas Island. Correct me if I am wrong, but I think Intelsat do provide some services through some clients on those islands. I am aware of the quite expensive pricing structure for the two-megabit and four-megabit links that service those islands. Can you comment on the future prospects for pricing structure if bandwidth increases and whether or not there really is a direct correlation between the number of megabyte links that are provided and the costs that will be incurred? We are getting a lot of information back through a separate inquiry about people concerned that the recurrent cost of accessing a fatter pipe from the satellite is going to determine effectively the level of subsidy the government will be asked to provide.

Mr Ball—The short answer is that there is probably a direct correlation: the more megabits, the more cost you have. It is pretty much a direct relationship. What would be different, though, in the implementation that NBN Co. may put in place would be that you could share bandwidth amongst, let us say, Christmas Island and Cocos (Keeling) Islands and other remote areas but you are not dedicating a specific pipe just to a very small user group. The way that retail internet is delivered, there is an oversubscription to the end user. It might be 70 to one or 100 to one, depending on the quality of service that the provider is making available. As you look at the small population centres on Cocos and Christmas, there may be something you can do with more appropriate technology to make that cost a little lower, to bring that down, as you increase the user base that is feeding off that fatter pipe.

Senator LUNDY—I understand there is a capacity for Intelsat's technology to be able to really spot-beam troublesome areas. How plausible is that in a scenario where, by virtue of the interesting terrain in various parts of this country, there will be very small pockets that it is extremely difficult to get fibre to but they might be all over the place? Can you deal with that in a reasonably cost-effective way from a satellite service perspective? Is it within your purview to be able to manage that kind of challenge?

Mr Ball—Yes. The satellite, by its nature, covers 100 per cent of Australia from day one. So there is full coverage, ubiquitous coverage, over the country. It then depends on individual subscribers taking up capacity on that satellite. As we designed the satellite, we took particular note of the offshore territories as well as making sure that the rural areas are well served, to enable small antennas, higher data rates, to that community.

Senator LUNDY—When you say 'small antennas, higher data rates', does that mean that, as demand grows and more subscribers come online, you can help manage what would otherwise be a competition for the available bits, if you like, on that pipe for that particular area of footprint?

Mr Ball—That is one of the challenges you have with any wireless technology as you start to load it up, and indeed with any ADSL type technology today. As you start to oversubscribe point of presence, you end up having to provide additional capacity. That is something we have seen, for example, in the US, where we are working with WildBlue, which is a Ka band satellite delivery service. Its initial service, where it sold out first, was 200 kilometres all around New York. It was not in the outback of Montana or Colorado; it was the gap fill around the population centres, where ADSL did not reach at that point in time. That is still the case today.

Senator LUNDY—How interesting.

Mr Ball—WildBlue are adding an additional satellite in their fleet to provide that supplementary capacity into those high-demand areas. That is something that you can do if you do an initial Ka implementation layering on the Ka band payload, as I talk about in the paper. That is the next supplementary step. As you understand the market and as you understand the demand you then look at additional capability.

Senator LUNDY—How quickly did WildBlue respond to that additional demand in the area of New York? Was it a matter of months or years?

Mr Ball—No. It is something for which you can do as much as you can with the ground segment but building a new satellite is not something that you want to rush.

Senator LUNDY—I was going to say that.

Mr Ball—It is typically a three-year process. You do not want to rush the manufacturer. It is hard to send a repairman out.

Senator LUNDY—So there is a capacity to update it without having to build a new satellite in the first instance but for the longer term you would need to look at it.

Mr Ball—You need to look at the demand as it emerges as you layer on richer applications if you need to bolster capacity in particular areas.

Senator LUNDY—That is interesting. I know that you have gone into that issue in a fair amount of detail as well, so I will not ask any further questions.

Senator LUDLAM—I have a question which goes back to where Senator Lundy was with the latency question. You said in your introductory remarks that you have also got a network of 50 fixed satellites. Is 'fixed' the word that you use?

Mr Ball—The fixed satellite service is a generic description of the frequency band on which we operate, so it is the geostationary satellites at 36,000 kilometres.

Senator LUDLAM—Okay. So 'fixed' means geostationaries. They are not actually zipping around the place.

Mr Ball—They are not.

Senator LUDLAM—So they are a lot further away than the satellites that are being proposed by O3b?

Mr Ball—Correct.

Senator LUDLAM—So your latency issues are conditioned by the speed of light and new technology?

Mr Ball—That is correct.

Senator LUDLAM—For satellites parked that far away what is the round trip?

Mr Ball—It is around 600 milliseconds.

Senator LUDLAM—The evidence that we took yesterday, notwithstanding the comments about gaming, was that for applications where you do want rapid feedback—like videoconferencing, for example—you need to keep latency under 180 milliseconds otherwise it becomes very laggy. Is that an industry standard or is that a number that you would agree with?

Mr Ball—That is not our experience. We do videoconferencing today very successfully in many parts of the world using the geostationary satellite fleet that we have.

Senator LUDLAM—So you do not really see that as being a major element?

Mr Ball—No, not for that application.

Senator LUDLAM—For what applications does it become an issue?

Mr Ball—It think it is the gaming. It is where you are looking at it if you have managed to take that hill or not in the teenage games that my children love to play so much.

Senator LUDLAM—Is that it?

Mr Ball—I believe so.

Senator LUDLAM—So it is the very rapid response where you are putting data out and you are needing it back straight away. So there are not any other applications that you are aware of where that is cited as an issue?

Mr Ball—It is any application where there is a time sensitivity. We have done a lot of work on the hub side on the ground to pre-fetch data to case data closer to the end user so you are not looking at terrestrial delays. We have really worked hard to minimise that impact.

Senator LUDLAM—But as far as the signal round trip time is concerned there is not a lot that you can do about that?

Mr Ball—It is unfortunately about the laws of physics.

Senator LUDLAM—So you do not put geostationary satellites any closer than that?

Mr Ball—You cannot. By definition they have to be at that altitude to remain fixed above the earth. Lower down you are in a radiation belt and have other issues to contend with.

Senator LUDLAM—Are those satellites parked above the equator or can they all be at different angles?

Mr Ball—They are equatorial satellites.

Senator LUDLAM—Are you going to hit difficulties peeking into hills and valleys this far south of the equator in Tassie?

Mr Ball—No. The look angles are still very solid to here. You are looking at penetrating through a lot of terrain. Different satellites have different look angles. It depends where they are in the orbital location. Optimal for Australia is probably anywhere between 170 and 110 degrees. As you look at those satellites you see some focus more on the west coast while some focus more on the east coast. There is a lot of work that you can do as you move towards a dedicated Ka satellite, if that is where you end up going. You would look at what the optimal location is for that. You take the Ke band today and leverage as much as you can off that.

Senator LUDLAM—Are the geostationary satellites likely to be in direct competition with the satellites in a much lower orbit with a lower latency that O3b represent?

Mr Ball—I think there are two different schools of thought in terms of the area that we are operating in. The technology is proven and exists today. We are doing it. The newer technology which was talked about yesterday is still emerging. It is not in flight. It is not in orbit to date. We know what we can do. We know we do it well. That is from the geostationary operator's perspective. We know the limitations and we know how to overcome a lot of the issues that have been discussed.

Senator LUDLAM—Where does the GPS network fit in with that?

Mr Ball—GPS is a low-earth-orbit network, lower than where Ob3 is planning to be. They are about 400 kilometres up, I believe.

Senator LUDLAM—That is all from me, and thank you very much.

CHAIR—Thank you very much, Witnesses, for your time and evidence today.

Proceedings suspended from 12.39 pm to 1.55 pm

COSTIN, Mr William Glenn (Bill), General Manager, Sorell Council CHARLES, Ms Sue, Manager Finance and Information, Sorell Council

CHAIR—Welcome. The proceedings of the committee public and you are protected by parliamentary privilege in providing your evidence. It is potentially unlawful and in contempt of the Senate for there to be any interference with evidence that would otherwise be given by witnesses or for witnesses to be misleading in the evidence they provide to the committee. If at any stage you want to provide your evidence in public, please make your request known to the committee and we will consider it. Would you care to make a brief opening statement? If not, we will go to questions.

Senator LUNDY—I understand that Midway Point has been identified as one of the three first areas for the rollout of the fibre-to-the-home network. A good starting point might be to describe where that process is at at the moment.

Mr Costin—Our involvement thus far is not terribly substantial, which is why we can contribute only a little bit. The involvement of Sorell Council at this stage has been a rather hurried invitation to the data centre at Cambridge, which Mayor Carmel Torenius attended. I think we got notice of that the day before the event, but we responded to that and that was okay. Apart from that, we also got an invitation to an ATUG sponsored communications session at the Midway Point Hall, which we believed would be attended by some key players, including the state representative, the project officer, and industry people—Cisco, Optus, the Computer Society rep and a few others attended—and supposedly some of the community. The only community members who were there included one of our councillors, Bryan Dean, and one of our staff, Collette, who works on the front desk. I do not think there were any other community members there. Other than that communications session, there has been a little bit of two-way communication with Sue.

Ms Charles—On 10 August I attended a national brand rollout involvement session with the department of Economic Development, Tourism and the Arts. That involved lots of different sectors of the state government, and about eight representatives from local government statewide attended that. Jim Wyatt, who is heading up the Digital Futures project for the Tasmanian government, ran that project day. It was all about letting us know what their plans are till 2014. They went through the step process of how they want to build awareness and understanding within the community of what is happening with digital technology and the rollout of the broadband system. They want to demonstrate capability and utilisation. They then want to do trials and an evaluation session. They then want to expand and consolidate and meet their 2014 vision. This was their five-year plan. But they did not really articulate the key strategy for the project, in the sense that they only have three towns identified—how they are going to rollout from those three towns has not yet been identified.

The ability of state government to connect with their local community would be very questionable. Local government has a serious issue with the ability of that going forward. Considering that when they set up the Midway Point users group to connect with the community, they only identified businesses. Midway Point is a suburb. That is all it is. It is a suburb outside of Hobart. It has 2,500 people. It has about 10 businesses and they are only like your local corner store. Their perception of the community make-up, who is the take-up within the community and their ability to connect with the community would have to be questioned. Who the first people are to take up this digital technology is yet to be addressed. We believe that schools should be involved. There should be some sort of visibility with this whole rollout. There should be some way of actually connecting with the community through some visibility. It is not just big business; if you are going to roll out to local communities like Midway Point, Scottsdale and Smithton, they are rural, farming communities—they are not major residential areas. Most of these communities are 2,000 at the most. They are really not part of the bigger picture. They are just rural locations.

Mr Costin—However, that is not to say that we do not in principle do not support that.

Ms Charles—No.

Mr Costin—We are very excited about the prospects for the Sorell municipality.

Ms Charles—But there is no indication that the Sorell municipality will be the next rollout plan after Midway Point. We are not clear who is the next part of the plan other than these three satellite suburbs at the moment.

Senator LUNDY—Given what seems to be a degree of frustration about less than optimal communication with both the council and the community, what is the council doing about that and what advocacy have you

engaged in with both the state and federal governments to try to improve that interaction between all spheres of government?

Ms Charles—We are having a lot more involvement now with DED and the key project players that are involved in it. We are building up that relationship.

Senator LUNDY—Sorry, who is that?

Ms Charles—David Anderson is the senior consultant. He is under Jim White's team. He is our key contact with DED at the moment. That is the person we are talking to. We are looking at having another community session in January-February next year. That will involve the schools within the area a lot more and looking at trying to get bigger community groups involved and the farming sector and business sectors. We do have a chamber of industry within Sorell. We want to incorporate that whole sector as well.

Mr Costin—In terms of Commonwealth connection it would be fair to say that we do not know who to call there—

Ms Charles—No.

Mr Costin—Because the first we heard was through the state government contact.

Senator LUNDY—Sure. It was David who?

Ms Charles—Jim White and David Anderson is a senior consultant.

Mr Costin—I suppose we could have jumped on the internet and hoovered around and found it, if we really tried.

Senator LUNDY—Pretty much. It is a wonderful opportunity, obviously, for the suburb—

Ms Charles—It is, yes.

Mr Costin—It certainly is.

Senator LUNDY—and for Sorell in general. I am just keen to get a feel from you. It is absolutely necessary that all stakeholders get involved in this project if we are going to optimise the benefits. I would like to get a better feel for what you anticipate your role to be as a council in garnering that community engagement. You have described a couple of meetings so far, which from your description were poorly attended. What have you done since then?

Mr Costin—Leading up to that, it was actually made clear that doing it during a Tasmanian school holiday period was not terribly acceptable. Sue said it would be better if you went down the local bloody Woolworths and set up a stand there and grabbed all the shoppers going past and said, 'Here is what is going on.' That would have had a better result. We have actually tried to provide quality advice to better communication, but it was charged through. It was really a tick.

Ms Charles—I think they just saw the opportunity, because they had a conference.

Senator LUNDY—Sorry, it was 'a tick'? What you mean by that?

Mr Costin—In the box. It appeared very much to be a tick in the box. Community consult, the ATUG roadshow has done its communications at Midway Point—tick. Really, it did not appear from our perspective at council that when advice was offered—and you offered that advise, didn't you, Sue, about better alternatives and better methods—

Ms Charles—It was an ad hoc response to a situation where they had a group coming together. It was not a planned response and it was not thought out very well. ATUG, their user group, is going to connect with stakeholders, whether they be in the community or in the business sector. That is something we are not confident in at this time. We did not find that they necessarily understood the conductivity with the community. It is a fabulous opportunity and we are looking at opportunities to better that advocacy. Local government's role is to have a connection with community groups—that is what we are.

Mr Costin—We can facilitate that, and I think we have made that clear. And we have only been involved since August, so it is in its infancy. That is the first we knew of it prior to some of the announcements. It was all very much running on the back of all that, so the staff on the council got wildly excited. Certainly Carmel is very interested and has got involved at short notice—even before the politics of the next election.

Senator LUNDY—Sorry, what was that?

Mr Costin—There are council elections in October. This happened in August, so it predates any sort of ramping up to make it political. There is genuine interest in this by the mayor because she is focused on

community things. For example, we have the GP superclinic starting up. That is another Commonwealth government funded and sponsored thing. The connection here is a good one for council. We have provided land for that to happen. That is wonderful because it keeps the cost down. It will improve health in Sorell, which is in need of attention. You would not believe that you could be 20 minutes from the centre of the capital city and be totally overlooked in these things. One of the problems that Sorell has as a council and municipality is the profiling of its position against all the other city and/or city fringe councils. So when these things happen we are on board fairly quickly and we try to do as much as we can with our limited resources. As Sue said, education is one area where the NBN could benefit us. We could influence the state government to stop centralising further education at Rosny and around town. They should think about putting it further out, because all the rural property farmers and their families miss out. Transport is an issue, so they do not send them into town. Traffic management is an issue because no money is spent on the causeway and the roads out there. So in the end they do not go or they go and work on the farm. So that is a bit of an issue there. So we would like to say that the NBN provides education. It can also improve what we are trying to do with IT and infrastructure with the GP superclinic and health. We hold a lot of community forums. W did a forum on the master planning scheme. We have a hall and we bring people there on a regular basis for a whole raft of activities. So I think we are well placed to do that.

Ms Charles—Also, Sorell is the gateway to the Tasman and east coast areas, so putting in the NBN means greater accessibility to a wider community base, which is an isolated community in some ways because they are further away. The Tasman Peninsula is a lot further away from the centre of the city, so they have a lot more potential isolation issues. This is what broadband would overcome. That is really important across the board. That is what Sorell is really engaged in and wants to promote. But we would like to see local government being communicated with because it has access to the community. That is what we are here for. We can promote the advocacy of this whole rollout. The whole thing at the moment is that the state needs to recognise that local governments need to be involved because we represent the community. That is what we want to drive and deliver on because there is huge economic benefit for every isolated rural sector within our state from this whole rollout.

Mr Costin—We can get some balance in the sector approach in our area. If you look at the documentation that surrounds this, the 55 per cent take-up of broadband in Tassie generally is low—I think it is at the bottom of the list. There are a number of reasons for that, I suspect. People do not understand what it actually means. Fibre to the home and that capacity in your home is a wonderful thing if you understand what it means. But if you are not connected in any way—let us look at the social demographic. Midway Point is not right up there. In terms of being able to afford that additional luxury, there would be an initial cost for that extra capacity, one would expect. Although it is a bit early to tell.

Senator LUNDY—There is a lot of debate about that. But you are right—it is not yet resolved.

Mr Costin—Who is going to fund the connection to the home? Is it user pays, or is it part of the rollout? I have seen some material on that. That is still not sure, either.

Ms Charles—It is difficult when you are talking to your community to know what you can promote about it. They are going to ask: 'What's in it for me? What can I get out of this? Who's going to pay for it? What's it going to cost me?' These are the things we discussed in the project meeting in August. They are very valuable things to know. You cannot talk to your community unless you have some answers. It is very difficult to promote something that they see as not necessarily benefiting them. They cannot see themselves connecting to it now. They see it as being in maybe two or three years. Unless it is on their doorstep today, it loses momentum in some way.

Mr Costin—Perhaps it is a bit early and we are overstepping with our expectation.

Senator LUNDY—Can I take you back a step. As a council, do you have the capacity to help those conversations, interactions and consultations to occur? How well placed and confident are you? You are obviously very keen and very enthusiastic about facilitating these conversations, but I am interested in your genuine capacity to do that and whether your own constraints are inhibiting your ability to do what you want to do.

Mr Costin—We have only got 12,870 people, which, by council standards is not a lot, so it will not be that difficult to communicate with them.

Senator LUNDY—It sounds like you know exactly where you want to go, but you have some frustration with who you are having the conversation with. I just want to make sure that, from your perspective, you are

not looking for additional resources or something like that. I explored this same issue with the Tasmanian Local Government Association representative as well. He seemed pretty confident that councils in his association were ready, willing and able to play this role and have these conversations.

Ms Charles—We can identify all the user groups, all the community groups and the business sectors and the farming sectors. We know who our people are, and that is key to targeting the right people. We can do that and we have some ideas on how we would like to see the first engagement happen—we would like to see it happen through our youth. But we need something visual that will drive the demand for the product and drive an understanding.

Senator LUNDY—More information about its prospective uses, for example?

Ms Charles—Yes.

Senator LUNDY—The committee explored the same issues yesterday in Melbourne. We heard quite a lot of evidence about some communities who have been leaders—one was a local government and one was a business organisation associated with the university—who were talking about the prospective users of broadband. But their message was the same—that we need to share this information and allow it to be absorbed and digested and then have that knowledge shared in communities that are going to get the National Broadband Network. So that point has certainly been made strongly to this committee.

Mr Costin—There is no question that we can do it without additional resources if it is just communication and coordination. We get the end benefit for the community anyway, so it is justifiable spend on general rates. I might also add that, for local government purposes and other purposes, the state is basically broken up into three subregions—south, north and north-west. Within the southern region there are 12 councils and we have a Southern Tasmanian Council Authority. The STCA at its last board meeting agreed that one of the performance criteria for the two joint CEOs of that association was to ensure that, on behalf of the 12 southern councils, they actually got involved with the project to ensure that the service providers that would be coming on line with the NBN were truly local and that the state government did not railroad it and that there was not a politically driven product or service privileges on that capability that took it away from what each council could actually get for their community. I think that was a good thing. If that comes to fruition, that will be a good thing as well. So there is another resource available to us in that association.

Senator LUNDY—You mentioned a meeting that you foresee happening in January or February. Could you give us a bit more detail on that.

Ms Charles—That follows on from the meeting we had at Midway Point a month ago. When I was talking to David, we said we would to have a catch up because of the lack of connectivity that was happening through the original one. W suggested that January and February is the best time to look at it again. It might even be March if we are going to go through the schools. That is something I will be talking to David about.

Senator LUNDY—Have they agreed to that or is that something you have proposed?

Ms Charles—That is something we both talked about and came up with as something that we need to do. There is not much more to say. We would probably look at the groups that would be involved, a better rollout, the schools and the community. But we would need information and access to information—the sort of information that people can relate to.

Senator LUNDY—So you will be pioneering in the area of consultation around this as well. Congratulations.

Senator BIRMINGHAM—Thank you for your time today. Could you give us a snapshot of the current services available at Midway Point, in terms of connectivity?

Mr Costin—There is a fuel station, a couple of stores, a pub—

Senator BIRMINGHAM—Sorry—I mean current communications services.

Mr Costin—Communications services?

Ms Charles—People still have access to current communications technology.

Mr Costin—They have standard access, up to and including ADSL2, I would think.

Ms Charles—They are not prohibited.

Mr Costin—Not being a resident there, I presume they are part of that coverage.

Senator BIRMINGHAM—What requests have you had from the state government or the federal government to play a consultative or midway role?

Ms Charles—Limited.

Senator BIRMINGHAM—So your initiatives in doing so have been largely of your own accord?

Ms Charles—That is right. We encouraged ourselves to go to the meeting in August. We were not on the list. It came to our attention that Midway Point was a satellite site, so we talked to DED and they made space for us to attend that session.

Senator BIRMINGHAM—In the end, of course, this will be built regardless of the feedback you garner, the enthusiasm or not in the local community, the level of connectivity or anything else. Why do you see the need to bother yourselves with community consultation on the issue?

Ms Charles—Because we would like to see our community prosper. Having access to current technology is important. It provides capacity to grow and potential economic development in our area, and that is what we are here for.

Mr Costin—It is key infrastructure. Perhaps we could channel enough interest across all sectors, including private and public, and say, 'The council is on board.' We facilitate a lot of governance things, in terms of regulating, planning and so on. We obviously encourage the local business council. One of the things we have to try and get is employment in the area, because employment is not that good in Sorell. Most people would commute into Hobart, which itself creates problems for our transport infrastructure, which is another issue for council at the moment. There is potential for this in terms of company operations centres and call centres, which have come and gone within Tasmania for various reasons. Perhaps we can get a chance to have a hand in, as I said before, what the STCA is trying to achieve—that is, not being excluded from some discussion about what providers end up either wholesaling or retailing on this particular product, this infrastructure. I think that is a good thing. A lot of private companies would be interested to know about the support they have from local government, if they intend to set up. We are declaring our hand early. It is an economic development issue for which we are pushing very hard. Sorell is still one of the fastest growing areas in the state by percentage.

Senator BIRMINGHAM—What timelines have you been told about in the consultation forums you have attended or through any other means as to construction of the fibre rollout?

Ms Charles—Only in a broad sense. Construction is happening now at Midway Point—they are putting in the cabling. We are not sure at what point that will hit Midway Point. It is just coming across the causeway at this point. We have not been informed a lot—it just has not happened. All we understand is that, between 2009 and 2014, the state would like to have the whole state wired in. I cannot remember the percentage of connectivity to the National Broadband Network.

Mr Costin—To give an example, at an operational level, the first we knew that work was being conducted across the causeway from Clarence, from the data centre, was when the sign went up saying the road would be closed for periods of time—there is a little flashing sign over the month. I asked my engineer, 'What's going on there?' and he rang DIER, which is the Department of Infrastructure, Engineering and Resources, but he could not get an answer. Even DIER, within its own departments, plainly knew what was going on but did not let the road operation guys know. We eventually sorted it out and realised it was part of the channelling and laying of cable across the causeway, so we got a bit excited about that. That was good. Then it did not go ahead. It stopped because someone did not check ownership of land issues, so there was a bit of a glitch at the start. What we are hearing is not terribly comforting about the delivery of the infrastructure on the ground. In terms of the time frame, I would love to know the detail.

Ms Charles—We would like to communicate that to our community. They are going to ask us: 'What is happening? What is that infrastructure?' So it is important for us. It is all about the fact that local government communicates a lot with its community.

Mr Costin—It is the closest level of government. You can forgive the state government for not giving down and dirty, because that is probably what we are there for. So it makes a bit of sense, I guess.

Senator BIRMINGHAM—Have you asked NBN Tasmania or the DED or somebody about the timing for the rollout?

Mr Costin—Sue talks with the DED.

Ms Charles—We have not got the latest update. But I will be talking to David in the next couple of weeks to find out exactly what is happening so that we can get a plan and start to communicate it to our community so that they know what is happening out there.

Senator BIRMINGHAM—Surely we are looking at a matter of months, not years, in your case.

Ms Charles—Yes, but, as we understand it, that is only Midway.

Mr Costin—I think it goes to Triabunna.

Senator BIRMINGHAM—Midway Point is the first area. Even for that, they have not given you an estimated time of conclusion?

Ms Charles—No. It cannot just be one-way communication, it has to be two way—and I would like to see a lot more of that. At the moment, it is Sorell trying to find out what is happening. It needs to be two way. We all have broad roles. We are not specialists; we tend to be generalists. We need to have that two-way communication to maintain the level of speed on what is happening in our community, so we would like to see the state assist with that.

Mr Costin—We have not committed resources to this in the current budget because we obviously were not privy to what might or might not be happening. But I would like to think that by February we will be able to get some details sorted and work out what is happening and when. If we are to be involved in any measure we need to understand what that is and budget for it accordingly in our next council budget, which we will be forming early next year.

Ms Charles—We want to have a digital plan for our community, and that is on the horizon for the next six months. That means we start to consult with the community about the technology that is out there. We talk to councillors first and get them on board. Then we talk to community groups and start doing the consultation process to put together that digital strategy for our community. That is the point we are up to at this stage.

Senator BIRMINGHAM—Earlier you mentioned connectivity to the household. Have you asked NBN Tasmania or DED about where the connectivity that will be rolled out over the coming months will be and where it will end? Will it end at the driveway, or will it end on the wall of the house?

Mr Costin—We saw the presentation at Midway, when they showed slides of the telegraph pole. I think it was a wireless link. The guy on the project thought that might be the solution in the first round. Rather than cable to the house, it would be down the street with a little device on the telegraph pole. That is as much as I know. Even then, I cannot answer the question about who pays for it once you want to get connected at the house.

Senator BIRMINGHAM—This was related to Midway Point still? They were looking at a localised Wi-Fi network or something?

Mr Costin—Yes.

Senator BIRMINGHAM——Interesting.

Senator LUDLAM—Thank you very much for your evidence. It kind of backs up some of what we heard yesterday and earlier today as well—that there seems to be a bit of an information vacuum about what people will be able to use these services for once they have been rolled out and about what the actual rollout will look like in particular areas. Given that you folk are on the front line and seem to be quite keen to grab the benefits—as soon as someone can explain to you what they are—what advice would you have for other local government authorities and also for the Commonwealth government as this thing is rolled out right across the country?

Ms Charles—I suppose it is about all tiers of government working together for the common objective of a successful rollout and to get utilisation of broadband across the nation a lot quicker—to get it accepted and to get the conversations with our communities happening now. Without that conversation, you will not have the demand, but you need to drive the demand to be able to connect to the system. I would like to see us all work together to achieve the goal of maximum utilisation of this new technology. So we need information.

Senator LUDLAM—That two-way—

Ms Charles—We need that two-way information to be able to deliver it. I think local government's role in this is to deliver it to the community and provide that connectivity between government and community groups and education and business groups that are out there in different communities. We have the access to do so.

Senator LUDLAM—What would you like to see happen in the next 12 months? I gather that we are trying to bring these three pilot sites online by the middle of next year.

Ms Charles—We need to start talking to David Anderson and Jim Wyatt about how they propose to provide information to the local government sector and how we can influence them to use local government as the best communicator to the community. Part of our role is to influence that process as well.

Mr Costin—My feeling is that it seems to be a closed shop, and I do not know whether that is NBN Tasmania or NBN Australia. Quite often, big-buck projects mean a big-picture approach, but I do not know that that is necessarily true in this case.

Ms Charles—It does not need to be big, does it?

Mr Costin—No, it does not. There are people out there who, like us, would be willing to participate at no cost. At the risk of being cynical—and I do not want to be too derogatory about our state government departments—I have often witnessed in the past that, where the Commonwealth has tried to go direct, they do not like it. Black-spot road funding is a classic example. We get that funding direct and all of the dollars go straight into the black spot. Other projects come through the state government and there is a fair bit hived off to prop up the administration of that money and a little bit trickles through to the end. At the risk of being cynical—and I hope it does not go too much further—I do not know whether the state government has been funded through NBN Tasmania to do anything. But I will not go any further. It looks like it is not a big project for us. It looks like a very simple thing. I just hope it is not somehow getting wrapped up in its own processes.

Senator LUDLAM—I think that is really useful evidence. I would be hoping that Tassie and the Commonwealth government have chosen these three sites because they are a bit different from each other and because they can teach us a bit about how to do it better elsewhere—and, in exchange, you guys get to be the first place that gets 'lit up'. As an aside, do you have any idea what the rate of personal computer ownership is in your local government area and whether people's gear would be compatible with this system when it arrives?

Ms Charles—No, we do not know that.

Mr Costin—That is a good question. We would not know that information. Anything I could offer you would just be a gut feeling. But it would not be at the leading edge of hardware and software at the moment. I think we would be lagging behind the national average. Although if we were talking about flat-screen TVs, we are probably at the front end.

Senator LUDLAM—That is fascinating—if only you could plug the fibre into that! Thank you for your evidence

Senator IAN MACDONALD—Were you consulted before your locality was chosen?

Ms Charles—No.

Mr Costin—Definitely not.

Senator IAN MACDONALD—So the first you knew about it was when you read about it in the paper.

Mr Costin—The first we knew about it was the invitation in August for the mayor to attend Kevin Rudd's visit to shove the thing in a hole. That was on the day before the actual media event at Cambridge Park. I said to the mayor, 'If you can't go, I can,' but she said, 'No, I'll go.' I can tell a couple of anecdotal stories about that, which I thought were amusing, but it is probably not the time or place to do that.

Senator BIRMINGHAM—Don't let us hold you back!

Senator IAN MACDONALD—I was going to say: do not hold back on our account about criticising a state government, either; go your hardest! Senator Lundy might have a different view, though. Does your council attempt direct communication by the internet with your residents? Do you put out an electronic newsletter, for example?

Mr Costin—No, we have a glossy—

Ms Charles—We have a website.

Mr Costin—We have a website, but we do have a produced glossy newsletter.

Ms Charles—We do have limitations with our systems. We have just put in a new system that will enable us to do more e-commerce, but at this point in time we are not rolling that out until late next year.

Mr Costin—We do track the hits on the site. When we advertise jobs and stuff, we can probably get 400 to 500 hits on that in a month, so we know it is active. And we do get comment when messages are not updated, like the mayor's message at the front end or whatever. So we do know that it gets a bit of use.

Ms Charles—We are moving down that track in 12 months, but we need the software, and that is something we are looking at to build onto.

Mr Costin—We have upgraded our systems now to have—

Ms Charles—To have the capacity to do so.

Mr Costin—the capacity to do that, to do e-requests and e-forms and so on through the website, so we are heading down that path. We would benefit from that capacity as a council anyway, for sure, and we would use it. Whether we would actually get into the business of providing any sort of purchased capacity to provide service, I do not know; I have not looked at that, but I understand it is possible. I know that there was a time last year when I was approached by one of the guys who was there in the communication session who said, 'When council is doing trenching around the place, let us know, because we'll come along when the trench is open and we'll put cabling through, and that will save us a lot of work.' I have kept that in mind the whole time. I must say that I did not follow that through, and there were a couple of opportunities, so I guess I am at fault for not following that through in detail, but that was last year. I never made the connection to where it was going until now.

Ms Charles—We can see the visual digital technology. I went to the presentation by Larry Smarr, from the US. The state government brought him down in partnership with the University of Tasmania. There is the whole idea of a village green, a visual, virtual reality system where you do not necessarily have your council meetings at your council; you have them across the web. There is so much technology innovation out there that in five years time we could look at and benefit from as a council and as a community, with community groups talking to each other through visualised meetings across the web. There are all those sorts of things that we can see as potential opportunities through this system.

Senator IAN MACDONALD—I am a former councillor myself. One thing your ratepayers will be good at is complaining when things go wrong. Do you keep records of the complaints you get by phone, by letter, by personal attendance or by email?

Mr Costin—Phone, yes, because they come through the customer service operator and we have a little bit of a system which we are enhancing with our new software over the next 12 months. Email and direct are probably not recorded in the same fashion, but it would not be hard to move to. We have an electronic records system, so if it comes it will be recorded and accessed on a—

Senator IAN MACDONALD—So would you have a feel for what it is percentage wise? Would 10 per cent come by email, do you think?

Mr Costin—No, I think the vast majority is phone, followed by letter, followed by email.

Ms Charles—Actually, we have a high percentage of face-to-face communication. We would have about 40 per cent that come through the front door.

Senator IAN MACDONALD—I am not sure whether you would do this or whether NBNT would do this. With Midway Point being one of the first places in Australia to have fibre to the premises, have you or are you aware if NBNT has set up a process to assess whether, once this happens, your interaction with that particular suburb as opposed to the rest of your localities goes up or down or the extent of it?

Mr Costin—To validate the actual scheme?

Senator IAN MACDONALD—Yes.

Mr Costin—No, I am not aware of anything.

Ms Charles—I am not aware of anything.

Senator IAN MACDONALD—One would expect, with all the hype surrounding this, that once it is turned on and people are getting involved, perhaps the communication in this locality by the internet would increase dramatically over and above the other parts of your council area. I was just wondering—

Mr Costin—That is true. We have heard nothing about the scheme of validation of that pilot site. One would have thought that the project plan would include that and, yes, what its interface to council might be like. I think what Sue and I fear most, judging by the result of that sort of ATUG communication roadshow that first happened, is that, with no community members there—Tasmanians being Tasmanians, they do not

subscribe to a show or a venue or a football match until the last minute either. They are not early bookers. They do not book six months out. It will be no different when it comes to upgrading their services for this particular communication. They will want to see: 'What do I get? How much more is it going to cost, and have I got the hardware and technology?' I personally think that from a residential domestic consumers point of view it will be slow on the take-up.

Ms Charles—I would not say they are early adopters of technology.

Senator IAN MACDONALD—Do I gather from something you said before that you would assess this as a sort of lower socioeconomic region?

Mr Costin—Yes, in Midway Point, if the median house price is 330 in Hobart—

Ms Charles—I would say it is lower and it is middle, but there is also a top end to it—we have got Penna.

Mr Costin—Yes, but that is further around. I think in Midway Point proper—and I can see why it was chosen; it is a nice discreet little node sitting there on the island, so geographically it makes sense. I do not have a problem with that. And it is close to the data centre, so from a topographical, geographical point of view it makes sense for an initial rollout. It is just a shame that it is not at the higher end; it is sort of middle to low middle.

Ms Charles—Yes.

Senator IAN MACDONALD—I think that is the point you were making to one of my colleagues, that it is not the area where people would have the lazy cash to rush out and buy a new computer when this comes in to take full advantage of everything.

Ms Charles—No. Another thing with the demographics is that it is a mature age demographic too. There are new families moving into the area, but there is no school in that area either. There is no primary school in that location, so it is probably going to be more a mature age sort of location.

Mr Costin—So, if they have a computer, yes, it will be a bit older, and the capacity to upgrade will be a lot less than some other areas would have. I think if you take it in context—

Senator IAN MACDONALD—Is there an area in your municipality that you think would have been a better sounding-board for being an Australian pilot?

Ms Charles—I think Sorell itself would have been better because it has a business sector and it has different demographics. It has low, middle and high-end demographics.

Mr Costin—Yes, there are some new developments on the hill back there which are all going for upwards of 400 or 450, so you are talking about—

Ms Charles—Another sector.

Mr Costin—a good 25 per cent above the median house price. There are several hundred going up there, so you might have got a better return.

Ms Charles—More families, and there is a more mixed demographic of age in that area and social—

Senator IAN MACDONALD—You are in the federal electorate of Lyons, aren't you?

Mr Costin—That is correct. I think it is a safe seat, too, by the way.

Senator LUNDY—Of course it isn't a safe seat!

Mr Costin—Yes, I apologise for that!

Senator IAN MACDONALD—We always think it is winnable, but it has not been—

Senator LUNDY—You had 12 years of practising it, didn't you, Senator Macdonald?

Senator BIRMINGHAM—That is why I was surprised to hear you were getting a superclinic!

Mr Costin—Actually, can I just say on that, although it is probably the wrong forum—

Senator IAN MACDONALD—Perhaps we should not lead you there.

Senator LUNDY—Too late.

Mr Costin—that we were an afterthought because—sorry?

Senator IAN MACDONALD—I was saying that perhaps, for your own benefit, from your own point of view, we should not lead you there.

Mr Costin—No, I will not say anything. That is another investigation.

Senator IAN MACDONALD—I am happy to hear what you are going to say, but it might not be in your council's best interests anyway—whatever you were going to say. I just have one final question. I understand that you invited the committee out to have a look at what you do. Unfortunately I cannot come; I have other commitments. What would you be showing us if we were able to go? I am not sure if anyone is going, but what were you intending to show us?

Ms Charles—A hole in the ground?

Mr Costin—It would just be to look at what is going on on the ground, basically. There is not really that much to show. It goes from the data centre at Cambridge Park, which is on the left as you go to the airport. They have just run a cable past the golf course. If you were to go past the airport and follow the Tasman Highway down, you go past the golf course and meet a causeway, which you can see from the air anyway. Along that is a little footpath, a traffic stretch, and they have dug a channel and laid the cable under that, across the causeway to the Midway Point peninsula. At the end is a terminating point. I think the cable has been laid.

Ms Charles—You would get an understanding of the layout of the site—how close it is to Cambridge Park, how close the infrastructure is that has been rolled out and the size of the site. That is visually—

Senator LUNDY—The secretary of the committee, Alison Kelly, has nominated to look. The rest of us have pre-booked our transport.

CHAIR—Senator Macdonald, can you think of any further questions on that?

Senator IAN MACDONALD—Not about that. You tell us that this one is going in a conduit underground. Is all the cabling for Midway Point going to be underground?

Ms Charles—I understand so.

Senator IAN MACDONALD—Or is it going overhead?

Mr Costin—That is a good question. I do not know. My impression from the one brief communication session on Wi-Fi to the home is that it will get to the telegraph pole. I do not know whether they will run the cable across the top and down.

Senator IAN MACDONALD—But, surely, if they were digging up your footpaths you would know about it by now.

Mr Costin—Yes, we should. I have not heard that.

Ms Charles—That is a query we have.

Senator IAN MACDONALD—Would you as a council prefer to have it underground, bearing in mind that there are obviously other things overhead?

Ms Charles—We would, because we would like to see underground power. We would not like to see more overhead structure; we would like to see it underground. We are also in a very windy area. We are rolling out underground power through our municipality, so we would not want to see a complex—

Senator IAN MACDONALD—You are doing underground power?

Ms Charles—We have done our main street.

Mr Costin—We have recently done the main street, but that was a joint program—it was a good one—with Aurora and the state.

Ms Charles—All our new subdivisions have underground power.

Senator IAN MACDONALD—Aurora obviously know you would prefer it underground. They joined with you with power.

Mr Costin—It is a high-cost proposition. In terms of making sure that the project happens and that it has a budget, if it cannot be for a lot of practical reasons—

Senator IAN MACDONALD—We have had some evidence that perhaps it is not such a high cost, when you take into account cutting back the trees every 12 months and dealing with other things. I think this is what you said; I just want to clarify it. In spite of you doing it elsewhere and it is your desire, nobody has raised with you as to whether they should go under your footpath or above your footpath.

Mr Costin—As to the physical implementation of where it is and what they would want to do, we do not know.

Senator IAN MACDONALD—And you do not have any control over that. I understand that is all for the state government.

Mr Costin—No. If it is our footpath then we would have to be consulted on it. If it is existing conduit—it might be Aurora's—and they can lift the lid and feed it through because there is capacity in the queue, then we probably would not know about it. If they were starting to dig things up—

Senator IAN MACDONALD—If they are going overhead, you—

Mr Costin—We would not know either.

CHAIR—Further to that, would you know about it, just by it being your footpath et cetera, if the government were to proceed, with the state government, with its planned exemption, by declaration, if you like, from existing planning rules—

Mr Costin—Yes. There are the call-in powers that they have just recently put through parliament. So, yes, it could be a project of regional significance and is therefore exempt from local government planning.

CHAIR—In his evidence, Mr Garcia said that the proposed exemption could potentially exempt the NBN infrastructure across Tasmania from local government requirements and, indeed, from attracting community comment prior to proceeding. He voiced the view that that was not yet law and that it was in the consultation stages. You have just said, yes, it has gone through parliament. Could you clarify that. Do you know the status?

Mr Costin—I thought the bill had been passed on the planning.

CHAIR—He claimed that it was in the consultation stages. I asked him about—

Mr Costin—Allan would know. He would keep us advised as part of the—

CHAIR—If it were still in process and progress, given your views about aerial versus underground et cetera and footpaths in your local area, would you be expressing the view of your council to the government about the proposed exemption?

Ms Charles—I would think we would want to be having a chat, just to see what they are doing and what they are proposing and to see whether we have any influence on that process.

CHAIR—Press reports about this issue have suggested that the proposal does not need to be passed by parliament to become law. So it may well be that it is not clear in that circumstance whether it is law or not at this stage. What would be your view if it were law?

Mr Costin—The exemption from planning?

CHAIR—Yes.

Mr Costin—I think all the commentary has been had within the state. The association has done its rounds of all the 29 councils in Tasmania and they have their views forward and I think that has been passed through for consideration. So if it is at the consultation stage they will know our views on it. Sorell's views—

CHAIR—I am not sure that Mr Garcia informed the committee that his association had put views on your behalf to the government on this issue. I stand to be corrected, but if he had what would he have said? What would he have been instructed or requested to say on behalf of your council?

Mr Costin—I am just trying to think what feedback we may have put through.

CHAIR—You might wish to take that on notice. I do not want a place you in a difficult position. On the one hand you are saying about very important things happening in your backyard, 'If that were happening we'd know about it,' but, particularly if it is already 'law' as opposed to 'lore', you may not know about it and it may be happening. Please respond to the committee on what you understand to be the status of that proposed exemption, whether or not your council has said anything about that prior to now and whether or not your council will say anything about that after now. And probably the final question is: did you make a request of the Local Government Association to represent your council to the state government at any stage prior to now on that issue? Thank you very much for your time and evidence—and dedication. Hooray!

Committee adjourned at 2.48 pm