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SENATE

SELECT COMMITTEE ON THE NATIONAL BROADBAND NETWORK

Reference: Implications of the proposed National Broadband Network

TUESDAY, 3 MARCH 2009

SYDNEY

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SENATE SELECT COMMITTEE ON THE NATIONAL BROADBAND NETWORK

Tuesday, 3 March 2009

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

Senators in attendance: Senators Fisher, Lundy, Ian Macdonald, Minchin and Nash

Participating members: Senators Abetz, Adams, Arbib, Barnett, Bernardi, 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 proposal to partner with the private sector to upgrade parts of the existing network to fibre to provide minimum broadband speeds of 12 megabits per second to 98 per cent of Australians on an open access basis; and
 - b. the implications of the proposed National Broadband Network (NBN) for consumers 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. 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, the likely future improvements in broadband services (including the prospects of private investment in fibre, wireless or other access networks) and the need for this government intervention in the market;
 - b. the effects on the availability, price, choice, level of innovation and service characteristics of broadband products if the NBN proceeds;
 - c. the extent of demand for currently available broadband services, what factors influence consumer choice for broadband products and the effect on demand if the Government's fibre-to-the-node (FTTN) proposal proceeds;
 - d. what technical, economic, commercial, regulatory and social barriers may impede the attainment of the Government's stated goal for broadband availability and performance;
 - e. the appropriate public policy goals for communications in Australia and the nature of regulatory settings that are needed, if FTTN or fibre-to-the-premise (FTTP), to continue to develop competitive market conditions, improved services, lower prices and innovation given the likely natural monopoly characteristics and longevity of the proposed network architecture;
 - f. the possible implications for competition, consumer choice, prices, the need for public funding, private investment, national productivity, if the Government does not create appropriate regulatory settings for the NBN;
 - g. the role of government and its relationship with the private sector and existing private investment in the telecommunications sector;
 - h. the effect of the NBN proposal on existing property or contractual rights of competitors, suppliers and other industry participants and the exposure to claims for compensation;
 - i. the effect of the proposed NBN on the delivery of Universal Service Obligations services;
 - j. whether, and if so to what extent, the former Government's OPEL initiative would have assisted making higher speed and more affordable broadband services to areas under-serviced by the private sector; and
 - k. the cost estimates on which the Government has based its policy settings for a NBN, how those cost estimates were derived, and whether they are robust and comprehensive.
- 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 9.07 am

CONNOR, Mr Andrew, Spokesperson, Digital Tasmania

CHAIR (Senator Fisher)—I declare open this public hearing of the Senate Select Committee on the National Broadband Network. This is a continuation of a series of public hearings. Welcome again, Mr Connor. If at any stage you wish to give evidence in private, you may make that request of the committee and we will consider it, including the grounds upon which you seek to do so. The committee will then make a decision as is appropriate. As you are aware, it is unlawful and potentially a contempt of the Senate for any party to attempt to influence evidence that would otherwise be given to this committee. It is also potentially an offence and a contempt of the Senate to give false or misleading evidence. Do you have any comments to make on the capacity in which you appear?

Mr Connor—Digital Tasmania is a consumer action group formed to get a better deal for Tasmanians in the digital world.

CHAIR—We have your submission, which is No. 18. Given that significant events have transpired since, firstly, the making of your earlier submission and, secondly, your appearance before us last time, is there anything you would like to say by way of opening comment?

Mr Connor—Yes there is. There indeed have been a number of changes since those last inputs were made. I am delighted to appear again before the committee. I hope to update you on the situation in Tasmania, reaffirm our key claims and provide supporting evidence of them, if you so desire. Our key claims are mentioned in our submission and have been further developed. They are that a roll-in, not a rollout, of the network should occur, which has been supported in conclusion 9 of your interim report; that a no disadvantage test apply to customers or current assets, which has been supported by conclusion 11; and that FTTP—that is, fibre to the premises—be the preferred deployment option, and I note conclusion 8 touches on this and suggests that the technological method of delivery should be broadened to facilitate areas where it is more appropriate to use others. That point is very valid, but we still feel that fibre to the premises should be a core rollout system in areas where it is definitely justified, and that would be in urban areas down to larger rural areas.

We are also supportive of the Tasmanian government's NBN proposal. Despite not a lot of details being released, we still feel that having the network owned and operated by a Tasmanian entity will ensure the best outcomes in servicing areas in a timely fashion and utilisation of existing resources owned by the state of Tasmania as well as providing not just a financial but also a social return to Tasmanian communities where others may not have that in their best interests. To give you a quick overview of the Tas broadband situation, the market is dominated by the incumbent. For interstate backhaul, intrastate distribution and customer access networks, its historical head start and monopoly position combined with Tasmania's mountainous geography and dispersed population has dissuaded competition almost entirely at the infrastructure level and hindered it severely at the service level. There is no cable TV infrastructure in Tasmania. Optus, the No.2 telco in Australia has never provided fixed broadband services in Tasmania and only in the latter part of 2008 has it upgraded its mobile network to 3G.

As an update since the last hearings, on November 11the state of Tasmania announced that a deal had been reached for the activation of the Basslink fibre optic cable that was made between the government and its GBE, Aurora Energy, and CitySpring, the owner of the Basslink cable. The deal will see two companies sell services on this route, Basslink and Aurora. As you may know, backhaul is a key roadblock to expansion of broadband in the state. The Basslink cable was installed over three years ago and we hope that it will now be active by April or May—that is, after thorough testing and equipment procurement, which has been a long step as well. But it is unfortunate that it did not happen three plus years ago or we would not be in such a dire situation in Tasmania. But since the Basslink announcement several ISPs have reconnected to Tasmania by announcing that they will increase their links and even build their own infrastructure in the state to take advantage of the lower pricing.

Also since the last hearing, some key ABS figures have been released on the household use of IT in Australia and this identifies that Tasmania is still severely lacking in those stakes. Broadband penetration is at just 39 per cent of homes compared to the national average of 52 per cent. In addition, household penetration of internet in general shows no increase over the previous year's figures and that is 56 per cent where the national average grew at three per cent. In the business area the latest data is a couple of years old but in the most recent years of 2005-06 business use of the internet or business connections to the internet actually fell in Tasmania. That was from 86 to 79 per cent, so that is more than just a statistical error. Also in the last month TASICT, which is a peak industry group for the IT industry in Tasmania, has released a couple of commissioned reports. They have found that poor broadband services are a hindrance to the digital economy in Tasmania. In the conclusion of one of the reports it also finds that it is a major differentiating weakness in the Tasmanian economy compared to others around the country because broadband is so weak and so poor there. We are supportive of the Tasmanian government's NBN proposal. It has some cross-party support and support from the TASICT group in principle. That is a recap of the last little while since we last met.

Senator LUNDY—I would like to follow up the developments with respect to the backhaul across Bass Strait. You said that several ISPs have announced a commitment on the back of that announcement that competitive backhaul rates will be able to be accessed by those companies. What sort of input are you getting from those ISPs about just how much of a financial incentive is created by virtue of competitive backhaul rates?

Mr Connor—Even before the announcement some ISPs had said to us and said publicly that the market would justify deployment of their infrastructure in Tasmania if not for the backhaul cost—as a general statement. But on the date of the launch Netspace announced that it would be deploying a lot of equipment in Tasmania and had already started down the track of deploying equipment. They noted that, despite the general lag for deploying ADSL equipment, which is up to six months per exchange, in Tasmania it is six to 12 months, because they are finding that they are the first non-Telstra entity into a lot of exchanges. That means there is a lot of extra cabling and earthing that needs to be done—a lot of ducting—to separate them from the Telstra network. That is an extra hindrance they are finding there in Tasmania.

Senator LUNDY—I presume you are talking about installing their DSLAMs into Telstra exchanges?

Mr Connor-Yes.

Senator LUNDY—I read with interest in the Telstra submission about the proportions of competitors' DSLAMs in exchanges compared with Telstra. Are you able to advise the committee on what proportion or indeed how many competitors have access to Telstra exchanges in Tasmania currently?

Mr Connor—Yes. At the moment it is two or three exchanges that offer services to consumers. There may be one that is only for business. It is very small number at the moment. The Netspace expansion is looking towards a dozen and possibly 20 exchanges to have equipped with ADSL DSLAMs.

Senator LUNDY—Theoretically, under the rules of competition, Telstra are supposed to provide access on reasonable terms to competitors to install their DSLAMs in exchanges. You said before that those ISPs are experiencing six- to 12-month delays in installing those DSLAMs. Why is that?

Mr Connor—Because of the extra ducting and connection requirements. I assume when another operator has gone into an exchange they build a separate set of infrastructure to supply them with services—power, earth, ducts—and that would be used then by other ISPs, other providers. But in a lot of exchanges in Tasmania there is simply no existing third-party infrastructure, and that is quite a setback.

Senator LUNDY—Did they anticipate that?

Mr Connor—I don't think they did, no. As you may be aware, the TEBA process is quite a lengthy one and is geared in favour of the provider of that service. There are a lot of roadblocks and a lot of key dates that have to be met. With the roadblocks, it is finding contractors that are qualified to do certain jobs, finding when they are available and when that suits the exchange operator to get that work performed. It is quite long time between each step in the process.

Senator LUNDY—It is quite instructive that that is the experience in Tasmania. We had a situation in Canberra, which I know some committee members would be familiar with. When all of the bureaucratic hurdles were leapt over or clawed through by TransACT, our broadband provider in Canberra, they turned up at the exchange only to find a new padlock on the gate, which forestalled the process for months again.

Mr Connor—Yes. There is also the issue with queuing in the TEBA process—only one operator can carry out works at a time. There is some justification for that: to know that any change that is made and causes a problem can be traced back to one operator. But all these contractors should be suitably experienced to provide a high level of service and not cause any additional faults to other equipment in the exchange when they are in there.

Senator LUNDY—One would think so. It would be instructive for everyone going through this process to keep detailed notes on every step of the process.

Mr Connor—Yes.

CHAIR—Mr Connor, you are talking about delays and contractors. Are you able to identify whether the delay that is being experienced is the result of contractors is down to workforce

issues—either shortage or lack of experienced personnel; is it funding; or is it, as I guess you have essentially been suggesting, more of a bureaucratic nature?

Mr Connor—I would say it is a combination of bureaucracy and then the staffing issue of finding those suitably qualified contractors to perform the work at the required step in the time line.

CHAIR—Is it a matter of whether those contractors have the workforces readily available to them? These are not one-man bands, are they?

Mr Connor—I believe that is the case.

CHAIR—Sorry, what is the case?

Mr Connor—It could come down to a one-man band operating as a sole contractor. He would be suitably qualified but, if he has other work on and cannot get in when the exchange is open, that would push the process back. With the funding, I imagine that the ISPs are probably budgeted for the complete deployment into that exchange. You are looking at \$50,000 to \$100,000 for an exchange. I am sure they would have factored in the cost of finding the appropriate staff to do that work, but it would still be a resourcing issue for that staff. That is my understanding of it.

Senator LUNDY—You mentioned that the IT industry had reported on the issue of broadband and its role in business innovation, business growth et cetera. Can you run through what the conclusions of that report were and, if possible, provide that report to the committee?

Mr Connor—Yes, I will provide it to the committee. It is from the TASICT industry group. They released two reports. The first one is the *Tasmanian ICT industry sector assessment report 2008*. The latter is the *Tasmanian ICT innovation and research report 2008*. Perhaps I could quote the appropriate conclusion regarding broadband from the latter report:

The Tasmanian ICT industry sector shares many of the same strengths and weaknesses, and some of the same opportunities, with the ICT industry sectors in other Australian States. The major differentiating weakness for Tasmania is inadequate and expensive broadband. It is encouraging, therefore to see the Tasmanian Government addressing this issue, both through supporting enhanced broadband competition, and ... potential involvement in the Australian Government National Broadband Network project.

...

ALGA claims Australia continues to lose a potential \$3.2 billion and 33,000 jobs due to poor broadband infrastructure. Some of this loss, of both revenue and jobs, would be in Tasmania. (estimated by CIIER—

the group compiling this report—

at \$6.4 million loss and nearly 700 jobs-

that are lost or not available because of poor broadband.

Senator LUNDY—Thanks for that. If you could provide both of those reports to the committee I think that would be useful and helpful for us. I am interested in some actual numbers about the nature of the existing infrastructure in Tasmania: the number of exchanges, the percentage of those that have Telstra DSLAMs installed and, if it is all of them, what percentage of customers emanating from a given exchange could in fact be connected via ADSL—that is, the ratio of ports per line within existing exchanges. Do you have access to that sort of information?

Mr Connor—I am afraid I do not have info on the specific number of consumers, particularly in the Tasmanian context. The internet service providers would have more detailed analysis of that. But I can generally advise that, as you get further from an exchange, the quality goes down and at a point you are no longer able to get an ADSL service. Some providers are able to extend the range of their service. Some have been very innovative and have got specifications ratified to provide that sort of service. But generally you are looking at four to five kilometres for a standard service or up to seven kilometres with some of the innovative providers. In Tasmania, as a recap, there are 205 exchanges, 136 of which have ADSL, 44 of which have ADSL2 infrastructure from the incumbent and only two to three of which have non-Telstra infrastructure.

Senator LUNDY—Only two of those?

Mr Connor—Two to three. It is hard to tell. There are different definitions of what is available. Since our last meeting, Internode has begun offering services over Telstra's ADSL2 infrastructure. That means it is available to those 44 exchanges where it previously was not available. If you look at the pricing between services provided over Telstra's infrastructure and those provided over Internode's infrastructure, there is quite a vast difference. For the same starter plan with 10 gigabytes per month on ADSL2+, over the Telstra infrastructure it is \$79 95 per month and over Internode's infrastructure it is \$49 95 per month. So there is a \$30 difference because it is provided over different infrastructure.

Senator LUNDY—These are Internode's own DSLAMs?

Mr Connor—Yes.

Senator LUNDY—They are not paying Telstra for wholesale?

Mr Connor—Correct. That is available at two of their exchanges in Tasmania through their own infrastructure and at an additional 42 through Telstra infrastructure. If you are in those couple of exchanges, you are getting a good deal; otherwise, you have to pay for that service.

Senator LUNDY—Is that Internode service the direct ADSL service, like iiNet's Naked ADSL? Is it without a line rental? Is that the cost differential?

Mr Connor—I believe you still need to have line rental for that.

Senator LUNDY—So they are still getting the price down to \$49?

Mr Connor—Forty-nine dollars off their own infrastructure is naked. Off the Telstra infrastructure, I believe you have to have a line rental.

CHAIR—What is the longevity of those sorts of offers? They could potentially be a loss leader for someone like Internode, could they not?

Mr Connor—Yes. Internode have a variety of plans, whether they are offered with a service, bundled or naked, or over their own infrastructure or Telstra Wholesale ADSL 1 or 2. I believe they wanted to get into this market so they have a bit of a foothold and can attract some customers for the day when they do have their own infrastructure in those exchanges—or simply to provide a national service. That is what we are taking advantage of in Tasmania. It is national pricing and it is quite lucky, but those ISPs are making a lot less off Tasmania than off clients in other states, almost to the point where they are not making anything at all. That has been justified by Internode publicly, and perhaps Netspace. Exetel have also claimed that they would not make money off services in Tasmania.

Senator LUNDY—With the 44 exchanges that have ADSL2+, has the recent announcement of the Basslink cable and Aurora being able to provide backhaul made a difference to the way in which Telstra are approaching additional provisioning of ADSL2+ in the other 160-odd exchanges they have in Tasmania?

Mr Connor—A thing to remember is that the cable is not yet active. ISPs have claimed that, when inquiring, they have not been able to get a firm activation date from the company, and that is hindering their plans. I believe that, without that push or incentive—without that spark—for competition, Telstra is still resting on its laurels, maintaining its existing services and not necessarily expanding them. There are reports you can find from Telstra Wholesale that show new exchange upgrades or expansion areas and, even nationally, that has been very quiet over the last six to nine months.

Senator LUNDY—Even with the demand growing?

Mr Connor-Yes.

Senator LUNDY—Even in the face of two ICT industry reports saying that Tasmania is losing potential growth to the tune of—what was it?

Mr Connor—\$6.4 million.

Senator LUNDY—Telstra have not moved, even though they essentially have a monopoly on that market?

Mr Connor—Yes. That is probably a nationally adjusted figure with just a percentage for Tasmania—

Senator LUNDY—I understand; you described how ALGA determined that figure.

Mr Connor—It could even be a higher amount than that, because the conditions for broadband and associated telco services are significantly worse in Tasmania. So Tasmania could be losing a higher figure than that.

Senator LUNDY—Is it a general consensus, then—certainly among the ICT sector but perhaps even the Tasmanian government—that Telstra's decisions on the lack of deployment of new broadband infrastructure is holding back the Tasmanian economy?

Mr Connor-It is not necessarily the deployment. It would be great to have it at every exchange-

Senator LUNDY—The nondeployment is what I am saying.

Mr Connor—There are 70-odd exchanges that do not have ADSL. Some of those are servicing very small numbers of people, but it would be great if they all had that coverage. There are 136 with ADSL at the moment. Over half of those were funded through HiBIS and other schemes—that is, they were paid for or highly subsidised by the government. Telstra may not have put them in without that subsidy, so we may be in a far worse situation if not for those subsidies in the past. You might have a situation where there are only 70 exchanges out of 200— or even fewer—with ADSL infrastructure in Tasmania if not for those subsidies. So the incumbent was given a handout to install those exchanges and they were able to profit from them.

Senator LUNDY—I understand. Still we see no investment at the front end driving greater broadband penetration despite all the economic indicators of what the benefit would be and arguably it would mean more return for the company.

Mr Connor—Correct.

Senator LUNDY—There is still no investment.

Mr Connor—Yes. But once Basslink comes on line we may see the market move overnight hopefully with back haul pricing, but in the residential space. Telstra have stated throughout this whole ordeal with Basslink that they offer the same prices in Tasmania as they do across the country, but that is on the retail side. It is the back haul side where the costs are up to 10 times higher for back haul into Tasmania than elsewhere in Australia. Time will tell what will happen.

Senator LUNDY—Hence the squeeze. Thank you very much.

Senator NASH—There has been a lot of comment around the regulatory environment and it has been put to the committee that that should have been established before the RFP process. Do you have a view on that?

Mr Connor—Yes. This does present a very good opportunity to change the regulatory environment in Australia. The RFP just appeared one day without a lot of input from the community and it would have been great for the community to have had input before that RFP was formed on exactly what the community wants and needs. That sort of process could have been taken on in the 2020 Summit or through a similar process to this or another request for information. It is disappointing that more input was not sought before the RFP was formulated and released. It does look at some regulatory issues but it is not very prescriptive, I think, in what is going to happen at the end. We may just see an announcement one day that, 'Bidder X has been chosen, these are the rules they are going to play by and we hope it passes the Senate.'

That is quite a big risk to take. It may not pass or the outcome may not be so great that those regulatory rules are in the best interest of everyone in Australia. Regulatory issues are a very important matter in this whole NBN ordeal, and more public consultation would have been a vast improvement over the current situation.

Senator NASH—Do you think it would have led to more appropriate bids if they had known the kind of regulatory environment they were going to be operating in at the other end?

Mr Connor—Yes. I imagine it is difficult for a bidder to formulate a bid when there is one document to go on and questions may or may not be answered about that process.

Senator NASH—You mentioned in your submission getting the regulatory environment right and you also say that 'the wrong framework could see massive waste' and so on. How would you describe what you see as the wrong framework?

Mr Connor—That would perhaps be where existing infrastructure is nationalised to some degree and infrastructure already installed by the state government in Tasmania is then underutilised or sidelined by continued use of existing infrastructure or yet another set of infrastructure. If it is determined that all infrastructure must be brand new for this NBN, that is perhaps a little out of sight. But we hope some common sense prevails and that the regulatory environment takes into account existing assets and definitely the interests of the customer and businesses.

Senator NASH—You also mention fibre to the premises as being your preferred option. There has been a lot of comment around what some people see as the prohibitive cost of that. Do you have a view about the cost of doing fibre to the premises, how it would work and where that funding would come from? Why do you see that as having a greater benefit than just fibre to the node?

Mr Connor—Certainly it may cost a little more, but in some cases it has been found to be cheaper to roll out fibre to the premises than copper to the premises in greenfields estates. There are a number of housing developments, notably in Brisbane, that are about to receive fibre to the premises as their telecommunications connection. There is currently a trial in Tasmania called TasCOLT, and that is connecting fibre to the premises in certain areas of Hobart and Burnie. That is being done in conjunction with the state government and the energy provider who has the right of way on the poles. We are yet to see the full outcome of that proposal but they have been using a rather innovative method of connection there in that all of the infrastructure or the cabling is prefabricated—that is, preterminated in a factory—and then the appropriate lengths are installed where necessary. It is more like a plug-and-play network than one where you have to splice and dice connections in the field. So it greatly speeds up the deployment of the network and there is a vast saving in the manpower required to put out that network.

Senator NASH—In your submission you talk about one of the fibre trials that has connections to the premises via overhead power poles and lines. Several years ago this was flagged as one way of delivering fibre, and it was almost cast aside at that stage as something that could not possibly be done and was really pie in the sky sort of stuff. How is it actually working?

Mr Connor—I believe it is working pretty well there. There was a long lead time in getting the project to a build stage, but I believe that was to do with planning processes. But we believe that it has gone up pretty well. It would be good if they did release a report on how their trial is going, and we will certainly seek that sort of information from that operator.

Senator NASH—When are you expecting a report on that?

Mr Connor—That is unclear. This project has been going for quite a while. I think it dates back to 2005 or even to 2003. It has been delayed along the way, but it is offering a multitude of services over the one connection: broadband internet, phone, video conferencing, videos on demand and the digital television channels that are available off air that are also available off the cable as well. So there are a whole plethora of services available through that one connection.

Senator NASH—Now that Telstra is not a bidder, they are obviously not going to be in a position to be a successful proponent. Whoever is successful is, however, going to need access to that last piece between the node and the home. Do you have a view on how that should operate—how access would be provided? Are there any hurdles you can see occurring, given that Telstra owns the infrastructure?

Mr Connor—If it is provided on a fibre-to-the-node basis, where there is copper for the last mile, there are problems. Copper is a decaying infrastructure in Australia and we can see that there are a lot of faults on Telstra services that often cut people off for days—and this is during normal operation, not through disaster. That is the reason why fibre to the premises is a good idea, because that last mile of copper infrastructure, which we may be relying on for our NBN, is decaying and it will need upgrading—and that is a cost that needs to be factored into any NBN proposal. So a new fibre network would obviate the problem. But if an operator were to use existing copper in that last mile, there are problems of stranding services. The customer might be quite happy on a certain service of 20 megabits but, if they are then cut off from that service, the ISP has got their customer disconnected and they are stranded and the customer may be forced onto a more expensive plan or service that does not really suit their needs or is simply beyond their budget. So they are some of the risks that we may be facing. I cannot speak in too much depth about the technical limitations, but there may be possibilities for an NBN to coexist with existing ADSL services beyond the node, and I am sure that you have heard from other witnesses that can speak about that idea.

Senator IAN MACDONALD—The fibre to the premises cannot go to every premises in Tasmania. If your wishes were to be realised, what percentage of Tasmanians could possibly get fibre to the premises, and what do you do for the others?

Mr Connor—If you are looking at towns with, say, more than 30 residences, it may be then economical—or with a subsidy feasible—to install that fibre to the premises solution. That may cover about 90 per cent of the homes in Tasmania.

Senator IAN MACDONALD—Ninety per cent?

Mr Connor—Perhaps 90 per cent. Tasmania has a very dispersed population and very rugged terrain and I am sure some of the bidders have put forward their suggestions for coverage in those areas. We believe those that are in the black spots will be just beyond the reach of even a

highly-subsidised connection where that is impractical. They still need the option of a satellite connection or a high-capacity wireless connection if they do have line of sight to an appropriate place. One of the suggestions we have been making is that existing state infrastructure—police radio towers, there are 65 of them across Tasmania; hydro corporation communications towers that are used to control the network, there are perhaps 50 or 60-plus of those—can be used to relay the network out to the communities and then service a customer access network to reach into the last pockets of the community and to serve them with at least some sort of service under the National Broadband Network.

Senator IAN MACDONALD—That leads me onto the other question. Can you repeat for me how the state government's \$60 million for the provision of fibre optic networking fits in with whoever gets the NBN contract?

Mr Connor—\$60 million is a figure that comprises their commitments over the last five to six years for buying and maintaining fibre networks in Tasmania and Basslink. They bought a fibre network from a gas company. The fibre was laid with the gas pipeline, 420 kilometres of it. That was about \$25 million and I think that was because that company did not have any intentions to use it. That was a good investment in a way. The other large amount of that figure is what was seen as the projected rent on Basslink of \$2 million a year plus inflation over 15 years. That is how we arrived at a figure of about \$60 million.

Senator IAN MACDONALD—Who owns that, who operates it and how does it fit in?

Mr Connor—The on-island part of it is owned by the state of Tasmania and is operated by Aurora Energy through their Aurora telecommunications arm.

Senator IAN MACDONALD—At a fee. They make money out of it.

Mr Connor—They are a government business enterprise. They are in it for a profit but because their shareholder is the government we hope that they have a social responsibility to provide at a reasonable rate to the community or to companies servicing the community so that we can bridge the tyranny of distance in Tasmania and escape the monopoly situation that exists at the moment. The Basslink component of that commitment is owned by a foreign company, but Tasmania has a deal to have access to that cable for at least 15 years. We are yet to see the details of that deal and we may never see it because of commercial reasons but it would be nice to know what sort of commitment we do have.

Senator IAN MACDONALD—Is Aurora running the service?

Mr Connor—They are charged with running maintenance and the running of this service basically from Melbourne to points in Tasmania. We hope that infrastructure can be utilised for the National Broadband Network to avoid duplication of it so a return is made back to the Tasmanian economy from that infrastructure.

Senator IAN MACDONALD—There were rumours around—I do not think we actually got evidence of it—that, before the bids closed, one of the prospective bidders might have included the Tasmanian government or an enterprise of the Tasmanian government as part of the

consortium. Can you comment on that at all? Is that still possible? Is it public, first of all, or is it only rumour?

Mr Connor—I am afraid I am not aware of that. I am sure the RFP does allow for state bids to be combined with other bids where appropriate, but I am not familiar with that situation.

Senator IAN MACDONALD—Could it work?

Mr Connor—I am sure it can work. It is good that it would be a Tasmanian component of a national network even in a consortium because we would have the direct line of communication to those in charge of that part of the network. So our communities that are majorly disadvantaged at the moment can go to the state government and, through their business enterprise and their part of the consortium, can have input into servicing that community in a timely fashion.

Senator IAN MACDONALD—The NBN is going to be 'subsidised'—in inverted commas by the federal government. The Tasmanian government is obviously a subsidising player as well at the present time and would continue to be.

Mr Connor—They have made that \$60 million investment so far, and I believe the commitment for their share of an NBN may be very large—perhaps in the order of \$100 million. In these tight financial times, that may be hard to come by, but it really is something that needs to be considered. It will be spread over five years. Things might pick up.

Senator IAN MACDONALD—Are you just speculating on that or has there been talk about that?

Mr Connor—The \$100 million figure?

Senator IAN MACDONALD—Yes.

Mr Connor—That is my calculation of a Tasmanian percentage of the national network, plus a little more for the added difficulty in Tasmania, where the population is spread out, and the inclusion of a fourth cable across Bass Strait. That will be a second, independent cable to provide redundancy so that a single-cable failure would not cut off the whole state.

Senator IAN MACDONALD—Thanks.

CHAIR—Mr Connor, I have one final question. In your answers to Senator Macdonald you talked about expectations of social responsibility in the context of Aurora. How do you see social responsibility being acted out in the context of the federal government's promises re the NBN and the current terms of the tender process?

Mr Connor—The RFP does state that the network should be formed and priced with the interests of the consumer at heart, and this committee—

CHAIR—My question is more about the practical panning out of that, given your experience in Tas.

Mr Connor—Yes. It may come back to access disputes from access-seekers onto the NBN. It may come from consumers who are just disgruntled with the service they are receiving through pricing or availability. We really do not know what the appeals mechanisms are going to be for those sorts of complaints. It may be through the ACCC, or whatever entity the NBN is administered by or formed under. That may be the department of communications or some other authority. It is really unclear at this stage how customers can seek recourse to get the service they need, and that is perhaps something that should be clarified at the time of the announcement of the successful NBN bidder.

CHAIR—Or, indeed, for some of them, how to become a customer for the first time perhaps.

Mr Connor—Yes.

CHAIR—Thank you very much, Mr Connor.

Mr Connor—Thank you, Senators.

[9.47 am]

GREEN, Professor Walter Battman, Director, Communications Experts Group Pty Ltd

CHAIR—The committee now looks forward to hearing from Professor Walter Green from the Communications Expert Group. Welcome, Professor Green. As you are aware the committee proceedings are public. If at any stage you wish to provide your evidence in private or in camera, please make your request and the committee will consider it and the grounds upon which you wish to do so. It is an offence and potentially a contempt of the Senate for anyone to attempt to influence a witness who is providing evidence to this committee, as it is also potentially an offence to give false or misleading evidence to the committee. Professor Green, do you have any comments to make on the capacity in which you appear?

Prof. Green—I am a Director of ATUG and Director of Communications Experts Group.

CHAIR—Thank you. We have both your submission and your supplementary submission, which is No. 31 in terms of our internal workings. Is there anything you would like to say by way of opening statement, given some developments since we last had the pleasure of hearing from you?

Prof. Green—Yes, I have a few new items as a result of research work that I have carried out, plus there are a few statements that have been made by others at this committee that I wish to draw on and emphasise their focus. The first is that, looking at your terms of reference, the benefits of broadband and future directions, we have now had the submissions for the 2008 Western Australian ITT awards come through and I have also had my colleagues in the British Computer Society in the UK. It is particularly focusing on how companies are using broadband. The most important thing that has come out that will impact the way in which I believe the NBN should be evaluated is that there is a growing number of companies, particularly small companies, that now collaborate in order to deliver a project. This methodology has been well used in the film and the defence industries, but we are now seeing it grow. Typically, we have one project for which the part of the design work is being done in Perth, involving 10 people, the second part of the design work is being done in Silicon Valley and the manufacturing or production is being done in Bunbury. The traffic that is flowing between these is quite considerable.

The common thread that has come out from the entry in the UK plus this company in Perth is that video conferencing is a key method of collaboration. Even though they are using the best practices, as described in the ATUG news—we try to advise and inform our members how to best use equipment—video conferencing is fine for ordinary meetings, but if you are having an interactive whiteboard discussion, video conferencing on its own falls down, even with the best use of world best practices. At the moment, the only solution that seems to be coming through is that you now have multiple video conferencing streams. In other words, you are not only looking at the people you are also looking at the whiteboard and you are looking at the data that is actually on the computers. Now, this application does not exist, so the new requirement is that the NBN, if we are going to get the benefit of this collaborative technique—and I might add that

it would particularly benefit Tasmania—needs to support multiple video conferencing streams in both directions simultaneously. So it is quite a big step up from the past.

The other thing that is coming in, and which has particularly come out of the WAITTA submissions this year, is that particularly in Perth there are a number of companies that are developing broadband applications and all of them have come back with the comment that they have had to modify or restrict their product or service they are offering because of the poor broadband in Australia. They have had to reduce the number of features and the effectiveness of their product, which in turn has caused some problems in them exporting or capturing markets overseas. But the important thing that the committee ought to note is that services and products that use real broadband—assuming that we have proper broadband—are being developed and deployed in Australia right now. So it is not like we will build a network and people will come; the people are already building the stuff that they need.

The second point-and one I would like to come back to-is one that has caused considerable debate. I believe that we should look at the business model of how the NBN should look and operate not next year but five or six years, possibly 10 years, into the future. What is coming out-and it is just about confirmed in the research industry-is that the needs of different customers or sectors of the community for networks can be broadly categorised in security. For example, your health network: you need high levels of security to protect confidential patient data, whereas if it is an internet network there is very little or no security. The second criterion is performance, which includes things like bandwidth. But there are other parameters that will influence and affect the ability to transmit video conferencing, IPTV and so forth. Thirdly is reliability. Again, if an internet connection to a home goes down, it can be serious, but if it goes down to a business then you need much higher reliability. It is worth noting that Amcom's high capacity broadband connections in Australia-that is, the one gigabit and the ten gigabit connections—are all fully duplicated. In other words, you cannot buy them without duplication. They have realised that when you buy that kind of capacity for your applications, you cannot afford to have it go down. When we talk about reliability, those are high reliability services and people are paying for them. In fact, the reason they took that path in the design was because that is what their customers were asking for.

Coming back to how our NBN should work, the business model, or what would be a successful NBN, is where retailers are responsible for determining the security, the performance and the reliability. What the retailers need to be able to do is buy point-to-point links and then to aggregate those point-to-point links plus their specialised switching and termination equipment, to build a network that meets their customers' needs. If you allow the monopoly carrier, and this could be in various forms, to do the aggregation of costs, you actually take away a considerable incentive for innovation and competition at the retail level. If you ask what a successful NBN would look like it would be one where, if I were a retailer, I could buy the individual point to point links and pay for those on an individual basis so that I could build the network I want, be it a health network, a power control network, or an energy-saving network—they all have different requirements. People underestimate the power control network where the timing and the requirements are incredible but they have to be for the various safety requirements. This is why the power networks like Western Power have built their own fibre network throughout Western Australia simply because you cannot buy the required level of service from the carriers. I wish to reiterate that the point to point links that a person buys should not be dependent on any quality of

service or protocol restriction. It should be a vanilla transfer of an intranet packet from one end to the other with no interference in terms of any other protocols.

CHAIR—Sorry, Professor Green, it sounded like you said a vanilla transfer?

Prof. Green—The way the internet works is to break the information into packets and it is the successful transmission of a packet from one point to the other. Now there are well-defined standards for the transmission of packets from point A to point B. Where the monopoly carriers, or can I say the incumbents, are starting to manipulate and put other people out of business is that they are adding additional protocols, controls and proprietary solutions on top. They are not just transmitting the packet, they are saying, 'We will tell you when your packet can go.' They actually have the ability then to throw the packet away and not send it at all. There is a very strong anti-competitive component in allowing the monopoly carrier or monopoly provider be it NBN or the incumbent, if they are allowed, to implement or propose this quality of service and alternative routing protocols. They should be restricted to simply transmitting a packet from A to B without any interference.

CHAIR—So you did say vanilla transfer?

Prof. Green—Vanilla, basic, low-level transfer. There are various technical terms but I am trying to keep it simple.

CHAIR—And we are contemplating neapolitan or something are we?

Prof. Green—No, I am saying keep it simple. The neapolitan is when the monopoly carrier can in fact kill off competition and innovation. We must keep it as basic as possible. Secondly, I believe the business model that I am proposing will allow one or more NBN builders and operators to work because retailers will simply buy the point to point links they require from the different operators. They can then aggregate the costs using the business model that they believe best suits their business model. If you allow your monopoly provider to do the aggregation, you then have all the problems that we have with the current legislation.

Just to clarify one point, these point to point links are both the link from the node to the customer which is one area of contention and also the links from the node to the capital cities and inter capital city networks. They can buy whatever they need to build their network and aggregate their traffic at the points that they wish to. This will create the competition and innovation. It will also remove a significant regulatory issue that will need to be dealt with by the government. The second point in terms of public policy goals is that, while much has been said about fibre to the premises, wiMAX and ADSL2, the provider or the NBN should be allowed to use a combination of all technologies. However, regarding greenfield sites, I have been involved in a number of projects where we found it cheaper to provide fibre to the premises in residential estates. We have been doing this for more than four years in Western Australia. The last count I had was that 15,000 homes now have fibre to the premises in WA.

Much has been said about copper wire. There is new technology. It is just out of the research phase and is currently in the phase of looking at which implementation method is going to suit the real environment instead of in the laboratory. This is capable right now of providing more than 100 megabits up to four kilometres and has the potential to go to a gigabit, and that is using

copper wire. Bear in mind, some of the copper wire in Australia is old and will not be suitable, but there certainly is significant new copper wire that in fact will support this new technology. It does not have a name. I call it the 'gigabit DSL'. My estimate is that copper is going to be an important part of the NBN for the next 20 years as there is a phased rollout from copper to fibre.

Going back to that point, the interface between the node and the copper wire currently owned by Telstra is in fact a fairly simple technical interface to deal with. It is a matter for the ACCC and whatever the government comes up with in determining how that interface is to be implemented. It is not the big-deal, complicated issue that people look at. I might add, there is the success of the likes of the people in Tasmania we just heard from, but with iiNet getting access to the bare copper to deliver their naked DSL and all the rest of it has proven that the problem can be overcome. However, what we need to do is ensure is that all greenfield sites or new estates or refurbishing of estates go to fibre to the premises. One thing that I still regret we could not do, referring to the Cocos Islands, is when we were engaged to develop or provide the design for the telecentre there. We identified an opportunity when there was an upgrade to the sewage networks: the trench was both big enough and suitable to put all the conduits in to give fibre to the premises at the Cocos Islands for a very marginal cost. It was less than five per cent of the total sewage upgrade project. That would have given them at that time—this was quite a few years ago—a copper network of 100 megabits to the premises at the Cocos Islands.

Senator NASH—Why did that not happen?

Prof. Green—There was no will and the government was not prepared to put in the money to do it. In WA we have proven that if you can put it in as you do an upgrade—to pavements, sewerage, water works, power—only five to seven per cent is the cost of installing fibre to the premises. I do not believe this methodology has been taken into account in a lot of the cost estimates for: what is the NBN going to cost?

Senator IAN MACDONALD—When was that not done at the Cocos, just as a matter of curiosity?

Senator MINCHIN—Was it when you were a minister?

CHAIR—Do you want to declare an interest, Senator?

Prof. Green—I would have to look up the files on that, but it was about five years ago. It cost somewhere between \$70,000 and \$100,000 to do it.

Senator IAN MACDONALD—I had an interest in Cocos. It would have been fabulous for that very small community and would have brought them into the world. It seems ridiculous that it was not done.

Prof. Green—The reason we proposed this approach is that the cost of the satellite link from the Cocos is expensive, and for the telecentre to operate and be the only operator they basically needed federal support to continue operation. However, if you brought in the entire community and got them to share that link, they would have had higher capacity at a much lower cost. The whole project would then have become viable. We are talking about five years ago on satellite.

Senator IAN MACDONALD—They should have paid for it out of their domain name sales.

Prof. Green—We did, in fact, follow that particular opportunity, but the incumbent manager of the domain name was not interested. It was also the fact that it was an upgrade to the network. It was more the government issue that actually blocked it.

CHAIR—Continue, Professor Green.

Senator IAN MACDONALD—Sorry, that was a diversion.

Prof. Green—I have one more point. Another thing on the NBN was a statement made by Art Price of Axia which is particularly relevant to the thinking. He says that the needs of the NBN to survive should be based on the success of its customers. This is also built into the policy of long-term interests of end users. Ever since the day of the very early telephone networks, it has been known that for a carrier to succeed they need to get as many customers as they can and to encourage and have as much traffic on their network as they can. With the charter, the regulatory issues or the submissions from the various NBN bidders, higher preference should be given to those whose focus is to try and do exactly that. At the moment we have a carrier who is prepared to cut off services or not deliver services—that is, work against the benefit of the community and also the cashflow. They use their monopoly status to, in fact, extract their profits. If you talk to the engineers in REACH, they say that, now that they have got rid of the marketing people and can focus on connecting customers and growing traffic, they have had growth and efficiencies in their network that were unimaginable before under the monopoly arrangement. In fact, it is also the improvement in the efficiency of the use of your infrastructure, which given the structural separation option is another outcome that is beneficial.

The other thing I am going to say is that, in terms of cost estimates, there have been so many discussions and debates. Having been involved in looking at cost models, I say that in fact the fundamental flaw in the Australian legislation at the moment is that we cannot build a legally sustainable economic model to work out prices. If you ask the simple question, 'What is the average cost of digging a trench for communications in Australia?' no figure can be agreed on, yet that is a fundamental—80 per cent—cost input to providing communications. It is simply because of the issue of aggregation. There have also been requests that we move to a value model. If you cannot work out costs, value, which is a subjective issue, will allow greater opportunity for gaming, delaying and price manipulation, and all the problems that were discussed by Andrew from Digital Tasmania will simply get worse. That is one outcome that I recommend be blocked at all costs.

The last issue I have, which was also raised by Andrew, is that you have a problem when you are implementing a network and connecting customers. He has talked about the changes in locks, the technicians not being available and how for some vague, arbitrary reason you are not allowed to dig your trench here even though it might be cheaper and quite possible. With the construction of the NBN, there is going to be a significant grey area between the requirements for single access, which is important for control, to those requirements which are imposed purely because of obstruction to delay or deny. There are a whole range of issues in between, which I call the grey issues. ATUG has argued that a mediator—they have used the term 'NBN Australia'—is required to deal with the day-to-day interconnection issues that will occur. Bear in mind that NBN, if it is going to be successful, will be working with a number of carriers, not just Telstra. It

will probably be working with iiNet, Digital Tasmania, Amcom and Nextgen. If there are these grey access interconnection issues then it is important that the government establish a mediator who has the authority to issue a quick resolution to the issue—in other words, that it be the case that, if they turn up at a Telstra exchange where the locks have been changed, these people have the authority to implement a fine, charge a cost or do whatever else is necessary to make sure that the NBN is not adversely affected. At the moment we do not have that.

It would also be beneficial for the committee to ask the Australian Communications and Media Authority what the current process is for porting an ADSL customer from one carrier to the next. The same problems were outlined by Andrew from Digital Tasmania, where in Tasmania there are a six-week delay and all sorts of other complications. One lady in Perth who moved a hundred metres up the street lost her ADSL service because she crossed some boundary. It took her six months before she could get her internet service back. Those are the points which I wish to emphasise. Thank you.

CHAIR—On the back of those not-at-all provocative and not-at-all controversial statements, I will ask Senator Nash to ask you some questions.

Senator NASH—Thanks, Chair. Can we go to the section in your submission around the access to the last mile network? I noted earlier that you said that the link from the node to the customer is an area of contention. Can you outline what you see as those areas of contention?

Prof. Green—It is the access price and it is the current problems that the non-Telstra ADSL providers have in getting to that copper. There are a number of valid technical restrictions, like when the cables fail. Cable pairs do go down in a cable, so it is a case of getting adequate quality cables. We have the situation in three ISPs in Australia that the way to get a person on ADSL is to get them to sign up with BigPond, get the connection with BigPond and then swap it onto their network. When the customer tried to buy it direct from these ISPs in the first place, it was not available.

Senator LUNDY—Is that with respect to the number of DSLAMs or ports available in the exchange, or is that in reference specifically to the way Telstra manage their mini ADSL ports—**Prof. Green**—It is access to adequate quality copper. Nothing else is involved.

Senator LUNDY—So you are saying it has nothing to do with the actual ports available for ADSL and everything to do with the quality of the copper in the ground.

Prof. Green—Correct.

Senator LUNDY—Who knows what the quality of the copper in the ground is?

Prof. Green—Unfortunately Telstra does.

Senator LUNDY—Does anyone else know the quality of the copper in the ground?

Prof. Green—There are enough ex-Telstra technicians who have a good idea what the quality is.

Senator LUNDY—But officially who can test the quality of the copper for the purposes of determining whether an ADSL connection is possible and of sufficient quality to sustain?

Prof. Green—Anybody can, providing they can get permission to get access to the frame.

Senator LUNDY—And who do they have to get permission from?

Prof. Green—Telstra.

Senator LUNDY—Thank you.

Prof. Green—This is one of the issues where I am saying the mediator should have the legal power to say: 'This is the solution. They will be given access,' and so forth.

Senator LUNDY—You are spot-on in making the point, as is Senator Nash, that determining the quality of the copper does require a test. I too have experienced quite arbitrary decision making, particularly when front-of-house in Telstra has a database which determines the distance from the exchange by virtue of that database. Individual testing, if you can get a technician who can do it, can often extend ADSL beyond that radial point from the exchange and indeed introduce all kinds of other factors. Fatter copper in older areas can extend the ADSL service beyond the distance that Telstra claims it is restricted by.

Prof. Green—All I can say is: keep going and, yes, that is exactly the situation. People believe that a copper cable deteriorates uniformly. The answer is, no, it does not. The outer cables do have a faster rate of decay than those in the centre. It depends whether there are cracks. There are quite a wide range of voracious insects that love eating copper cables as well. You have probably heard of the Christmas tree problem. That is very good—its roots crush the copper. All those things affect the quality of the copper.

Senator LUNDY—Sorry to keep going with this, but one of the problems that has often been discussed is attenuation with respect to bundles of copper and limitations on the number of ADSL services that can be delivered through any given bundle of copper pairs. How are those restrictions addressed and what restraint does that place on the number of ADSL services that can be provided through a given physical bundle of copper pairs emanating from an exchange or, indeed, a pole?

Prof. Green—There are restrictions but they literally depend on the materials used in the cable and the way the cables are twisted. The advantage of this gigabit DSL is that people have looked at the disadvantages of copper and then turned those disadvantages to their advantage. As a copper cable deteriorates, they can in fact put on this gigabit DSL technology, which will overcome a lot of the restrictions and extend the range. But all the problems of access and testing are more critical for the gigabit technology than for ADSL. I see this mediator as a key success factor in getting the NBN to deliver the results for the community.

Senator NASH—It is a really good point that you raise about the mediator actually, and it has not been brought up before the committee before as a suggestion. This is, as we see it, one of the key areas. If you have fibre to the node and Telstra is no longer a prospective carrier for the NBN, apart from the mediator, are there ways to overcome the difficulties of testing the copper?

I suppose in practicality, in layman's terms, if you have got somebody who has fibre to the node and they do not know what the quality of the copper is from the node to the home, how do they plan to roll their service out right to the home?

Prof. Green—In the past we had ACIF, which developed standards for dealing with the technical interface and customer things like how you move a subscriber from one carrier to the next and so forth. These processes are reasonably well known and reasonably well defined. They need to be codified and enforced.

Senator NASH—How do you see the best way of enforcing those? I note that earlier you said in relation to the mediator that there should be some sort of fine or cost, but what is going to be an appropriate mechanism, if you like, to ensure that if the mediator determined there was a certain course of action that was necessary to ensure that the impost would be of a certain level that would make the provider play the game?

Prof. Green—The threat of structural separation—in other words, much along the same lines as in New Zealand and in a few other countries. Secondly, at the moment we have what I call half a model, in that ACIF used to prepare a standard which the ACMA would then say was acceptable, but those standards were totally irrelevant until such time as the carrier agreed to comply with them. We need a stronger enforcement, in that once that standard is approved then a condition of licence is that the carrier is obliged to carry out with it and there are penalties for not doing so. In the implementation of the NBN, there is going to be that clear-cut case and penalties will need to be applied, but there are a wide range of grey issues in that the carrier can legitimately say, 'The pole is full and you want to connect another 10 pairs; where am I going to connect them?' In this case, that is where the mediator and the inspectors that they will have in the various sites can work out an acceptable solution. There will be a case-by-case need, and at the moment that whole mechanism does not exist. My belief, and it is based on my experience, is that if you do not have that mediation plus the ability to deal with it case by case you are going to have great problems delivering the NBN.

Senator NASH—The whole NBN process then, as a result of what you have mentioned, is flying a bit blind really.

Prof. Green—At the moment it is flying blind, but implement the appropriate policy. And I say this: NBN Australia should be part of the policy decision. In other words, do not try to mandate the technical solution yourself; put in place a legally constituted body with the role of mediation and with legal powers and leave NBN and Telstra to negotiate how they are going to deliver that solution. To me, this is where there is a huge fuss about a fairly straightforward problem. The mediator environment could in fact eliminate a lot of those problems.

Senator NASH—It is a very good suggestion.

Prof. Green—By the way, it is not only going to happen with Telstra. I have had to deal with some of the smaller carriers, and in some instances they can in fact be far worse than Telstra. I am not just knocking Telstra—

Senator NASH—There is more than one baddie out there.

Prof. Green—Yes. I am saying I have had experience with carriers.

CHAIR—Rogue.

Senator NASH—Rogue, I should say. Through a number of the submissions and in a lot of the discussion there has been a view that there should be structural separation. I notice that you touch on that in your submission as well. Could you outline your views? I think you said structural separation is beneficial?

Prof. Green—I was the chief engineer in the Rhodesian telecom, so I know what a carrier looks like and I know how the marketing team behave. The big problem is that when you aggregate the costs you can effectively use that to manipulate prices in your favour. It is a case of your model versus somebody else's model. Structural separation gets rid of that tension because the retailer is then responsible for aggregating the costs, and different retailers have different business models. This is why I said selling the point-to-point, individual links should be the core component. And you can only do that when you have it structurally separated. The second benefit—and this only came out since the last submission—is that when you have something structurally separated you actually get better and more efficient use of your infrastructure, because the provider is not dealing with customers; he is dealing with the retailers. All he needs to survive then is to focus on getting as many customers as possible and as much traffic. That is the successful business model.

Senator MINCHIN—I want to come back to the NBN mediator. This is a central point, given that, although their submission is not even being considered, Telstra own the copper from the node to the home and somebody else is going to install the fibre. It is a crucial problem and yours is one solution. Presumably you are proposing a new institution, separate and apart from the ACCC? You are not suggesting that the ACCC could perform this role or that it could be a subset of the ACCC? Are you deliberately saying it should be quite separate from the ACCC?

Prof. Green—I am saying that, if you look at the ACCC's charter or area of focus, NBN Australia should not be under the ACCC. A more logical place would be under the ACMA, as a subsection, because they are responsible for administering and approving the standards. At the moment they need a team to ensure that those standards are implemented effectively. Then, as I said, there is a whole grey area where you do need the case-by-case solution. Those two duties can be effectively combined in the same group. The other option is to have it as a completely stand-alone entity. The reason I have given it that name is that it is a mediator. Again, my preference is a subgroup of ACMA, and its role would be the enforcement and implementation of accrued standards.

Senator MINCHIN—It is not simply a mediator, is it? It is an arbitrator.

Prof. Green—'Mediator', 'arbitrator'—you can—

Senator MINCHIN—A mediator seeks to resolve disputes amicably; an arbitrator has to make a final decision when resolution cannot be achieved.

Prof. Green—Right. In that case you would probably have two sections to it. One would be the mediation section. In other words: can we get a simple solution? I believe that in a lot of

cases in fact that can be accommodated. There will be some that will go to full dispute, and that is when you want some kind of arbitration.

Senator MINCHIN—And that would be the same body?

Prof. Green—Either the same body or the current telecom tribunal within ACMA.

CHAIR—And there is a subsequent question, because you have also talked about fines and the ability to enforce. So should that body have mediation, arbitration and enforcement within one organisation? That may raise some legal issues.

Prof. Green—Okay. This is where the argument is: what is the best structure? Because you do have the different roles, and they need to be provided for in the legislation. So it might be that the mediation is done by somebody else and the arbitration is done by the ACMA. This is where, from a legal point of view—and I am not a lawyer—that, I believe, can be sorted out. But the concept is that you will need both of those to enforce the standards.

CHAIR—Who and where and how, I suppose, are somewhat academic to your core message, which is that you need this institution, wherever it is, but can you clarify a little more what you think should be the goal, if you like, that this institution would be trying to achieve. For example, to use Senator Minchin's question about the ACCC, their mission is to protect competition and they do it in a range of ways. So is the aim of this institution, for example, as you said earlier, to mediate and arbitrate on the rules or the standards, or would it be a higher level goal—perhaps to mediate, arbitrate and see to enforcement to ensure that there is competition in this particular sector? What would be the higher level goal of this institution?

Prof. Green—The focus here is on the coalface. In other words, you have an inspector who has enough knowledge to go out to an exchange or a pole and then work out a particular solution for that particular network. So we are dealing with the day-to-day, coalface issues, not the high-level issues of competition. It is more to ensure that timely and fair solutions for building the NBN become available. At the moment there are too many opportunities for that to be delayed. We have had so many people in this Senate committee describing how they get delayed and denied and degraded service and so forth. To get the benefits of the NBN, as I say, we need a mediator who can deal with coalface issues, who has technical competence rather than economic type competence. We are not really dealing with prices. It is: 'I want to connect my 10 pairs of cable to the pole; I can't do it because of various arbitrary things. Sit down and come up with a solution.' There are a range of possible problems, and I believe a lot of them will be solved by this mediation role; not that many will go to formal arbitration.

CHAIR—Mediators in other areas do not necessarily have expertise in the subject matter on which they mediate. They are skilled at bringing together a meeting of the minds of the warring parties, as it were. But you are contemplating that the mediators within this organisation would have particular skills in communications, are you?

Prof. Green—Yes. Skills in building and operating telecoms infrastructure will be critical to this mediator role, yes, simply because they are, as I say, working at the coalface rather than on the high-level issues.

Senator MINCHIN—Just quickly, on a couple of the other points you made. Many are critical of the government policy being fibre to the node. Many are saying that is in the interim. It should be fibre to the premises. You said in your evidence that new estates must go to fibre to the premises. What did you mean by that? Did you mean that the government should require that—that the developer or whatever cannot have a copper solution; by law they must install fibre?

Prof. Green—This is where we need to change the legislation. At the moment, for the universal service obligation, a copper cable must be installed. Now, to me, that needs to be changed in that if it is a new estate—

Senator MINCHIN—Okay.

Prof. Green—you will put in fibre.

Senator MINCHIN—Under the USO?

Prof. Green—Under the USO.

Senator MINCHIN—Okay. Am I misinterpreting what you are saying, or are you saying that is cheaper?

Prof. Green—Yes. We have proven it is much cheaper. Art Price said that there are many ways to put in fibre. When we did our first benchmark studies, we thought it would cost \$X. But when you are at the coalface actually putting the fibre in, even designing the layout of the cables can increase your costs quite dramatically, in ways that you would not expect. But there are new technologies. We very quickly found out, putting in the conduits and using the newer technology's fibres, that it became cheaper to do that than try and handle with the copper, simply because, as I say, they are new devices, the techniques for joining the fibres together, the fusion technology, is all well sorted out, and the beauty is that one fibre gives you your TV, internet, email, videoconferencing and everything, at a range of 20 kilometres.

Senator MINCHIN—So why is copper still being installed?

Prof. Green—When you come down to a local planning area, you do need a head end or building within the area where you can put in the transition from the fibre backhaul to the equipment that is needed for distributing the signals over fibre. It is an interim solution using these roadside cubicles, which are quite common. They actually look quite reasonable, but it is a third-rate solution. We need to plan for, and make space available in the planning of an estate for, the communications area. Bear in mind, if the NBN is going to work, we are going to have multiple people in that particular building. We do not want multiple cubicles, because it then makes the interconnection issue complex and difficult. In the estates I have been involved in, the developers have been actually quite keen to put in or allocate space for a communications centre, simply because it reduces the costs and gives the new owners of the estate far better services.

Senator LUNDY—I would like to follow up a couple of issues with you, Dr Green. I recognise that time is short. I noticed a story in today's *Financial Review* that appears to relate to notification to iiNet customers of the impending shutdown of their ability to access the naked

ADSL product from Telstra because of some network upgrade that Telstra have forecast to those customers. Looking at this story intrigues me, because it implies that Telstra, despite having an access regime that allows iiNet to access the copper and provide the naked ADSL service, appear to be making physical changes to their network that would render that impossible in the future, cutting those customers off. Did you by any chance see this story? If not, what would your views be on the circumstances where Telstra make a decision to change the nature of their infrastructure in a way that prevents competing companies from offering a naked ADSL or an equivalent-style product to customers on the network?

Prof. Green—I have not seen the story in the *AFR* this morning—simply because my copy is delivered in Perth—but I am well aware of the situation. I have known of a number of similar situations that have arisen over the past five or 10 years, where you can in fact disrupt service to your wholesale customers but you can maintain the service to your retail customers. That is very easily done. Again, that is the kind of issue where, if there was a mediator in place, it was a case of, 'We know you have to upgrade the service, because cables do need replacing, but what is the solution to ensure things for all parties?' Again, that is good manipulation and it is done at a higher level. At the operational level within Telstra, there is in fact a keenness to make sure that customers have a decent service, but it is at the higher levels where the problems kick in.

Senator LUNDY—In my experience, such a change in the network could mean the installation of something like a RIM, the installation of additional fibre to a subexchange like structure, and that would render it impossible for anyone to get the higher level of faster bandwidth service. Do you think that the ACCC has a role in preventing this activity, given its anticompetitive outcome?

Prof. Green—The ACCC should have a role, because that is anticompetitive conduct. The difficulty that the ACCC or even a technical expert is likely to have is that you can now replace a RIM with the fibre optic solutions that I discussed earlier on. Simply because of the greater range, the fibre can in fact support as many customers as what you have on a RIM right now. It is how you handle those transitions is where the need for a mediator starts occurring.

Senator LUNDY—In the current circumstance, the solution would obviously be some requirement for existing customers to retain their existing relationships with their company or their carrier of choice. Is that a reasonable solution if in fact a fully fibre solution was deployed as you describe? The article is not clear on what Telstra is doing to the network.

Prof. Green—The fact is that initially we have copper cable all the way from the telephone exchange to the customer. They have said: 'We have this fibre into the node. We're going to chop out the intermediate copper.' That means that all the equipment in the exchange, which is dependent on copper, suddenly cannot be used. That has been done for a number of years—there is nothing new in it. The point is that we do need to move to fibre. There are going to be cases in which the RIM and the node are got rid of by using the fibre distribution. People do not realise the real implications and benefits of the flexibility of the fibre installation. There are going to be these difficulties where copper will need to be removed, but it needs to be done on a case-by-case basis.

Senator LUNDY—The article is in the context of what is happening now prior to the NBN. Your comments relate more to what could happen if the NBN is deployed and new fibre solutions—

Prof. Green—I am saying that what is happening now will be 10 times worse under the NBN, and that is why we need to do something about it.

Senator LUNDY—Put in place the mediation strategies—

Prof. Green—Put in place your mediation and arbitration capabilities. And have them legally enforceable.

CHAIR—I have one question that you might want to take on notice unless your answer to it is short. In your submission, you talked about price comparisons between rural and metropolitan areas and proposed a tiered mechanism. In your closing line on that recommendation you say:

This pricing policy excludes remote users (or the 2% not covered by the NBN).

On what basis are you equating remote users with the two per cent not covered by the NBN?

Prof. Green—Right. These are those who will be required for one reason or another to use satellite services only. Even when you have multiple users on a satellite and they are trying to share the costs, they will not be able to achieve the \$80 to \$90 cost that I am expecting will be achieved by a regional or rural customer who has physical or terrestrial infrastructure to use.

CHAIR—So it is a combination of the service mechanism and the pricing considerations, not—and I want to make this clear—anything that has been indicated as part of the RFP process or by the government?

Prof. Green—Correct. Yes.

CHAIR—Thank you very much, Dr Green.

Proceedings suspended from 10.39 am to 10.50 am

KELSO, Dr Douglas Ross, Private capacity

CHAIR—Welcome. As you are aware, the proceedings of the Senate select committee inquiring into the National Broadband Network are public and any evidence that you give is on the public record. If you wish to provide evidence in camera then please make your request and provide the grounds upon which you are seeking to do so, in which case the committee will consider your request. It is unlawful and potentially in contempt of the Senate for any party to attempt to interfere with evidence that would otherwise be given by a witness to this committee. It is equally potentially unlawful and in contempt to provide false or misleading evidence to this committee. We have your earlier submission. We do not have a further written submission from you at this stage. But, given the developments that have occurred since you last appeared before the committee, would you care to make a brief opening statement before we start to ask you questions?

Dr Kelso—Thank you. My written submission is listed as No. 24 and I appeared before this committee in Brisbane on 21 November 2008. On this particular occasion, however, I have agreed to appear to answer further questions that are in my capacity to do so and to raise some new issues that have come to mind. I previously noted that the advent of a national broadband network, or NBN, offers a generational opportunity to reassess the appropriateness of Australia's telecommunications policy and regulatory environments. We should not lose sight of the fact that we are to gain a government sanctioned NBN arranged in haste and substantially behind closed doors. The urgency behind the process is due to the political necessity of satisfying an election promise which in turn grew from an artificial sense of urgency created by Telstra lobbying first the Howard government beginning in August 2005 to grant Telstra a new natural monopoly if it were to embark on an accelerated program of investing in optical fibre in the access network. Behind this lobbying was an implied threat to withhold investment. We must not forget that no player in any business arena can do that without enjoying significant market power.

The lesson we have yet to learn is that the telecommunications specific provisions of the Trade Practices Act, part XIC, are in practice incapable of dealing with such market power. Hence the political conclusion was that market failure existed and that this could only be addressed by sanctioning a so-called national broadband network. This urgency has particularly favoured a secretive process, administered by the department, that has been tantamount to putting out to tender the development of public policy in this field. As a consequence we the public, telecommunications users and service providers are being told that the network provider selected by the expert panel and endorsed by Minister Conroy knows best. In one fell swoop Australia's future telecommunications policy settings will be redirected, with much of the long-term implications hidden from public and even parliamentary scrutiny behind the clauses of a commercial-in-confidence agreement.

My final point is to raise my concern that we are now inexorably on the path towards having two tiers of broadband networks throughout Australia for delivering the next generation of telecommunications services. I am talking here primarily about the wire line or cable-based networks that have been the mainstay of the public switched telecommunications network, or PSTN, and have been the prime means for delivering universal service obligation. I submit that the two tiers we are heading towards are as follows. One will be the government sanctioned National Broadband Network, the subject of this Senate select committee inquiry, which will be regulated as an open access network, hopefully mimicking the arrangement we have long enjoyed with the PSTN and which was so instrumental to the successful introduction of the internet to the mass market. The other will be Telstra's national broadband network, both existing and to be rolled out, which Telstra will, I contend, strenuously push to become unregulated in the future and, as is effectively the case now, to not be operated on an open access basis. Such a two-tier outcome will be a classic example of a massive unintended consequence arising from the urgency and secretiveness inherent in creating the National Broadband Network. But that, again, is my view only. Thank you for the opportunity to be given a hearing here.

Senator MINCHIN—Could you elaborate on that final point and how you see telecommunications, or broadband in particular, developing—this proposition that you would have a government sanctioned NBN, which by definition now will not be Telstra, and then a second tier which is Telstra. How do you envisage this Telstra network in the absence of it being the NBN provider? How would it be constituted, how do you see it operating and what fears do you have of that?

Dr Kelso—What I was referring to there is the existing, residual Telstra network, depending upon how it is impacted by the NBN. On the basis that the government sanctioned NBN will not prohibit the existence of the Telstra broadband network—I will be most surprised if it does prohibit it—the current Telstra national broadband network will continue to exist and continue to be rolled out. It will operate in parallel, both physically and in a wireless sense. Ever since its previous substantial investment in a wireline network—that is, the hybrid fibre coaxial network to carry Foxtel and Big Pond internet access—from 1995 onwards, Telstra has acted strenuously in a regulatory sense and through lobbying governments to ensure that that network would be regulated to the least degree possible. In fact, they have succeeded in effectively closing access to that network. I think that is important to note because, since the investment in the public switch telephone network, there has only ever been one other substantial investment in a wireline network that is delivering Foxtel and Big Pond cable internet access. Telstra has succeeded over a period of 10 years in managing that network to be substantially closed.

This is only a natural behaviour. I should not be surprised that Telstra or any other carrier may wish to do this, but what I have surmised is that, given the government sanctioned NBN, we will continue to have a Telstra national broadband network. In my view, Telstra will almost certainly argue that that should be less regulated than it is and, in fact, they will argue that they should not be liable for providing the universal service obligation and should not be the carrier of last resort. After all, the government sanctioned NBN will be delivering service to 98 per cent of Australia's population. So I suspect that an unintended consequence of having a government sanctioned network is that the remaining network will quite obviously tend to be moving towards the era of being unregulated or less regulated than it currently is. And that network was never operated on an open access basis, anyway.

Senator MINCHIN—This does go to the issue of 'infrastructure competition' as it is called, but it also goes to the origins of this, which is that Telstra were only ever proposing an upgrade of their existing copper network. They were not proposing stand-alone brand new NBN, were they? The proposal that they came to the Howard government with was to upgrade their copper

network to fibre. That was rejected but picked up by the Labor Party. It seems to me that there is confusion about this. You are suggesting that whoever is awarded a tender to build an NBN is going to have a stand-alone separate fibre network, and the existing copper network—exchange to the node—will continue to exist. I am told—I would be interested in your views—that technically and operationally it is not really practically possible to have fibre lying alongside the copper in the same conduits. That is simply not operationally effective or possible, but you are suggesting that if the new NBN operator lays out their fibre in Telstra conduits, alongside Telstra copper, that that will operate and that Telstra can continue to operate its copper alongside it. Is that what you are suggesting?

Dr Kelso—I do not know in every instance, in every street throughout Australia, whether there is or is not capacity to accommodate both optical fibre and copper pairs in every conduit. Clearly there will not be. But if you look at the situation where Telstra has a significant amount of optical fibre extending out into the access network and from there copper radiating out to the end users, all we are talking about having is the optical fibre extending a small amount further— often in many instances only a few hundred metres further. Then the node is to be located and the copper pairs will continue from there. I do not think anyone has suggested that if the non-Telstra winner of this tender gained access to Telstra's copper pair network radiating from the nodes Telstra would be denied access to its own network.

Senator MINCHIN—That is one of the interesting issues.

Dr Kelso—That, indeed, would be a most interesting outcome: if they had to beg access to the network. I would be extremely surprised if that were the case.

Senator MINCHIN—We know that two of the three bidders have publicly said that their bids rely on a statutory prevention of any overbuild. I do not know how that plays into how you see this two-tier arrangement developing. It is one of the interesting aspects of this that at least two of the three are openly saying, 'We would have to have statutory protection from any overbuild of our fibre system.'

Dr Kelso—I guess the scenario that I was painting assumes that Telstra would continue to overbuild. You must realise that Telstra has been augmenting its access network for decades, and the optical fibre has been gradually moving out for various economic reasons. It will continue to do so.

Senator MINCHIN—Just on that, do you think that the non-Telstra winner of this tender should be given statutory protection from overbuild, as two of the three are demanding?

Dr Kelso—I am in two minds in that regard. Telstra would quite obviously raise considerable concerns over that. They recently went to the High Court and were unsuccessful in claiming sole ownership—monopoly ownership—of their access network. But I think if the government-sanctioned NBN solely relies upon such an outcome—that is, a protection from overbuild—then quite naturally Telstra would take legal action which would prolong the roll-out of the NBN. I would suspect that, based upon the history of protecting their investment asset in the fibre coaxial network, this legal action would be intense and prolonged. It could go for five or 10 years.

Senator MINCHIN—To come back to your two-tier model and to play devil's advocate, what is wrong with that outcome, if it gives greater competition and more choice to consumers?

Dr Kelso—It raises many unintended consequences. It raises the question: if one is open access and the other one is not open access, which business model will succeed in the longer term? The one that is not open access would tend to operate on a vertically integrated basis and, due to hidden subsidies, could well offer services that could be more attractive than those offered via the open access NBN.

Senator MINCHIN—Thanks.

Senator IAN MACDONALD—For the government sanctioned network, they would assume that they would have an ability to access some of Telstra's quite substantial existing network, wouldn't they?

Dr Kelso—Yes.

Senator IAN MACDONALD—But if Telstra were going it alone in an unregulated, unsubsidised thing, Telstra might rightly say: 'This is ours. You do your own. You're getting a subsidy from the government.'

Dr Kelso—You must realise that the access regulation in this country is to regulate services, not infrastructure. That has generally been the understanding that I have had from the ACCC. Whilst you need access to the infrastructure to gain the derivative services, the distinction between the regulation of services and the regulation of infrastructure raises some interesting—

Senator IAN MACDONALD—Telstra would rightly say, 'You're confiscating our property.' If things had gone a different way, perhaps that could be argued. If there is going to be another government sanctioned, government subsidised and regulated open access network, Telstra would be able to make a fair case for saying: 'The government is doing that. We'll hold our own stuff, thanks, and we'll hold it solely.'

Dr Kelso—I would imagine that that could be the case, yes.

Senator IAN MACDONALD—But the government sanctioned network cannot possibly operate unless it has access to Telstra's main line network—at least, not with the billions of dollars we have been talking about so far. It would cost them considerably more, wouldn't it?

Dr Kelso—I was more describing a situation where the government sanctioned NBN gained access to parts of Telstra's network but Telstra still provided its own services over its own network.

Senator IAN MACDONALD—And, as in the current situation, Telstra would receive remuneration from the government sanctioned network for using their network.

Dr Kelso—Yes.

Senator IAN MACDONALD—It would have to. That is how it is at the moment, of course.

CHAIR—Can you expand on your claim that there is a distinction between open access to services and open access to infrastructure?

Dr Kelso—I was referring more to the access regulation provisions in part XIC of the Trade Practices Act which are there to regulate the provision of services rather than infrastructure. The ACCC does not control infrastructure, carriers can deploy pits, pipes, copper, pairs or optical fibre but, in the main, these assets are not controlled by the access regulator, but the derivative services are.

CHAIR—If I may take that one step further, if the ACCC were to be the cop on the beat then it would only have the power to police services as opposed to infrastructure—is that what you are saying?

Dr Kelso—Yes, that is the current situation. It could be argued that the situation we are currently in in having to have a government sanctioned national broadband network in a way derives from the fact that we set up a regulatory regime which failed to regulate infrastructure. It meant that a carrier could install infrastructure that has a large amount of untapped capacity but only decide to tap into a certain proportion of that for a certain service and that service is regulated. But the untapped capacity is not regulated.

CHAIR—Thank you. You seem to have suggested two scenarios, in both worlds you have two networks, as it were, running in parallel, but in one scenario you seem to suggest that Telstra will wholly own and utilise its existing infrastructure and in the other scenario you seem to be suggesting that there will be some use of it made by the successful tenderer.

Dr Kelso—Some use of Telstra infrastructure, yes.

CHAIR—Yes. If the second scenario were to eventuate, going back to a question that Senator Minchin asked in part earlier, why is that of itself bad for consumers given that it could also be argued that government investment should be in an area where the private sector will not go? If a telco wishes to go to the second bit of that scenario then that is the private sector providing some competition. Why of itself would that outcome be bad?

Dr Kelso—I am not sure if I exactly understood your question. You were referring to the investment of \$4.7 billion of government moneys. I am not aware, and perhaps nobody in this room is aware, as to how that will be applied once the agreement is reached with the selected tenderer as to whether this money will be directed towards investment only in underserved areas, in more rural and remote areas, where a business case does not stack up. I am not aware of how that money will be applied.

CHAIR—You are right. It is rather vague at the moment and perhaps I was taking you too much to the hypothetical.

Senator LUNDY—To put the conversation into context there was a High Court decision, I think in the early part of last year, that affirmed the right of the government to regulate with respect to access to the network. That surely frames the way in which the federal government is approaching the questions that they are currently contemplating about regulation of the NBN. What are your observations about the nature of the regulation required, particularly for the

copper that we have been discussing and the likelihood of there being some copper in a fibre to the node style network once the NBN is deployed.

Dr Kelso—Could you clarify that question further?

Senator LUNDY—What is the main regulatory mechanism that you foresee in a fibre to the node national broadband network presuming, given the High Court decision, the capacity of the federal government to regulate access to that existing copper from the node?

Dr Kelso—I think it is difficult to answer that question because I do not think anyone in this room is aware of whether the existing Trade Practices Act legislation will be utilised to regulate the new NBN. It may in fact be regulated outside of the Trade Practices Act by other instruments.

Senator LUNDY—I am asking your opinion about what you think the regulatory mechanism ought to be.

Dr Kelso—We know that the outcome is to be of an open access requirement. I think I understand what you are getting at. I believe that it is necessary for part XIC of the Trade Practices Act to be modified to prescribe an open access regime. It does not do so at the moment because there is no right of access provided by part XIC of the Trade Practices Act. This goes back to the days of the Hilmar committee; there was no inherent right of access. Infrastructure commenced more or less in the closed access basis and access had to be granted. The Trade Practices Act works on that basis. So there is no inherent right of access. So the Trade Practices Act, if it were to encompass the government sanctioned NBN, would have to be substantially rewritten to impose an open access requirement. That would be a dramatically rewritten act.

Senator LUNDY—To the extent that we were discussing earlier some of the physical features of that last bit of copper—that is, from the pole—what is your understanding of the current state of that part of that network and how will that impact on the proposed build of a fibre-to-the-node style network?

Dr Kelso—Are you referring to the quality of the—

Senator LUNDY—Not just the quality of the copper but also the access to information about the status and the quality of the copper—that is, via Telstra.

Dr Kelso—A previous witness today—and I only heard part of their evidence—certainly spoke about this. I agree with what I heard. Telstra is the only body that is fully aware of the status of every meter of its network and the quality of every portion of that network—

Senator LUNDY—That is the theory anyway.

Dr Kelso—Yes. They are certainly aware of the ability to accommodate additional cables in the conduit network. But since fibre to the node implies an extended reach of the optical fibre in the access network, and then the existing copper pairs remain, we are not talking about fibre going all the way to the premises. So the remaining copper pair tail stays there unaffected. Basically it is a matter of extending the optical fibre to a nodal point, perhaps cutting away that

portion of copper pair that has been passed, establishing a cabinet in the street and the remaining copper pairs stay there.

Senator LUNDY—Do you have any knowledge from that last tail of copper in a fibre to the node network? How does the various existing broadband blocking devices in the network impact on the deployment of a fibre-to-the-node network? I am talking specifically of small pair gain systems.

Dr Kelso—I do not have detailed knowledge of those. I am aware that they exist, and clearly these devices would be supplanted by the service capability from a nodal delivery mechanism. But, no, I cannot speak in any detail about that.

Senator LUNDY—Thank you.

Senator MINCHIN—Coming back to your two-tier concept, which you say is the result of the haste and secretiveness of this process, are you suggesting that somehow in the ultimate legislation, which will be required to give effect to the government's NBN policy, that it should somehow regulate or legislate to prevent that two-tier arrangement or are you saying that it is absolutely inevitable and we are all going to have to live with it?

Dr Kelso—That does raise a point. If in fact the NBN is to be regulated via changes to the existing legislation then it would be a ludicrous situation for the legislation to be grandfathered in a way to accommodate a two-tier system. If you follow through the argument—and I think this is behind your question—that if the NBN is to be regulated via changes to the legislation rather than some other vehicle, then the one set of legislation should really control all networks and should not be network specific.

Senator MINCHIN—I think that is what we are all assuming would be required or would be the obvious outcome.

Dr Kelso—But there may be other instruments that the government may call upon to regulate this government sanctioned NBN. It may not be done via the existing telecommunications act or Trade Practices Act.

Senator MINCHIN—That is possible.

Senator NASH—Given the difficulties that have been raised about the process and potential implementation of the NBN, do you think the minister would be wiser to simply scrap it, go back to the drawing board and start again?

Dr Kelso—It is probably far too late for that. There has been too much invested. I would hope that from this point onwards that the government is more open in publishing the reports of various parties that it has commissioned—publishing the report of the ACCC to the expert panel. The full report of the expert panel should be open to public scrutiny.

Senator NASH—In your opinion, do you think the minister would have any valid reason whatsoever to not do that?

Dr Kelso—A lot of this goes back to the acceptance by the government of material from tenderers that is commercial-in-confidence. Once it accepts certain material on the basis that it shall only be commercial-in-confidence, the government will continue to hold such information in confidence. This is a retrograde step because, as I said before, we are really seeing a generational opportunity to modernise Australia's telecommunications infrastructure. My greatest fear is that a lot of this will not even be brought before your eyes as parliamentarians. A lot of the hidden detail will still be secret to the minister, the department and the tenderer.

Senator NASH—If that information is not made public, how can Australian taxpayers be sure that their \$4.7 billion has been wisely spent?

Dr Kelso—There is a strong likelihood that there will be disputation over the nature of the rollout. If the terms of that rollout are not made fully public then you, as parliamentarians, will not be able to determine whether or not the terms of the contract have been breached. There will be certain terms which will be held in confidence. I am sorry—that is a problem.

Senator NASH—That answers it well. Thank you.

Senator IAN MACDONALD—Has anything that has happened so far in the saga caused you to have any other thoughts about the promise to service 98 per cent of the Australian population? Is it heading that way?

Dr Kelso—I am not privy to any other information in that regard. I would assume, hopefully, that the tenderer has been made privy to the full database of existing telecommunications infrastructure such that there will not be disputation in the future as to whether 98 per cent or 97 per cent or 96 per cent is to be served. I think that you, as a politician, would not want to be handling, certainly on the government side, complaints from customers in the years to come saying that they have been underserved. Then there will be arguments as to whether or not the tenderer knew they were to serve those particular customers. In other words: who is actually in the two per cent?

Senator IAN MACDONALD—I think it is becoming increasingly obvious that to get even 98 per cent is going to require a suite of vehicles to deliver it. It will not just be fibre to the node; it will have to be satellite and wireless. Would you agree with that?

Dr Kelso—There will certainly be a substantial need for wireless means of delivery. We are not aware of what the selected tenderer has offered in that regard, but I would assume that wireless would certainly play a part.

Senator IAN MACDONALD—It is almost looking as if we are getting back to the OPEL contract, which was two years ago, wasn't it? It would have been up and running by now.

Dr Kelso—In broad terms, yes.

CHAIR—Thank you very much, Dr Kelso, for your time yet again.

[11.27 am]

KRISHNAPILLAI, Mr Maha, Director, Government and Corporate Affairs, Optus

SHERIDAN, Mr Andrew, General Manager, Economic Regulation, Optus

CHAIR—The committee welcomes Mr Krishnapillai and Mr Sheridan from Optus. As you are aware, the proceedings of this committee are public. If at any stage you wish to provide evidence in private, please make your request and the grounds upon which you are making it known to the committee; the committee will consider it. It is unlawful and potentially in contempt of the Senate for any party to attempt to interfere with evidence to be provided to this committee, as it is also, potentially, for a witness to give this committee any false or misleading evidence. The committee has your submissions. Do you care to make an opening statement, given the passage of time and some developments since you were last before the committee?

Mr Krishnapillai—Thank you very much, senators, for your time this morning. Optus is very highly supportive of the government's proposed national broadband network, which has the potential to provide significant economic benefits for all Australians. Its construction will provide a significant form of economic stimulus at a time of global financial uncertainty, with lasting benefits in the shape of improved productivity and competitiveness for all Australian businesses. The NBN also has the potential to deliver significant social, educational and health benefits for all Australian consumers through access to new and innovative services at affordable prices.

As Optus has outlined in previous written submissions and in the earlier appearance before the committee, these significant benefits can only be delivered if the government locks in the necessary market and industry structure and regulatory framework. For the national broadband network to deliver its promised benefits, it is vitally important that a vibrant, innovative and competitive marketplace be alive and well. We believe the government understands that competition is the key to the long-term success of the NBN. This requires national interests to be put ahead of the interests of any shareholders or stakeholders. I refer to the comments of Minister Tanner on the *Insiders* program last Sunday. He noted:

We—

the government-

are committed to making sure that we have got genuine competition in telecommunications, particularly broadband. It is critical for the future of the Australian economy that we get world-class broadband, genuine access, genuine competition.

Telstra's economic strategy has always been about trying to minimise competition, to try to maximise returns out of particular products and not rolling out new things, not innovating as quickly as perhaps it should.

That is fair enough in the interests of its shareholders but we [the government] are acting in the interests of the Australian community, Australian businesses, Australian consumers, and our interests and the interests we represent a different from Telstra's.

Optus applauds these comments, which highlight the myth we believe behind Telstra's long made claim that its private interests are aligned with the national interests. What is good for Telstra is not necessarily good for the country. We have consistently argued for regulatory reform to address the present dysfunctional state of the fixed broadband market, which is tilted heavily in favour of the incumbent and has been for many years.

In particular we advocated that the regulatory framework should be built around four key pillars: structural separation, so no one retail player is able to control the wholesale market; open access and genuine open access principles; true cost based pricing; and a very clear and unambiguous oversight role for the ACCC. With these four pillars locked in, Australians can look forward to a new high-speed broadband network and strong competition, bringing plenty of choice for consumers and affordable prices.

Optus has lodged a proposal that sets out a plan to build a state-of-the-art national broadband network that will deliver wholesale only broadband services at a minimum downlink speed of 12 megs to at least 98 per cent of Australian premises. Optus's proposal is not only consistent with the four pillars above, it also places competition at the very heart of its proposal. Optus is pleased that amongst the committee members there is strong acknowledgement of the need for fundamental regulatory reform aimed at fostering competition through the National Broadband Network. The NBN represents a once in a generation opportunity to right the many years of failure of the current regulatory regime. It is time for the firm hand of government to put the national interest above private shareholder interests and create the conditions necessary for a vigorously competitive fixed line market.

The government will shortly announce its preferred proponent, which will be followed by detailed negotiations on the terms on which the NBN will be rolled out. This is a key stage in the process. We look forward to the government's announcement and are confident that our proposal will deliver a first-class outcome for Australia.

CHAIR—Thank you. Mr Sheridan, do you wish to add anything?

Mr Sheridan-No.

CHAIR—In that case I will invite Senator Minchin to start the questions.

Senator MINCHIN—Good morning. Nice to see you here. I applaud your obvious emphasis on competition, but I want to go to obviously the biggest development since we last met with you, and that is the close of the tenders and the exclusion of Telstra from even being considered. Is it not really the case that the tender process itself cannot be regarded as properly competitive—I appreciate you are a fierce competitor of theirs but they are a fairly large elephant in the room—if Telstra's bid is not even considered against bids from your company and others? How can that properly be described as a competitive tendering process? Coming back to this issue of competition, which I applaud, from the very outset, it would seem to us, if I may play devil's advocate, we are not even going to have a competitive tender process if the bid from Telstra did not even get to first base.

Mr Krishnapillai—There are five bidders who put forward proposals through the RFP process and we absolutely stand by the sanctity of that legal process. The government sought to

introduce a competitive bid process and it attracted a number of major players, ourselves included, to that process. We are an \$8 billion company which invests over a billion dollars a year and which is part of a SingTel group which invests far, far more than that throughout the region. We are a significant network builder. We have the technical capability and the financial capability to make this proposal a reality. There are other players who have also bid through this process which also have significant technical and financial capability to deliver. So I categorically disagree, with respect, that Telstra needs to be part of this process. It had its opportunity. It chose to submit a 12-page media release, compared to the 1,500-page proposal we have put forward, which is a comprehensive financial and regulatory model to address the shortcomings of broadband in Australia. Telstra had its chances; it chose not to participate. The government cannot, in our view, and should not have any accord with a party who wants to put its interests above the national interests, which is clearly what Telstra has chosen to do.

Senator MINCHIN—I meant no reflection on yours or any of the other bids but, from the Australian people's point of view—and there is \$4.7 billion of their money at stake here in this tender—it does seem passing strange that the competition for this right to access that public funding has, by what some would properly regarded as a something of a technicality, excluded one of the principal telecoms operators in this country.

Mr Krishnapillai—Without being facetious, the technicalities were pretty easy to pick up, so if it could not even pick that up then maybe it should not deserve to be part of the process. The reality is that we have said all the way through that Telstra does not have to be involved in this process. In fact, as I think I said last time at the Senate hearings, we are strongly of the view, and I think most who have worked in this sector for many years recognise, that over the last 10 to 15 years Telstra has done all in its power through litigation and other regulatory mechanisms to stall, frustrate and delay the rollout of broadband in Australia. Its commercial interests, its private shareholder interests, certainly do not want it to lead to the delivery of a competitive broadband market. They retain 60-plus per cent margins that they earn on their fixed broadband network. They have a very clear strategic and commercial interest in delaying the move away from those sorts of margins to a competitive broadband market. I would suggest that the alternative is actually true, which is that Telstra cannot and should not be part of continuing those sorts of margins and frustration in terms of delivery of broadband to Australia.

Senator MINCHIN—Thank you for that. Can I come back to your bid. Certainly Senator Conroy lowered the veil of commercial-in-confidence at Senate estimates and refused to talk about any of this—but you feel free to tell us what you can. Your bid is in the name of Optus Network Investments. Who or what is that exactly?

Mr Krishnapillai—That is part of the Optus business in Australia.

Senator MINCHIN—It is part of Optus Australia?

Mr Krishnapillai—Yes.

Senator MINCHIN—It is a vehicle, is it, for—

Mr Krishnapillai—There are a range of things that I obviously cannot go through in terms of the details of the RFP. There is no conspiracy around it. It is part of Optus, is the simple answer.

Senator MINCHIN—Just to be clear: in your submission, and you have reiterated it this morning, your bid does purport to meet the minimum criteria that the government has set: a broadband service, minimum download speed of 12 megabits, to 98 per cent of Australians. You do not, however, reiterated one of the government's other key criteria, that it is fibre to the node to 98 per cent of Australian premises, residential and business. I seek some clarification on that. Is it just that you did not mention that?

Mr Krishnapillai—I would certainly reiterate that our proposal meets all of the criteria that the government has put forward for this bid, and that includes 98 per cent coverage of broadband services throughout Australia. Broadband, as I think the previous speaker has noted, will be through a combination of technologies, based on our discussions with government, based on which is the appropriate value-for-money solution for various parts of Australia. We certainly look forward to discussing those options with government. The reality is there will be a combination of technologies that will certainly be used, but it is a fibre-to-the-node solution that will deliver 98 per cent coverage throughout Australia.

Senator MINCHIN—I do not want to unduly pressure you on this, but the government has made it one of its criteria that it would be fibre-to-the-node to 98 per cent of Australians. That is what everybody is assuming is a minimum criterion. What you are really saying is what the rest of us have always thought—that that is not going to be commercially feasible and fibre-to-the-node may be 80 to 90 per cent but some form of wireless or satellite solution would be required for, let us say for the sake of the argument, the final eight per cent. Is that really what you are telling us here today?

Mr Krishnapillai—In terms of the details of our commercial proposal, we have put forward what we regard as a technically sophisticated and innovative proposal that we cannot talk about in public yet. We will certainly be including in that proposal maximising the amount of fibre, but also putting the value-for-money component of the fibre network to the government. Clearly, the government and ourselves in negotiations will work out which is the best combination of technologies and services to deliver to 98 per cent.

Senator MINCHIN—Okay, thanks.

Mr Krishnapillai—So we do meet all aspects, through our 1,500-page proposal, that Telstra was unable to meet.

Senator MINCHIN—To come back to this issue of competition—

Senator IAN MACDONALD—Just on that point, Mr Krishnapillai, you were part of the OPEL consortium, weren't you? And that bid is now open and public—of course, it is no longer current. But under that proposal the OPEL concern was going to get broadband to almost 98 per cent of the Australian public by a combination of fibre-to-the-node, satellite and wireless. Is that correct?

Mr Krishnapillai—Correct.

Senator IAN MACDONALD—I guess I cannot ask you how different your current bid is going to be from what you put in as part of the OPEL consortium, but there would seem to be an

understanding that the OPEL proposal was doable and, had that gone ahead, we could perhaps have been connected up by this time. Would that be right?

Mr Sheridan—Can I make a point of clarification. The OPEL proposal was slightly different technology. It was not fibre-to-the-node; it was using—

Senator IAN MACDONALD—At all?

Mr Sheridan—No, it was using a combination of ADSL technology in metropolitan and outer-rural regions and then using a WiMAX solution to go to around 94 to 95 per cent. It was not a 98 per cent solution.

Senator IAN MACDONALD—Okay, 94 to 95 per cent.

Mr Krishnapillai—It was a clearly different funding and financial model in terms of government commitment as well, just to highlight that.

Senator IAN MACDONALD—Certainly. Is it right, though, that had it gone ahead the plans for OPEL were to be up and running by about this time?

Mr Krishnapillai—Generally, yes. There is no doubt that OPEL would be delivering many broadband services throughout Australia today, had that project continued. I might just add that at Optus, while we are disappointed with those decisions, have certainly moved on.

Senator IAN MACDONALD—Of course.

Mr Krishnapillai—Clearly the NBN proposal is a significantly larger and more comprehensive broadband proposal, and we look forward to working with the government on that proposal.

Senator IAN MACDONALD—With a greater involvement of taxpayers' money.

Mr Krishnapillai—Correct.

Senator IAN MACDONALD—The OPEL thing did not have a great deal of taxpayers' money in it.

Senator MINCHIN—I again want to come back to this issue of competition, if you could clarify this. I think you have made public your position that a precondition for your company's investment would be the statutory prevention of overbuild of a fibre-to-the-node network. Is that correct?

Mr Krishnapillai—Our bid is absolutely about putting the interests of consumers and the national interest first. A country of Australia's size with its size of population, in our view, cannot support multiple fibre networks. We have had that experience with empirical evidence with the 1990 rollout of competing pay-TV cable networks. The alternative I believe we have in the Australian context is to have one utility rate of return, a fibre network that achieves 98 per

cent coverage, or a couple of smaller networks that achieve coverage in metropolitan areas. That is very clearly the choice.

Mr Sheridan—I think it is important to note that, if there is a single network, that is why it is absolutely vital that it is subject to genuine open access, so that competition can thrive on that network.

Mr Krishnapillai—And that is regulated by the ACCC. The key is, if you are going to have a monopoly network, and the economics and commercial rationale justify that, then you must have genuine open access, regulated by the ACCC, in the national interest, with a utility rate of return for that network.

Senator MINCHIN—To cut to the chase: whoever is awarded this tender, in your view, should therefore have the comfort of knowing that Telstra would not be allowed to invest in upgrading its copper network to fibre.

Mr Krishnapillai—There are a range of things in our proposal about which I cannot go into an enormous amounts of detail, but we have put forward a suggested legislative and regulatory framework that we believe addresses the requirement to have a single network that is regulated in the appropriate way, in the national interest, that puts the needs of consumers first, yes.

Senator MINCHIN—I think you were here for some of Dr Kelso's evidence. He was painting a scenario. He thinks the process has been done in haste and undue secretiveness and it is going to result in what he describes as a two-tier broadband service arrangement in Australia, with the government-sanctioned NBN operator at one level and then Telstra continuing to operate its current network, its copper based network. Is that a likely scenario, in your view? If not, why not?

Mr Krishnapillai—I would not believe so. If we go through the process in the appropriate way and the discussions with the government lead to the outcome that a high-speed broadband network, delivered by whichever NBN operator is selected, is able to have the regulatory protection and the regulatory framework in place, there will be economic arguments about why that will be a far more attractive wholesale base than any existing Telstra network.

Senator MINCHIN—Again, I do not want to unduly pressure you—and please say if you are not at liberty to answer the question—but your proposal, or any other proposal, is presumably based on laying fibre in existing Telstra conduits, is it not?

Mr Krishnapillai—One of the comments I think I made last time was, 'Thank God for Phil Burgess,' because he has clarified a range of the legal and other impediments, through the High Court decision which Telstra lost 7-0. I think the High Court judges outlined it as an artifice and a superficial argument. Among the range of things that were addressed in that court case and other precedents over the last decade of Telstra's litigation through these processes is that there are standard access obligations, there are facilities-accessing arrangements and there is an access regime which Telstra must abide by. Through the sale process—as you would be familiar with, Senator—there was a very clear understanding that that was predicated on Telstra abiding by the laws of this country in general terms and, in particular, the access regime as it existed then and will exist in the future.

Senator MINCHIN—I think that is an answer to my question. I think I follow you.

Mr Krishnapillai—So there are many ways already established, through 10 years of litigation, that have set precedent. There are several ways that we will need to address as part of our proposal in moving to the new NBN. But the bulk of those legal issues, in our view, have already been canvassed, as I said—thank God for Phil Burgess!

Senator MINCHIN—He certainly gave the media something to write about. I think that means that we could have a situation where somebody else's fibre lies alongside Telstra's copper in a Telstra conduit. Is that scenario possible? Is it technically possible then for the copper network to continue to operate and be used by Telstra alongside the NBN operator's fibre in the same conduit?

Mr Krishnapillai—There are probably a range of things in the solution, but I cannot go into detail around the technical solution. What I can say is that, technically, we are very confident that we can deliver a fibre-to-the-node solution that will enable us to cut across services to 98 per cent of Australians, offering a wholesale fibre based network. There are a range of technical issues that we believe have already been addressed through our solution. To be frank, we do not see them as being major impediments to the rollout of that network.

Senator MINCHIN—I have a question on the structure. You, along with others, have emphasised the importance of structural separation—that the operator of the NBN should be a wholesaler only. Let's say you hypothetically win the right, under ONI, and Optus remains a retailer of telecommunications services. You would be a vertically integrated operator, would you not, or are you somehow going to separate the ownership of ONI, should it win the tender, so that it is legally and structurally a completely separate entity to Optus Australia?

Mr Krishnapillai—I will clarify the difference. ONI, or Optus, has put forward a proposal for a vehicle to be developed with a variety of shareholders, including Optus and other private equity holders, as well as the government in terms of its potential equity or other funding. That arrangement would mean that Optus would be a minority owner of the NBN core wholesale network.

Mr Sheridan—It would be a separate legal entity.

Mr Krishnapillai—Just to be clear: Optus has put forward the proposal, but the NBN vehicle is quite different.

Senator NASH—So you would effectively be structurally separated?

Mr Krishnapillai—Correct.

Senator MINCHIN—And you are not at liberty to indicate who the other parties to this entity you are proposing might be?

Mr Krishnapillai—At this stage we cannot, but what we have said is that our proposal—and we have been quite public about this—has at its very heart structural separation, that no one retail player can be a majority owner or dominate, if you like, provision of those services and

certainly would be a structurally separate organisation that managed and ran all elements of the NBN network.

Mr Sheridan—It would give the ACCC the role to ensure that, on a day-to-day basis, through time those principles will continue to apply.

Senator MINCHIN—Would we be right in presuming that—as and when the government announces the preferred tenderer; and the minister again reiterated that he intends, or that it is his ambition, to do that in March, which we are now in—that would then, whether it is you or anybody else, require final contract negotiation? That is presuming, as I think everybody does, that there would have to be at least some legislative and regulatory change to provide the correct environment for the investors to invest and that there would be no final, binding contract able to be signed until those legislative processes have been completed. Of course, given the thoroughness with which the Australian Senate operates, that could take some time. Would I be reasonable in painting that scenario? Is it a scenario you would agree with?

Mr Krishnapillai—We certainly expect that the negotiations with government will take a little while. If we were selected, we would expect that it would be a short and sharp process. We are also aware that many of the issues have already been put forward in our proposal. Many of the issues that we need to resolve have already been put forward, so we would not expect that to be a convoluted process. We are also fairly sure that the legislative requirements we put forward are not by their nature sufficiently large and that there would not be significant concerns about putting forward those changes. As long as those discussions have some conditions precedent through the negotiation process, we would be confident that we would come to a fairly quick agreement.

Senator NASH—Following on from that, it is interesting that you say you think—if you were to be the successful tenderer—that the negotiation process would be quick and fairly straightforward. One of the concerns that I have is the fact that the regulatory framework was not determined before the RFP process. While I am very pleased to hear that you think that, if you were successful, it would be a fairly streamlined sort of process, hypothetically, what if it were not? What if there were a stumbling block around the regulatory environment and that agreement could not be found?

Mr Krishnapillai—You are correct to highlight that there is a balancing act between the type of regulatory framework and legislation and the commercial needs of any organisation. We are looking forward to discussing with government the balance between our commercial requirements, and the clarity we would need around those, and the regulatory and other legislative framework issues that would be required. The 1,500-page submission we put forward outlines a very comprehensive legal and regulatory framework that we are confident will meet all the needs of the government. But, if it were to take slightly longer than that, we are of the view that this is far too important an issue to rush for the sake of a matter of a few weeks. We are very strongly of the view that this is a once-in-a-generation opportunity and we should get it right. I think we have got the potential to get it right through this process.

Senator NASH—You touched on access earlier and thanked Telstra's Phil Burgess for the outcomes around the whole High Court process. Do you envisage, though, given the nature of the incumbent, a change? One of the previous witnesses—I think it was Dr Kelso—referred to

the fact that in his view it could be a potential five- or 10-year litigation process. Would you agree with his statement or do you have a different view?

Mr Krishnapillai—I certainly do not share that view—for a variety of reasons. Telstra has made great capital over the last decade using its market power, abusing its market power, through fear, uncertainty and doubt of various legal threats. It has been hypothesised that if Telstra had left that High Court decision hanging there would have been a far bigger uncertainty hanging over the potential rollout of the NBN. I am of the view that the vast bulk of the legal and regulatory framework issues have either been set in precedent over the last decade or the ACCC has had some experience in arbitrating and resolving those types of issues. Most of the issues in fact have been resolved through a tortuous litigation process over the last decade. I am not underestimating Telstra's creativity in creating new litigation opportunities—certainly that will be the case. Our proposal we think nullifies the vast bulk of those legal challenges. I certainly do not share the view that there would be five to 10 years of litigation.

Senator NASH—You may or may not be able to comment on this, but in terms of your 1,500 page proposal and the regulatory requirements you have in that, do you think that the ACCC as it currently stands is an appropriate form to manage whatever framework you have put forward?

Mr Krishnapillai—What I can share in terms of the proposal does not envisage radical changes to the ACCC itself. We have put forward regulatory and legal changes through that. The ACCC, as I mentioned before, has had a lot of experience in regulating these sorts of issues for the last decade and therefore has some precedent and some experience. It is, in our view, challenged by the sheer scale and legal muscle brought to bear by Telstra. I think Graeme Samuel highlighted recently that, of all the industries he regulates, 50 per cent plus of all the legal challenges he has across the entire economy-wide portfolio he manages are Telstra related. It is an absolute travesty for our industry and it is a travesty for this country that over half of the litigation and other arbitration issues that he has to deal with as an economy-wide regulator are due to Telstra's creativity on legal challenges.

Senator NASH—I know you said you have moved on obviously from the OPEL process, but as a regional senator I have great interest in the reasons why this fell over. Certainly in my view it was a great step forward for regional people, who have enormous problems still with broadband. Would you clarify for the committee the process around the OPEL contract being cancelled and your view that you thought the department was incorrect in their decision that you could not deliver the percentage coverage that you had put forward?

Mr Krishnapillai—The first comment I would make is that we absolutely stand by the technical capability of delivering services to regional Australia through the OPEL contract. We believe that that would have been a highly successful and appropriate technology solution to regional Australia. I also need to note that, although we put on record some of our concerns around that process, there is a sense that the legal wheels grind slowly in this process. The only part I can really talk about is a disagreement between ourselves and the department around the measurement of those underserved premises which led ultimately to the cancellation of that contract. We certainly disagree with that process and we are working through the opportunity to publicly clarify that when we can, but at this stage we cannot talk about that in too much more detail.

Senator NASH—Okay. Another quick question, again showing my bias towards regional Australia. I am certainly of the view that the minister was lax in not requiring a roll-in rather than rollout process for the NBN. Are you at liberty to advise the committee whether you will be rolling out or rolling in, in your proposal?

Mr Krishnapillai—We have said publicly on several occasions that we would prefer to roll-in to those areas where there is limited broadband services and certainly limited broadband competition wherever we possibly can, but we look forward to discussing that with government. Our preference is clearly to roll-in towards the cities—address those areas of Australia that either do not have broadband or need broadband competition. But clearly that is an element that we need to discuss with the government in terms of, obviously, the commercial underpinnings of such a proposal, which would be quite different from a commercial model of rolling out.

Senator NASH—Do you have any understanding of how the government came to the \$4.7 billion figure necessary, apart from what the minister has already provided at previous times that it was an election commitment? Beyond that we do not have much knowledge.

Mr Krishnapillai—That is probably something I cannot comment on directly other than to say that our financial model certainly recognises that that is an absolutely appropriate figure to address 98 per cent coverage broadband to Australia. So we are quite comfortable that that is a very achievable figure, but we look forward to discussing with the government how that financial model would work.

Senator MINCHIN—Quickly on that: that is on the basis—I think you mentioned this before—of the government using the \$4.7 billion as an equity partner of the consortium you are proposing be the NBN owner and operator. I would say it is an equity.

Mr Krishnapillai—As we have said publicly, we are quite comfortable with whatever form the government chooses to be involved in terms of its financial contributions. One of the suggestions has been as an equity partner but there are other ways and other mechanisms by which the government could retain ownership. Without saying that this is our bid, you could certainly look at the Kiwi share option that New Zealand has been through. You could look at other mechanisms that other countries throughout the world have used to make sure there is some element of control. The key, as we have always said, is that the government, in our view, has to maintain some element of control and some element of involvement through that structure. But we are open to whichever way the government would prefer to do that.

Senator MINCHIN—It goes to the point that the government has been anxious to suggest that this is not by way of a subsidy, and that their contribution is an investment upon which they expect a return. I just want to be clear that your proposal is built on that premise and not built on the premise of the government's funds being a subsidy.

Mr Krishnapillai—Our proposal at its heart is around structural separation, and one of the mechanisms that we believe is appropriate to do that would be for the government to be directly involved in equity funding. But there are other mechanisms that we could use. I certainly confirm what we have said in the past, that we look to the government to be directly involved in the right way in terms of the financial model.

Senator IAN MACDONALD—On the assumption that the National Broadband Network between the capital cities and the populated areas would be a commercial proposition without any government subsidy, one would assume that the \$4.7 billion is really, not withstanding the government's protestations, a subsidy for those parts of Australia which would not otherwise be a commercial proposition for a profit making company like yours or your competitors in the bid. My question comes back to the question from Senator Nash that you answered on the progress of the legislation through the parliament. The Senate may have a view that the \$4.7 billion really should go to the underserviced areas and therefore it may use whatever influence it has in the Senate to scrutinise very carefully the government's regulations to ensure that there is an appropriate spend of the money. I am not very successfully trying to be sensitive in saying that the Senate may have a view that it should be a roll-in not a rollout and may use its influence to not quickly passage legislative or regulatory reform unless that happens. It may not be you, of course. You may not be the successful tenderer. Has that been taken into account in the negotiations with the government?

Mr Krishnapillai—There are a couple of points. It is certainly not our intention to use that subsidy or equity contribution, whichever form it may take, to do intercapital type broadband. That is certainly not the intention. The other intention is that we have put forward a proposal that we believe is an integrated and a coherent solution and that is a national network, so I am not sure that we could actually look at carving out elements through that technical solution. Secondly, we have certainly factored in our commercial model. We look forward to discussing with government—because we have not done so yet—the opportunity to, as we say, address those areas that need broadband first, which clearly would be a roll-in rather than a rollout. That is certainly at the heart of our commercial model. I cannot go into too much more detail on that, other than to say that our commercial modelling shows that that is a solution we can deliver with the amount of government funding that is being offered through the RFP.

Senator IAN MACDONALD—I cannot speak for the Senate, but it is something that clearly the government and any bidder would have to have in mind, that being a lot of taxpayers' money. I am quite sure the parliament as a whole would want to see that the funds are appropriately spent, so that needs to be taken into account by the government rather than by you or the successful bidder, whoever it is.

Mr Krishnapillai—I would echo comments I made to Senator Nash a moment ago that there is a balance between sharing what we regard as innovative technical and commercial solutions that we frankly do not want to publicise for others to use and recognising that the ACCC advice on the regulatory framework, the discussions around the expert panel considerations and around the regulatory framework and the legislation required to do this should be of sufficient weight in public policy terms for due consideration by the Senate. We have factored into our thinking and process that there would be an understandable reason for the Senate to be quite heavily involved.

Mr Sheridan—We also think it is very important that, whoever is chosen to roll out the network, there is the appropriate regulatory framework put in place, because that provides the necessary safeguard for consumer interests, which are acutely relevant given the size of the potential government investment.

Senator IAN MACDONALD—Finally and on quite a different note, would it be reasonable to assume that the new network will enable a much easier use of Skype and VoIP? My

terminology may not be correct, but I think you know what I am getting at. Would that have any impact on the revenue of all telecommunications companies—your own and any competitors—from telephony?

Mr Krishnapillai—Without highlighting any one particular service provider or technology, certainly VoIP, Skype and others would be major attractive features of any high-speed broadband network and would have implications for the entire sector in terms of traditional voice based circuit switching and other older types of technologies that use those voice technologies. So broadband will certainly have a major impact on the types of services being delivered for health, education and a range of other social benefits as well as voice and voice services, which is one of the reasons we believe it is so important. You have to get that service right so that we actually have the right technology in place to deliver high speed and also so that we do not replicate the 20th century monopoly that we had with Telstra's PSTN network with a 21st century monopoly of an NBN that delivers voice and other broadband services, which is why we put forward those four pillars in terms of the regulatory outcomes.

Senator MINCHIN—Can I just come back to your latest submission, and the OPEL contract, and its cancellation. You said in 4.4 that the department had provided flawed advice to the minister. Can I ask whether you had what you regard as a reasonable and adequate opportunity to contest that flawed advice prior to a decision, presumably by the minister, to cancel the contract? You might clarify that for me. Was it the minister, and did you have the opportunity to contest that advice with the minister before the contract was cancelled?

Mr Krishnapillai—I might at the outset say that this is the subject of legal proceedings so there are limits to what I can talk about in this area. Clearly we did not agree with the information we received back from the department. That was post event, rather than pre event. So we will be looking forward to discussing those issues at the appropriate time. As we have said in our statement on record in the Senate submission, the core of our disagreement was an assessment of how many underserved premises were to be serviced. Just for clarity we tried to put some examples in our submission—

Senator MINCHIN—Yes, it is quite persuasive.

Mr Krishnapillai—which I think helps you to understand how you could come to that possibly understandable misunderstanding. It is about the department taking a fairly basic mapping view, for example around Lismore, drawing a circle and saying that all of the premises within that area are served by broadband, therefore you cannot count any services in those areas, whereas anyone who comes from Lismore or has been through those sorts of areas would recognise that there are great swathes of the area within that circle that clearly do not have broadband services, and we identified that in our model. So there were some quite different opinions around that model. We tried to resolve that with the department. We were unable to do so pre and post and that led, I guess, to the recommendation for cancellation.

Senator MINCHIN—Sorry, did I hear you say that you are constrained because this is currently subject to legal proceedings?

Mr Krishnapillai—It is currently in legal assessment. We have some legal options, obviously, around what we will be doing with that particular contract.

Senator MINCHIN—I was going to go on to note that you have said in this submission that Optus reserves all its rights, and that remains your position.

Mr Krishnapillai—Correct.

Senator MINCHIN—Presumably that remains your position regardless of the outcome of this current tender.

Mr Krishnapillai—Correct; although, as I highlighted before, most commercial organisations have various elements where they are in dispute with other businesses and government. But we do not believe that should stop any organisation or government from working constructively in other areas. There is certainly a disagreement of assessment processes with OPEL. We will certainly work through that. As I said before, we certainly believe that we have moved on, and the much larger, greater and more important challenge is delivering the broadband network via NBN.

Senator MINCHIN—Are you able to put a figure on the cost to your company of the cancellation of that contract?

Mr Krishnapillai—We have certainly, in some detail, assessed that cost but we cannot go through that detail at the moment until we have finalised the next steps.

Senator NASH—I have a process question that I would like your view on. We had some discussion earlier today about the level of detail that would be released by the minister in terms of the regulatory advice and the advice from the panel itself to the minister, and how much of that would be made public. What is your view on what level all of that detail should be made public so that the unsuccessful tenderers are very clear, as is the Australian public, on the decision making process of the minister and, indeed, how he will arrive that the determination? I am just getting to the question of how much should the taxpayers of Australia be privy to in terms of what led to the decision? How much should be made public so that the unsuccessful tenderers are comfortable that the correct decision has been made, and on a certain basis?

Mr Krishnapillai—We have certainly said in the past that we believe that the expert panel and the ACCC recommendations should be made public. I think that is a fair call for us and any tenderer to this process in that we need to understand what the ACCC's view was and what the expert panel's view was in relation to their assessment of the RFP bidders. I would balance that, as I said before, by our desire to protect some national commercial intellectual property in other areas that are at the core of our bid. There are some elements of all bids, not just of Optus's, that I suspect would be commercial-in-confidence. We certainly would not be looking to release some of that information. But, as a principle, we would certainly look to maximise and shed as much light and transparency as possible on any information that has been fed into the ultimate decision by government, and that is particularly around the ACCC recommendation and all of the information in the expert panel report.

Senator NASH—What would be the ramifications if the minister chooses not to do that?

Mr Krishnapillai—I would not speculate on whether or not the minister would be going down that path. We have certainly said quite clearly we believe it is appropriate that the minister should release the expert panel report and the ACCC report.

Senator NASH—Okay. Thank you.

CHAIR—Thank you very much, Mr Krishnapillai and Mr Sheridan.

Mr Krishnapillai—Thank you, Senators, for your time.

[12.16 pm]

HORAN, Mr John, General Counsel, Primus Telecom

CHAIR—Welcome, Mr Horan. The committee looks forward to hearing from Primus Telecom. You are a solo operator here today, I believe, Mr Horan.

Mr Horan—Yes; Ravi Bhatia was unexpectedly unable to make it to Sydney this morning.

CHAIR—It is good you are here. As you are aware, the proceedings of this committee are public. If at any stage you wish to make submissions in private, please make your request of the committee and the grounds upon which you are seeking to do so and the committee will then consider it. It is unlawful and potentially in contempt of the Senate for any party to attempt to interfere with evidence otherwise to be provided by a witness to this committee. It is also potentially unlawful and again in contempt of the Senate for a witness to provide this committee with any false or misleading evidence. We have received your supplementary submission. Is there an opening statement you wish to make at this stage?

Mr Horan—Yes, I would like to make an opening statement, if I may.

CHAIR—Please proceed.

Mr Horan—Primus supports the deployment of a pro-competition national broadband network. If there is one main improvement that we would suggest for the process it is that there is more consultation or transparency. There are a number of issues such as points of interconnection, the services that would be available and the transition process which are all examples where ill-informed decisions could cripple our business and the competitive industry. So that is the main improvement we would suggest.

Primus continues to submit that the NBN must be operated under a genuine no-conflict, open access model. This, in the view of Primus, can only be delivered through a structurally separated and independent ownership model. Primus has a good vantage point to comment on this. Our industry has not delivered on its full potential. The last 10 years have been a costly but valuable lesson. The industry structure is undeniably flawed. Consumers and businesses have been the big losers. In Telstra—and we have submitted this previously—we currently have a wholesale network operator that has no incentive or inclination to provide open and equivalent access. Operational separation has proved a complete farce, and I do not believe anyone could credibly argue otherwise.

I would reiterate what I heard earlier in the evidence from the representatives of Optus, that the NBN does provide a once in a generation opportunity to remedy the current failings and establish a platform for the future that will foster innovation and competition for the benefit of all consumers and businesses in Australia. The essential feature of the new network must be independence—that is, independent ownership and independent operation; an ownership structure that can truly deliver competition and the benefits of competition. In our view, the few remaining critics of structural separation largely circulate hackneyed arguments of little merit. The reality to us is that Australia cannot afford not to have a structurally separated operator of the national broadband network. That is the only way to remove the perverse incentives that exist today. These incentives serve to block innovation and dampen competition. Again, we reiterate that this is an historic opportunity to correct the failures of the past. Primus remains cautiously optimistic and implores the government and its advisers not to waste this opportunity.

CHAIR—Thank you. Senator Nash.

Senator NASH—Can I just take you to your opening comment around the requirement for a no conflict—I think you termed it—open access model: (a) do you think that that is achievable and (b) what do you see as needing to be in place to ensure that that happens?

Mr Horan—That is entirely achievable with a structurally independent operator of a National Broadband Network that does not have any conflicting incentives, as proposed by the Optus bid. As it was explained earlier today, that would seem to deliver that outcome. I am sure some of the other bids might as well. Currently we face a situation where the operator of the wholesale network, Telstra, has conflicting incentives, and consumers and competition lose in that situation.

Senator NASH—One of the things that is actually very strong coming through all the submissions is this view that structural separation is necessary. Being the Devil's Advocate, in your view what are the reasons that people would not be supportive of a structurally separated model?

Mr Horan—That is an interesting way of phrasing the question. Look, they have their own agenda. My understanding is that it in excess of perhaps 90 per cent of the respondents who made submissions in the regulatory process supported a structurally separated outcome. Telstra has obviously clearly come out against such an outcome. I am not privy to internal discussions at Telstra, but they have their incentives for arguing that position. The arguments that are made in support of the anti-structural separation position I believe are largely of no or little merit.

Senator NASH—You mentioned that you felt that operational separation had indeed been a failure. Can you expand on that a little? Why do you think that that has been a failure?

Mr Horan—There is 10 years of experience to demonstrate that, for a start, we as a competitive participant in the industry do not receive the equivalent terms and conditions to that provided to Telstra retail. There are a number of well reported issues—access to exchanges for a start. It can take us up to two years to interconnect our equipment at Telstra exchange. Where last year Telstra engaged 900 plus DSLAMs throughout the country in less than three months, it would have taken us two years just to get access to an exchange. We are forced to use a fairly dysfunctional IT system to interconnect with Telstra wholesale to provision orders et cetera. That broke down a couple of weeks back for two complete days, where we could not process any orders as a competitive carrier. Telstra retail was not affected by that at all. These are issues that have been taken up with the ACCC before in terms of arguments under the operational separation plan. The ACCC has indeed referred a couple of matters to the former minister where it considered there were grounds to suggest there was a breach of operational separation. There has been no outcome and there has been no change in behaviour on the part of Telstra as a consequence of repeated complaints and allegations.

Senator NASH—Okay. On the issue of the level of detail to be made public from the RFP process, do you have a view on what level of public accountability, I guess, should be undergone in terms of making that information available to the public?

Mr Horan—Yes. I guess that, as opposed to the wider public, the industry itself and industry participants like Primus and other competitive industry participants are directly impacted by the outcome of this RFP. Our interests are aligned with the interests of consumers. We want to maintain our ability to participate as a competitive carrier. The outcome of that is that consumers and businesses benefit from innovation and a choice of services. At the very least, there should be some fairly detailed disclosure to industry participants that will be customers of the wholesale NBN operator. In particular, as I highlighted, there should be disclosure on the types of services that are going to be made available and the points of interconnection. There are a number of other matters as well. The transition itself is going to be very material to our continued participation. So we believe there must be a fairly detailed disclosure or consultation with the industry participants. There are precedents for that sort of disclosure in regulatory type proceedings where confidentiality undertakings are put in place and where specified individuals are enabled to view the material. At that level, I think, it must be fully detailed disclosure. The wider public, as taxpayers and as being likely to be impacted fairly seriously by this national broadband network, should also have an opportunity to understand the decision and why the decision was made when it was made.

Senator NASH—Thanks, Mr Horan.

Senator LUNDY—Mr Horan, you mentioned the IT system that you as a competitor have to essentially rely on for many of your access related issues to Telstra's network.

Mr Horan—Yes.

Senator LUNDY—Can you describe in a little more detail what happened a couple of weeks ago and how that impacted on your business?

Mr Horan—I wish I could explain in more detail, but at this stage the explanations we have had have been fairly insufficient and inadequate, so we do not have a lot of understanding of what happened. Something happened at Telstra—it was a Wednesday morning; I think it was around 9 am—and that essentially shut down our ability to interact with the Telstra wholesale provisioning team. For two complete days we were unable to process orders. It was resurrected again, I understand, in the late afternoon of Thursday. We have put through some requests for more information. Certainly when we have a better idea of what actually happened we will be taking that information as part of a formal complaint.

Senator LUNDY—To whom do you complain about such things, given that they prevent you from providing services to your customers?

Mr Horan—Telstra itself has a representative to whom you can formally make these complaints, but the ACCC is largely where the competitive industry will target complaints of this nature under the operational separation plan.

Senator LUNDY—Thank you. I want to refer you to an article in the *AFR* this morning regarding not your company but iiNet and reports that Telstra are cutting out copper and replacing it with fibre, which has the effect of denying iiNet their capacity to provide their naked DSL product to their customers. Has Primus experienced anything similar?

Mr Horan—I have not read the article and I am not in a position to comment in any detail. I would expect that if iiNet has suffered that fate we would also be experiencing those problems. I will make some further inquiries on that.

Senator LUNDY—I want to pursue this. Do you provide a comparable product to naked DSL?

Mr Horan—We are currently contemplating that, yes.

Senator LUNDY—Just seeking confirmation, you do in fact as part of your model install DSLAMs and provide services via the Telstra copper network direct to customers?

Mr Horan—Yes, we do.

Senator LUNDY—ADSL services?

Mr Horan—Yes.

Senator LUNDY—Where you have one of those services in place, that is a DSLAM installed in an exchange, and a customer connected through your business, what happens when Telstra changes the network to install a piece of fibre to push fibre further out into the network and then has some kind of system—I suppose what I know is RIMs, a large pair gain system. What would happen to the customer in those circumstances?

Mr Horan—We would be unable to provide a service to our customer in that situation. I guess that has been a concern of ours since 2005 when Telstra's grand plan suddenly materialised.

Senator LUNDY—So this reconfiguration of the Telstra network that they have talked about, effectively if they were to start doing that now it would have a directly anti-competitive effect if they did it in advance of the NBN.

Mr Horan—Quite clearly it would be anti-competitive. It would just destroy competition, full stop.

Senator LUNDY—Given that there is already one report, and it is in my own constituency, in Canberra, where this has occurred, in the suburb of Phillip, apparently emanating from Deakin exchange where iiNet has been notified that Telstra plans to cut the copper to push out fibre and that will have the effect of preventing iiNet from sustaining their customers on the current naked DSL product, possibly on a direct DSL unbundled local loop service that they currently provide. Can you undertake some inquiries within your company to find out if you have received any sort of notifications in Canberra or anywhere else of such activity? It concerns me greatly that this may be a tactic by Telstra trying again to sustain their monopoly.

Mr Horan—I would not expect that activity to be confined just to Deakin, to be honest.

Senator LUNDY—I know. It is strange. We do not know what Telstra are planning, what type of configuration they have in mind. That is unclear. I will certainly be asking them those questions this afternoon. I am sure, given that they have now had a little notice, that they will be able to provide specific answers regarding the technology they plan to deploy.

Mr Horan—Let us hope so.

Senator IAN MACDONALD—There is no player still in the game that would be opposed to structural separation. Is that correct?

Mr Horan—By that you mean there are no bidders currently in the RFP process that would oppose structural separation?

Senator IAN MACDONALD—Yes.

Mr Horan—I have no visibility of some of those bids. Primus certainly supports any procompetition bid and I would hope you are right. I guess it is an assumption you could make.

Senator IAN MACDONALD—You probably follow it a fraction more closely than I do, but publicly most of the other bidders have said that they agree with the structural separation proposal.

Mr Horan—I am not sure if all have come out so publicly, but certainly Optus, Axia and I believe TransACT made some similar remarks. But I do not really have visibility of what has been lodged, so it is difficult for me to comment.

Senator IAN MACDONALD—Telstra were clearly opposed to it, but they are not really in the game at the moment.

Mr Horan—Yes.

Senator IAN MACDONALD—I think one of my colleagues asked you this: can you foresee any reason why the government or any of the tenderers would be opposed to that if they agree with open access?

Mr Horan—I cannot see any valid reason to oppose it, especially if you are considering the long-term interests of end users, consumers, businesses and competition.

Senator LUNDY—I want to go to the issue of availability of information about the network. Obviously this is something that the government is considering as part of all of its considerations. I am interested to ask you as a competitor of Telstra: to what extent are you aware of the physical attributes of the network from the exchange out into the last mile, and how do you access information about the quality of copper? It is not really about the issue of DSLAM provisioning but more about the attributes of the copper that can support an ADSL style service or, perhaps later on in the context of an NBN, a VDSL style service. How do you get information about that copper, and how does that affect your business decisions on what markets to target? **Mr Horan**—We have very rudimentary information made available to us. We can run a number of basic tests, but it ultimately comes down to guesswork and speculation as to the quality of the copper. This is an issue we are discussing at the moment with Telstra in respect of some of our services. The current information that we can discern on the quality of the copper is very inadequate for us to confidently run our business and speak to our customers.

Senator LUNDY—How would you like to see that change? What do you think needs to be done for what is effectively an access regime to become a more effective access regime—that is, to provide access to information about the network in advance of having access to the network, which is what the regime effectively deals with?

Mr Horan—There should be open and equivalent access to information. If the information is available, it should be made openly available to us.

Senator LUNDY—Some years ago there was a Senate inquiry into the state of the network. It looked at, amongst other things, the extensive use of large, medium and small pair gain systems throughout the network. Have you ever been able to access mapping information about the location of those different types of pair gain systems and about the fact that many of them, although not all, block ADSL?

Mr Horan—I cannot really comment on that as I am not sure of the detail. I have viewed the odd map, but I am not sure how accurate all the detail of them was or whether they were provided by Telstra or engineered by someone at Primus.

Senator LUNDY—One of the reasons I am asking the question is that it is extremely difficult for anyone to find out information about the whereabouts of the pair gain system, not least because Telstra probably do not know accurately themselves. If you do have any additional information, could you chase it up and provide it to the committee?

Mr Horan—I will make some inquiries, yes.

Senator LUNDY—That would be helpful. These questions are trying to get a better picture of what is happening in that last mile in the context of the current service provision and also in the context of pushing out higher bandwidth services in anticipation of an NBN solution. Thank you for your time.

CHAIR—Thank you in particular for holding up, on your own, Primus Telecom's end of the bargain.

Proceedings suspended from 12.39 pm to 1.40 pm

WEIR, Ms Deanne Evelyn, Group Director, Corporate Development and Legal Affairs, Austar United Communications Ltd

CHAIR—Welcome, Ms Weir. As you are aware, the hearings of this committee are public. If you wish to provide your evidence in private at any stage then please make a request to that effect, whereupon we will consider it. It is unlawful and potentially in contempt of the Senate for any party to attempt to interfere with evidence that would otherwise be given by witnesses to this committee. It is also potentially unlawful and in contempt of the Senate for a witness to provide evidence that is false or misleading. We have a submission and a supplementary submission from you and your organisation. Would you like to make an opening statement?

Ms Weir—No, other than to say that in reading the interim report we were particularly encouraged to see that the committee focused very much on the need for the issue in regional areas to be addressed, with which we would fullheartedly agree. We think that is where there is the greatest need. We would also say that, in particular, the area of greatest need is a focus on backhaul services. We believe that that could indeed be the place where taxpayer money could most practicably and reasonably be put because by changing the paradigm about the cost of backhaul services in regional areas you create the opportunity for broader competitive access networks in regional areas. That is obviously an area of interest for us. With that, we would stand by the contents of our submission and I would be very happy to answer any questions.

CHAIR—And I suspect Senator Nash will have some.

Senator NASH—I do indeed. On that issue of backhaul, can you expand a little more for the committee on where you see the current impediments? Obviously there is cost. Is there a lack of competition? How do you see a better backhaul environment working?

Ms Weir—We have had various attempts to look at building wireless access networks into regional areas because, as you are aware, we hold the spectrum that can be used for WiMAX style or potentially even LTE style services in regional areas in the 2.3 and 3.5 gigahertz ranges. We have had a couple of different looks at trying to build our networks in regional markets. The biggest impediment always is that you can quite efficiently built access networks using wireless technology in a lot of regional towns but the commerciality all comes back to the fact that it is not just a question of building the network in that town but of then being able to bring that traffic back to hubs in capital cities and so on. The cost of that is just incredibly prohibitive, depending on what part of the country you are attempting to serve. There is limited regulation of those backhaul services and the costs are quite extensive.

I may have made the point in our last appearance before the committee that when we were looking to bid for the Broadband Connect program, in which we teamed up with our friends from Unwired and from Soul, we went to the incumbent provider and found that the cost of purchasing backhaul services to service the sort of network we were looking to build under Broadband Connect was much more expensive than actually building it ourselves. In the absence of regulation, it is entirely rational behaviour for Telstra or, indeed, anyone else to price their services in that way, because the point of buying those services is to build competing access networks. So if there is no regulation they are going to set the pricing in the way they see fit. The issue is that that backhaul service is the real bottleneck in terms of being able to build competing access networks and have innovation at a localised level. So that is one of the key issues we face in trying to be a regional broadband provider.

Senator NASH—What sort of regulation would you like to see in place to improve accessibility to backhaul for other carriers?

Ms Weir—Theoretically, one would argue—

Senator NASH—Theoretically is fine.

Ms Weir—Theoretically you could argue that certain backhaul services and certain broken down backhaul services, should be regulated access services under the access regime. But even the history of the access regime itself under the Trade Practices Act, has shown that that is a very difficult process for people to go through. Really it acts as something of a disincentive, particularly for an initially smaller provider looking to compete. We have not prepared a full submission on exactly what we believe would make sense but it is really acknowledging the fact that those backhaul services, from whichever market you are seeking to build a local access network in back to the main hubs, need to be provided at reasonable rates, particularly when a lot of those services are already there.

Senator NASH—The other thing I wanted to raise with you—which, as I said earlier, has been quite recurrent in the submissions—is this issue of structural separation. You also refer to it. We may well have covered it last time. In light of recent changes have you changed your view? Is your view the same as it was then?

Ms Weir—Our view is even stronger. Obviously we are aware of the Optus submission and the approach taken by Optus. We would agree with them 100 per cent. We would agree 100 per cent with their willingness to say, 'This entity that receives this funding needs to be structurally separated from the rest,' The Axia approach is that it is not even structural separation because it is just a separate entity that is performing this one function. That, we think, is absolutely critical. Again, I can understand from a shareholder perspective why Telstra does not want to go down that path, but we are talking about \$4.7 billion of taxpayer funds to address what is clearly seen as a need that has not been addressed by the market so far. So the market structures to date have not dealt with the need in the market. Something has to be done differently, and we would argue even more strongly, I think, having looked at what has happened in the last few months, that that structural separation approach is absolutely critical.

Senator NASH—In terms of where this NBN process is going to start—I have indicated earlier that a roll-in would be preferable, given that those are the areas that are not currently serviced—would it be your view in relation to the \$4.7 billion, if it starts in the cities and is rolled out, that there would be an expectation that successful tenderer would have to cross subsidise? If the taxpayer funding is supposed to go to those underserved areas—which would make sense if competition is delivering where it should anyway—do you have a view on where it should start and where it should roll from and to?

Ms Weir—If it is a commercial proposition then the logic of starting in major markets and building up revenue and working out makes sense. Again, we are arguing about trying to address

a need that commercial markets have not met. A lot of the metropolitan areas are already well served. Our argument has always been, and remains, that the focus should be on regional markets. The funding that the government is providing is helping to fund that approach. It is helping to fund regional areas that are not being served properly and where there needs to be more services provided. These areas need to be subsidised. I think it actually keeps it cleaner, if you like, to focus on those regional areas first and build in that way.

Senator NASH—Do you have a view on the RFP process and, obviously, the advice from the expert panel and the advice that will be given around regulatory framework options, if you like? What is your view on how public that information should be when the minister makes his decision? How much of that should be in the public domain?

Ms Weir—It is a difficult question because the more public you make it the more opportunity there then is for what is perceived to be confidential information of the bidders to be made public. It is a little bit difficult to go into detailed analysis of the reasons why the independent panel made its recommendations without understanding in detail what the submission is. On the other hand, you are still talking about \$4.7 billion of taxpayer funds and the need for accountability. I think that, during the Broadband Connect process, whilst what we submitted was commercial in confidence there was certainly an understanding that perhaps some of this information was ultimately going to have to become public.

Senator NASH—Given that you are now in that market with Tamworth and Wagga, would you want to see—I suppose in a balanced way, from what you have just said—at least some understanding of how the minister arrives at the determination of what the regulatory framework should be?

Ms Weir—On the regulatory framework, to clarify that, yes. I think there is a difference between making some calls around the regulatory framework and making judgment calls about the merits of one tender application versus another, which itself very much comes back to the commercial-in-confidence information of the different tenderers. But with the regulatory framework, in itself, the regulators need guidance, the courts need guidance and everyone needs to understand what the regulatory regime is intended to achieve and how it is intended to achieve it. I guess it probably is a little bit difficult to envisage how you can give that understanding to all of the relevant stakeholders without going through your thinking process.

Senator NASH—Thanks, Ms Weir.

Senator LUNDY—Thank you, Ms Weir. You make some strong points about the principle of equivalence in articulating your view on separation amongst the functions of the successful NBN bidder. I was particularly drawn to the point you make on page 21 of your submission, where you state:

It is important for the Government not to compromise in the area of equivalence. An example of where compromise is likely to be sought by the NBN operator is in the timing or extent of the imposition of the requirement for the use of the same ordering and provisioning systems and processes, which may require considerable modification of existing IT systems and transaction flows.

It goes on. It is a very important point. We heard earlier today about some of the problems that that causes for the principle of equivalence, such as when Telstra's systems went down the other week. Although they are obviously not in the process for the NBN, it is an incredibly important point that you make. Can you expand on this issue of transitional transformation of information systems relating to networks and access equivalence? Why, from Austar's perspective, is that so important to you and why ought the government to be devoted to maintaining the principle of equivalence for information as well as for access itself?

Ms Weir—Sure. I think that you can learn a lot from looking at the massive transformation process that Telstra itself is currently going through. Remember that Telstra, like all incumbent telcos around the world, has dozens of legacy systems—indeed, more—in terms of billing systems, provisioning, IT and all of these systems that grew up around each other without necessarily having an overarching architecture from day 1 that said, 'This is how we'll build this system,' because new technology is coming on board all of the time. Keep in mind that it is a relatively short period—1991 onwards—in terms of real competitive services, so all of the systems that existed before that within Telstra never assumed that there would be competition. From 1991 onwards, it had to change systems to allow competitors to have access to existing network but also, importantly, to have information. So there are physical connections that need to happen but there is also the need to understand that information sharing.

When we resell Optus mobile services—we used to resell Telstra mobile up until they switched off CDMA—the question is about where you are along the chain as a reseller. Are you basically just an agency and just selling and then Optus does everything else? We do a bit more than that, so it is important for us to have information that comes into our network so that we can properly bill our customers. If we do not have the immediacy of information about what is happening on the network and what is happening in relation to someone's particular account, we cannot bill that customer properly and we cannot manage that customer properly. We are giving them an inferior customer service experience if we do not have that equivalence of information from a customer service point of view. So, No. 1, from a customer service point of view, equivalence of information about managing a customer's account is critical, otherwise they are going to say, 'That wasn't a very good customer service experience. I may as well go with Optus or whomever.' So, from a customer service experience, it is very important.

No. 2, information equivalence is critical when you are planning how you want to roll out your services and how you want to compete. If you have to go and ask for every single bit of information that says, 'I want to know how long it will take to provision in this particular exchange here, there or wherever,' then what you are essentially doing is flagging to the incumbent—who you are also trying to compete with—what your competitive plans are. So, having an equivalence of access to that sort of information allows everybody to plan their own business in the way that they want to plan it and to roll out their network in the way that makes sense to them—subject, of course, to technical limitations or whatever else might be happening in the existing network. It then allows you to give an equivalent customer service experience—or, indeed, if you can innovate on top of it, hopefully a better customer service—and it allows you to be a competitor. So equivalence is absolutely critical.

Senator LUNDY—Thank you for that. In the context of where the NBN will end up, I guess that what you are arguing, essentially, is that equivalence of both capacity to serve the customer

and access to information needs to be one of the foundations of the operation of the wholesale aspect of the NBN.

Ms Weir—Absolutely.

Senator LUNDY—That is what I thought.

CHAIR—Ms Weir, earlier we heard evidence from Dr Kelso. He was suggesting that there might be two scenarios that roll out. I do not know whether you were in the room when he gave evidence?

Ms Weir—Unfortunately, no.

CHAIR—One scenario essentially allowed, as a result of the current process, a successful tenderer—as well as a Telstra—to operate, to some degree, in parallel after the event. As part of his evidence he was expressing concern, if I understood him correctly, about a scenario where there was not a restriction on overbuild. I note that at the end of your submission you say there are two things that must or must not happen, in terms of mechanisms, which would prevent the NBN from delivering. In 5.2 you say, 'There should not be any over-build restriction.' Can you expand on that?

Ms Weir—The argument that we have put forward is that this is about dealing with a void or a lack of network where network is critical—and if there is a commercial opportunity that arises once this network is built, we do not think that those commercial opportunities should be restricted. I understand the position that Optus have taken and we can see the logic in the argument from their perspective. We just do not think that it needs to go that far. Because what we are talking about here surely should be the funding going to areas where there has not been a commercial case thus far to actually build network, and if technology changes and there are advancements that create the opportunity for that, then we should be encouraging that competition and not restricting it.

Where one can see Optus might be concerned is if they are building in those metropolitan areas, and where there is indeed some competitive opportunity, they would be obviously worried about having Telstra just come over the top. Heaven forbid, no-one wants to see a repeat of the whole Optus Vision/Telstra cable debacle, because that has not really served anyone well. But that, to me, goes to the point of why, in any event, you would necessarily be prioritising metropolitan areas that have a commercial opportunity. We should really be focusing on where the true need is for these services, and the true need is in regional and rural areas where there just is not necessarily a case. There is some pre-existing Telstra network there but—to come back to the backhaul example—there is not necessarily an ability to access that at a price that encourages the build of competing access networks.

So, if the focus of this process is on those areas where there is most need, concerns about restricting overbuild become somewhat more irrelevant. We do not see it as being a high priority point and we think that the regulatory complexities that it could generate could be more problematic for the process. We are trying to focus on keeping this a very clean and more simple process because the simpler it is and the less legalistic it is, the more likely it is to be successful.

CHAIR—In making that assessment, are you saying that no overbuild can deliver a better service—and more of it—and competition? Or are you attempting to balance both those aims in what you are saying?

Ms Weir—If the focus is on building in areas where there has been little or no commercial activity to date, it just seems unlikely that there would be overbuild for smaller markets and greater geographic expanse with less potential market. It seems unlikely that someone would be prepared to make the investment to overbuild to compete with that existing network—and if they are, one has to perhaps question the actual rationale. Are they simply using monopoly rents to subsidise that in a way that is not particularly pro-competitive? It just seems an irrational investment ultimately for someone to make, given the size of some of the markets in the areas we are talking about.

Senator MINCHIN—Given that Telstra has been excluded from the government sanctioned NBN, one of the issues that will presumably arise is what there would be to stop them—and the question is: why should they be stopped—from upgrading their existing network to fibre where they so choose at their own expense? Do you say they should be able to?

Ms Weir—It is certainly hard to argue with that, but I think what it comes back to is a question of what network we are talking about—whether or not those who end up building the NBN need to utilise part of Telstra's network or whether they do not—because certain activity of Telstra in upgrading could, in fact, then frustrate that NBN build process. That is one of the very inherent difficulties with part of the approach to this. That is an issue for which I do not pretend to have an answer, but if you are talking about building NBN without needing to utilise as much or any of Telstra's network—if you do have a true build or buy scenario—then the question becomes somewhat different.

CHAIR—Thank you, Ms Weir, for your time today.

[2.05 pm]

BUDDE, Mr Paul, Private capacity

CHAIR—Welcome, Mr Budde. As you are aware, these proceedings are public. If at any stage you wish to give evidence in private please request to do so. It is unlawful and potentially in contempt of the Senate for any party to attempt to interfere with evidence that would otherwise be given by a witness, and it is potentially the same to give false or misleading evidence to the committee. Would you please state the capacity in which you appear before the committee today.

Mr Budde—I am an independent telecommunications analyst and I operate from the Hunter Valley.

CHAIR—Do you wish to make a statement?

Mr Budde—Yes. Thank you for giving me the opportunity to talk to you again. As you know, I am very passionate about the National Broadband Network, in particular in regional Australia, which Deanne talked about earlier. Since I last spoke to you, a couple of things have happened. Firstly, we now have an economic crisis, and that further highlights what I have discussed with you before-that is, the need to look at the multiplier effect of the National Broadband Network on health care, education, community services, smart meters and things like that. Secondly, we now have the Obama government in America, and we are seeing some good leadership coming from there. I am very honoured to mention to you that I have been an adviser to the Obama transition team. We talked about the transition of the American telecommunications industry and wrote four reports for the transition group. If you look carefully at their broadband submission you will even find certain elements that we in Australia have set up, such as the open access principles, which were very eagerly looked at by the Obama team and in their broadband economic stimulus package they have for the first time talked about open access in the United States. So it is no longer just the socialist countries that are doing this. The most capitalistic country in the world is really starting to talk about the national importance of telecommunications and the need for the economic and social benefits of a national broadband to make it available to everybody in the United States. I think that is a good move because the country is large and it takes international leadership, so it is good to have Obama on our side in this battle. Also since I last spoke with you, Telstra missed out in the NBN, as Nick just mentioned, and Sol Trujillo is leaving. I think this will open up a whole range of new opportunities for us to sit down with Telstra and discuss things.

So what has remained the same since we last talked? In my opinion, the need to have our vision clearly on the fibre-to-the-home network. Whatever steps we take in between are fine, but the end goal has to be fibre to the home. We talked about 12-megabit services in 2004-05; the international benchmark for 2010, which was set by the OECD and the European Union, is now between 20 and 50 megabits. So we will again be behind the eight ball if we do not focus on the future rather than on what happened three, four or five years ago. In that process, from what I have followed in some of the other discussions, if we actually start talking about fibre to the home rather than fibre to the node we are taking away a lot of the regulatory issues linked to

fibre to the node, which is still a very heavily dominated, monopolistic roll-out in the VDSL sort of area. We cannot avoid it. I realise that this is a process that might take five years or whatever, but it needs to be a process in which in the end we say, 'This is the end goal.' Fibre to the node obviously is not the end goal. No country in the world is seeing that as the end goal so we certainly should not be. Also, I mentioned to you on the previous occasion that Telstra will participate. There is no way in the world that Telstra will not participate. Telstra will participate in the National Broadband Network. Again, there is no country in the world where the incumbent is not participating, and I think we have a golden opportunity, with Sol leaving and with a review of the NBN, to actually make that happen.

What also remains is that we have to fight for open networks. You already talked about it. We need to have equivalent services. Since we spoke last time, more countries have gone in that direction—Switzerland; the Netherlands, which now has open access to fibre from \in 7 to \in 13 per month per customer, so that gives you an idea. I have just read an article from Palo Alto in America where they are rolling out a network with access, again at around US\$7, US\$8 or US\$9 per month for fibre network. It is run by Axia, by the way, who one of the contenders in the Australian NBN as well. These things are not just Utopia; this is not futuristic stuff. This is happening as we speak, so why should we aim for a service that is going to cost our consumers something like \$80 or \$90 a month. It is totally ridiculous, and it is still on a network that is 12 megabits rather than what these people are talking about—a 100 megabits.

I do not know if you saw my last report from last week on trans-sector work. In the economic stimulus—and we also have been able to put it into the Obama plan—we need to look at how we can solve more problems with one investment. If you have an economic stimulus of \$40 billion and lots of it is used particularly for infrastructure, then you should look for the multiplier effect. In that report I used the Victorian bushfire example where ten dozen communities have been totally devastated by fire. Why not make them smart cities? But we are doing it in silos. The construction people are saying, 'Oh, yes; we do something in fire protection'; Telstra will simply repair its copper network and the electricity company will simply repair their electricity network. If we start to look at an overall plan and recognise that we have this devastation and that we have to look at environmental issues, fire issues, transport issues and communications issues, we as a country—and as a world—are not organised. You are a silo minister or a shadow minister. So everybody is in silos.

We had an interesting discussion and we have spoken in the meantime to ministers Gillard, Ferguson, Tanner and, of course, Conroy. We tried to talk to Senator Roxon, and that problem is quite interesting because we have to convince people that broadband or communications is not something that the IT manager in health care does, but it is a core element in health care, it is a core element of education, it is a core element of energy saving, et cetera. The government needs to think trans-sector and start addressing these issues not in silos but as an overarching model. There should be a minister for trans-sector thinking, or something like that, so that when a situation like that happens, you can pull things together rather than have everybody sending in their own little car and doing their own little things. So that is coming out of the economic stimulus package. Suddenly you have these breaking points, and the financial crisis is a breaking point. It is not a slow process; suddenly people are interested in new ideas and new suggestions.

Also, when talking to governments, they ask, 'Paul, do you have ready-to-go projects?' and I say, 'Wow, they asked for that.' I turn around to the industry and get a 'no'. So we are not yet

ready. I am not just blaming the government for things like that, but also, as an industry, we are not yet ready to come up with a cross-sector approach to a particular problem. It does not really matter whether it is the broadband network or smart meters or the Victorian bushfires or those sorts of things; we are not there yet. We need to start working as a government and as an industry to look at situations like that. I think that is it from my point.

Senator MINCHIN—As an independent communications consultant, could you give us your honest reaction to this NBN tender process, which has resulted in the current operator of what passes for our network and the biggest telecom being excluded because it failed to submit a small business plan on time? What is your reaction to that?

Mr Budde—I think that is just one tiny, little element from it, but you cannot ignore the fact that Telstra over this whole five-year period has never, ever believed in the NBN. They have clearly ignored it. They have clearly said: 'We don't want it. We don't want Kumbaya; we don't want lovey-dovey'—all these sorts of things. So they have clearly indicated that, based on government policies around open networks and things like that, they really never wanted to sit down with the government to do that. In my opinion Senator Conroy had two options. A year ago he could have said, 'What are you talking about? Where on earth are the regulations, because we are still waiting for them?' That obviously would have led to a situation whereby Telstra would have said, 'I don't want to be involved anyway.' Or Senator Conroy could have taken the approach that he took, which has been delaying and frustrating—I fully agree with all of that. In any case, it kept Telstra on board for a year. We have now reached the situation where we have got a new opportunity to get Telstra involved.

The NBN was a request for proposals—no tenders, things like that. In the new environment, we have the economic crisis and, if you look at Telstra's body language at the moment, there are clear indications that Telstra want to be engaged. I think there are lessons from around the world that you are not going broke when you move in this direction. BT is still going very well. There is KPN in the Netherlands. Swiss Telecom is doing it of their own accord; they are not being forced by anybody. You start seeing developments in the United States. So I think you can no longer ignore the fact that the way we start looking at open networks is not something that is totally outrageous and nobody else in the world can do it and you go broke. I think Telstra will come to the party in that respect.

Hopefully what will happen are three things. The government cannot ignore the fact that Telstra did the bullying and basically lost the game. They played a high-level game but they lost the game. It is not my fault, it is not Senator Conroy's fault, it is not your fault—it is Telstra's fault. However small the issue is, it is not that Telstra has been so incredibly cooperative and at the last minute just forgot five lines. That is not the situation. I think the reality is that the government will have to start looking seriously at Optus and the others. You cannot again ignore, like they did with the previous—

Senator MINCHIN—OPEL.

Mr Budde—Exactly. You cannot do it again—that would be totally ridiculous. So there is that side of things. On the other side is the reality of the financial crisis. The industry groups I have been working with have been able to transplant some of that trans-sectoral thinking. We need to include international broadband network health-scare issues, not just as a side issue but in the

overall plan. My gut feeling is that we are slowly getting there. To be honest, if we could get there we would be leading the world in that respect. When I sent the same report that I sent to you to the Obama team, they said: 'Paul, good luck. We will never, ever get this going. We will never, ever get the thinking cooperation from health care and education so that we think together in a stimulus package like the broadband network here.' The EU is running behind us. The other day I read an article in one of the newspapers in France and they are still not there. We can grasp that sort of situation. We can start looking at the NBN and say, 'Forget about the proposals; we have to make sure that Optus and the others are becoming involved.' We cannot just ignore them-that is impossible and we should not do that. We owe it to them to stick to the national interest and we owe it to them to make sure there is a role. I do not think that the key issue for these players is building infrastructure. They want to be part of a telecommunications industry. So if you have got the industry, you have got a willing Telstra and you have got a government that is prepared to start looking in a slightly different way at the NBN in the total economic stimulus sort of environment then I think we have an excellent pot of ingredients that we can start working on in going forwards in that respect. We now have this golden opportunity because of all the things that are happening and have happened to actually get them together. Will it happen? I am a born optimist, so I will say yes and I will fight for it, but at the same time-

Senator MINCHIN—Correct me if I am wrong, but I understand you to be saying that the government should essentially set aside the tender process and get the parties back around the table. Is that correct?

Mr Budde—If the outcome is in the national interest and that outcome is acceptable to the parties involved, then, I think, why not? On a daily basis you would make decisions where you say, 'I wonder what would happen if I were to do this or that?' I know that in politics it is really bad to do that, but from a common-sense, national interest point of view—although I know they will have a ball when they say, 'Ah, they turned around!'—I think it would be great.

Senator MINCHIN—No, we have actually been calling for the minister to start again! I am interested in what you say. I would appreciate your comment on the way this has developed—with the apparent exclusion of Telstra entirely from the process. As you have—I think correctly—been saying, they just have to be involved. If you are going to build an NBN, they have to be involved at some point.

Mr Budde—Absolutely, yes.

Senator MINCHIN—But the only way to do that is really, in a sense, to put to one side the current process and get everybody back around the table.

Mr Budde—It depends a little bit. If you look at how it is happening around the world, where you have an incumbent that is not cooperative then you have to come up with legislation. There is no other way. But there are also examples in the world where you do not have to put in legislation and where the operator becomes involved—because, in the long term, it is in their interest. BT's new future plans are a million times better than many of the other incumbents around the world. They suddenly see other opportunities and new ways of moving forward, and that is happening—and you see that in Scandinavia and the Netherlands as well. So you can see that it is possible to remove the blinkers—the monopolistic 'how can I be greedy and get as much as possible from a very small pie?' attitude—and, if you are a little bit more daring as an

incumbent, you can say, 'Actually, the pie is much bigger if you talk about \$10 billion from health care and \$10 billion from Smartbits.' So you suddenly create a much bigger pie.

But in the current way in which we, as a society, live you cannot say, 'Give it all to Telstra and they will look after us.' You need to have competition, and you need to have an open network where the electricity companies and health care can participate on their own terms and conditions—not as a wholesale level where before you get a monitoring service you first have to pay Telstra \$80 or \$90 for a broadband connection. It does not make sense at all. So you need to have that infrastructure as a utility available—and that is what will happen with the open network. That can be done in phases or whatever. These are things for the long term, and then you can give them a year, or two or three years, to fine tune how they are going to do it et cetera.

Senator MINCHIN—The alternative scenario is one where if the government persists with its current course and awards a tender to, let us say for the sake of discussion, Optus, and says bad luck to Telstra and dumps on them, you are just going to have ongoing legal, technical and regulatory confrontation for, potentially, years.

Mr Budde-Yes, but if you look at the proposals, all of them talk about some way of allowing access into the Telstra network. That means that some sort of regulation will be required that allows Axia or Optus-or whoever is billing-connection to that network. If Telstra says, 'We are going to kill you. We are going to charge you hundreds of thousands of dollars for the backbone or whatever,' then there is no way that any of these projects will get off the ground. So, if the government says, 'Optus, you can do it,' then immediately linked to that will be legislation on how that will interconnect with the Telstra network. And the government will have to set prices because, as we have learnt over the last 20 years, that is the fight. You have to be very precise as to what you want to do, and you have to set wholesale prices in order to make that business case for those companies workable. It is impossible to actually have a business case where you say, 'Optus, you build whatever you want to and let Telstra do what they want to do.' That is not going to work. Despite what Deanne is saying, that it does not make economic sense, in some situations it does make economic sense to do something in Wagga or wherever simply to kill a project and weaken the competitor. It might be fought out in Wagga or Albury or wherever but, in the end, it kills the operator and then it kills the whole project, if that was your strategy. That would be the strategy under Sol, clearly, but I do not think that Telstra's strategy going forward will be a similar sort of strategy and I think they will become more cooperative in that respect.

CHAIR—You talked about the trans-sectoral process, and perhaps you might want to talk further in the context of health, but do you envisage that COAG, the Council of Australian Governments, might have a role in that?

Mr Budde—We have a very difficult situation in Australia in that respect. I find it very, very difficult to include the states in this sort of situation. This is typically a national situation; you cannot just put it in bits and pieces. The political system we have in Australia is failing us. Health care is the best example—that system is so failing us. When I start talking about transsectoral sorts of things what I am saying is, 'For heaven's sake, stop trying to fix broken systems.' I think that is the case in a lot of situations. We have to start looking at health care, at energy in totally different ways than we have done before. It is no longer just a matter of saying we will throw something at energy or we will save something and just going on; we have to

really start thinking quite differently. If you take the trans-sector approach, then the federal government holds the key to that sort of situation. It is totally silly if Victoria has smart meters different from the ones in New South Wales which are different from the ones in Western Australia. How ridiculous is that? Why don't we have a national approach to that? That is what we have been talking to Minister Ferguson about, of course. You need to have a national approach.

I am the Executive Director of Smart Grid Australia, an industry association working together on smart grids. We have a working group on standards. Basically, we have abandoned the standard and we have joined the Americans because, as I said, it is totally silly to talk about standards in Australia. We have to start talking about Smart Grid Europe and Smart Grid American, and we are in the middle and we participate in the working group electronically. But if it is silly to start talking about national standards, how silly is it to start talking about state standards? It does not make sense to all. On the other side, yes, we do need to get the states in place. So there is a role for COAG to do that, and I have absolutely no issue with it whatsoever, but only under the very strong leadership of the federal government.

CHAIR—How would you suggest to the federal government that it provides that leadership? On the most pressing issue of water, many of us would argue that the government has spectacularly failed to deliver on that leadership. You talk about separate meters in the context of the NBN. Well, in water we do have separate, different and distinct meters, state by state. So thus far the federal government has, in the view of some of us, failed to show and deliver leadership on water. How would you suggest to them they do so in the context of the NBN?

Mr Budde—It is interesting that you mention that because—

CHAIR—End the blame game, basically.

Mr Budde—Yes—there is a national proposal for an inland water network. The people involved in that contacted me and said, 'We have no idea but how can we work together?' That is typically a trans-sector situation. The funny thing is if you guys give us the vision, we fix it.

CHAIR—You are the doers.

Mr Budde—We fix it. If you have got the vision and you say, 'Guys, infrastructure, \$40 million: do something with water, do something with electricity, do something with broadband, but you have to make sure that you work together and come up with a plan of action,' I can come back within a month with a plan of action of how these sectors are going to work together and how we are going to utilise the infrastructure. All these companies have great people—great engineers, great visionary people. I can get them together in a group of 140 companies without any problems. They share and they provide submissions and they do whatever we ask them to do. But we miss the vision from the government. The government is thinking in silos: 'It's a water problem; fix the water problem.' 'It's a broadband problem.' No—it is a national problem. How can we actually link them together? If your vision is trans-sectoral, you start by saying, 'If we are to fund infrastructure, we have to have a multiplier effect; we have to find out how we can actually do that better,' and you can say that there should be some standards or whatever. That can be at a high level; you do not have to go nitty-gritty. This is high-level stuff, visionary stuff. The only thing we say to industry is: 'You have to work together. You cannot just say, "My

situation is unique." You have to work together.' Otherwise, the incumbent would say, 'Mine is an electricity problem. I don't want to talk to water.' And the telecom would say, 'No, it's a telecom problem. I don't want to talk to electricity.' But if you turn that around and say, 'The infrastructure will have to be used to get a multiplier effect,' then suddenly you will find that these people—because the government says so—will start working together. Then you can come up with an infrastructure plan that will actually start addressing that, and the water issue, and the electricity issue and other issues in the broader sense of infrastructure.

CHAIR—That sounds like a plan to deliver evidence based policy to me. It sounds very good, and I do not disagree with much of what you say. Yet it has not happened thus far. For instance, we have a city like Melbourne building a pipeline to take water from a river system which arguably does not have it to give.

Mr Budde—Yes.

Senator NASH—It is a very stupid pipeline.

CHAIR—Indeed, Senator Nash; we have gone trans-sectoral. It has not worked thus far, though it sounds good. You say, Mr Budde, that you can help the doers do it. But I come back to the question: how would you suggest to the government that they actually make it work?

Mr Budde—First of all: show leadership. Show leadership, show leadership, show leadership. You must come with that vision. You could say: 'We have got \$40 billion on the table. We are going to try to use that in a way that will get this multiplier effect,' and you could include things like health and education. I mentioned that we had spoken regarding education. The University of New England came to us with a plan as to how we could actually link education activities together with the NBN. So we are delivering that, based on the Victorian problem. When I wrote my story-my brilliant idea of trans-sectoral thinking about Victoria-a couple of days later I thought, 'Paul, forget about it. You will never get this up. Telstra is already running as Disney. Electricity companies are already doing things. Forget about it.' I wanted to abandon it. But then I threw it back to the group and said, 'Okay. But what about the next time?' On 7 May we have a meeting with the minister. We will have a plan where we say, 'If something like this were to happen and we wanted to talk trans-sectorally, or we wanted to think about smart cities and things like that, here is a plan of action.' We will come back on 7 May with a piece of paper. It will be a start—I am not saying it will be a hundred-page document talking in detail about how it is going to be done. But we will come back with a document to say, 'Next time, let us do it in this way.'

CHAIR—And your 7 May meeting is with Minister Conroy?

Mr Budde—On 7 May we will have an industry dinner with the minister and that is when we are going to propose that to him.

CHAIR—Okay. Thank you.

Senator NASH—This is probably going to sound rather simplistic, but I would like your view on what would, hypothetically, be the perfect model for telecommunications infrastructure. I am at risk of being called an agrarian socialist by my good colleague, Senator Minchin. Maybe we cannot unscramble the egg. But should it be seen as a utility, as infrastructure—as in road and rail—that there is government ownership of, or a PPP, and completely separated out from service delivery?

Mr Budde—Another thing I was discussing the other day with the international group was this. Here we are. What is our average age? Let us be optimistic—

Senator NASH—Thirty!

Mr Budde—Fifty, let us say. But the people that we are building the infrastructure for are now, let us say, 25 to 35. Go to any 25- to 35-year-old person and look at how they communicate—how much they do that through video. They do 15,000 things at the same time. They watch YouTube, they produce their own little things, they do this, they do that et cetera, whether you like it or not. We can say, 'Oh, no, it's not good for the kids.' Forget about it; that is what they are doing. So, if we start building infrastructure, it is not infrastructure to deliver for our generation: 'What you should do on the fibre-to-the-home network is IPTV.' We are the TV couch potato generation. We come up with this brilliant idea: television. Those kids do not watch television anymore. It is not television that they want; they want to communicate over that network. They do not want Telstra or Vodafone to be in the portal or whatever to tell them what they can and cannot do; they want to have access to the network. They want to do what they want to do. If you start looking at infrastructure in that way, you are not delivering a telephone service; that was a hundred years ago. You are not delivering a video service; the television era is over. People like Austar, not the broadcasters, are winning the battle-they are winning customers. So you start looking at what they are talking about; 250 channels of rubbish does not really matter, but there will be 250 channels of pay television next year.

CHAIR—Ms Weir has left the room! But we are in public.

Mr Budde—So you start seeing totally different sorts of situations like that. What happens if we start building networks for the future? If you build a fibre-to-the-home network, it takes five to 10 years. That is when this generation is getting to be in charge. So, if we do not build what these people need, we are rather stupid. We will have to make sure that the infrastructure that we build facilitates what they want to do. They are going to create; they are going to produce; they are going to communicate. They are not using a system from Telstra, Optus, Vodafone or Hutchison. So the infrastructure is separate. You have to provide an infrastructure. Forget about the individuals; I cannot go to the healthcare department and say, 'You can deliver a telemonitoring service, but first you have to pay \$50 or \$60 per line to Telstra before you can do it.' You need to have open access. If those people cannot deliver a healthcare service with video monitoring for \$1 per customer, the healthcare system will collapse, so you have to go to a utility facility. Everything on top of that is services, with no regulation or very little regulation. People can make money. If the people make 500 per cent profit on a particular service they flog over the net, I have no issue with it whatsoever-let capitalistic competition rule-but the infrastructure should be open and utility based. Utilities can be owned by private companies; we see that around the world. Utilities can be owned by the government. Every country will have a slightly different flavour for how you do that, but it is not really important who owns it.

I understand that you cannot suddenly turn to Telstra and say tomorrow, 'Guys, we'll take it all away from you.' Of course you cannot, but what you can do as a government is have vision

and say, 'That is most likely the scenario where all the countries are going; we should be going there as well.' How can we now engage Telstra to understand? Sol Trujillo talks about fibre to the home. He clearly says fibre to the home is the end goal. He says wireless is not the solution for 80 per cent of the population. That is Sol Trujillo. He says wireless might be used in certain pockets but fibre to the home is the end goal. If a conservative, monopolistic telecommunications person like Sol Trujillo is talking like that, you had better pay attention. He is actually saying that that is the future. He is not going so far as to say, 'Split the infrastructure off'—of course not—but you start seeing that everybody is pointing in that direction, and then you have to make that facility.

We have to sit down, as other governments did with their incumbents, and say, 'How are we going to get there?' In the Netherlands they have isolated Amsterdam. Amsterdam now has its own fibre optic network. Surprise, surprise—what happens? KPN came and knocked on the door and said, 'We were excluded, but actually we would like to run this network, and we agree with the price of \notin 7 that you guys have set.' Suddenly that happens. Scheepbouwer, who is the CEO of KPN, is saying, 'We were wrong in 1996 when we made the decision not to go for open networks.' That is the CEO of KPN; it is exactly the same with Telstra. You see that these people are turning around, but we have to show—you guys have to show—leadership. That is the direction. Otherwise, why on earth would you give up a monopoly? Why would they give up situations where they have 80 per cent or 100 per cent returns on their investment? Why would they?

Senator NASH—Well, why would they? That is a very good question. To move to the scenario that you were talking about, it has to take something. Why would they give up what they currently have to move towards a—

Mr Budde—What we have to show them—and they see it themselves as well, but you have to push them and prod them a little bit—is that the pie is actually bigger if you allow health care and education and SmartBits all to use the network. I sat down with France Telecom—another very, very conservative company—two years ago. They have opened up in the meantime. At the time, I was saying: 'Okay, but if you open up the network then you can allow others to use the network. For example, the electricity companies would like the broadband network. They would like to do that.' But it was a case of: 'Over my dead body—not on the conditions of the incumbent.' So the same thing happened in France. The incumbent never thought about talking to the electricity company because it was water and fire; there was no way that they could talk to each other. Suddenly there is the open network. Suddenly France Telecom turns around and says: 'Actually, we can allow you to use our network for whatever you want to do. We won't restrict that, and you'll pay a low utility price.' Now it is happening. Now they are working. This is what can happen if you start opening up their eyes.

Monopolies are your problem. For you as a government, that is your problem. We cannot solve it as an industry. You have a problem with monopolies. That is why we have you guys sitting there to make sure that, if there are monopolies, they are regulated monopolies. That is the situation. Here we have a monopoly. Whatever we do, we will never, ever get a competitor if there is not a regulatory regime that actually allows you to do that. You can go into all sorts of silly things that we have been talking about for the last 20 years—overbuild and things like that. That has not worked. Nowhere in the world has it worked that way.

The only way forward is to talk about open networks, separation and, one way or another, structural changes to the industry creating the utility facility that you need and then allowing others to build on top of it. Look at Google. How much money can you make if you actually create an open environment? The telcos are saying, 'Where is the business model?' I heard Telstra saying—and some of you might recall it—'The internet is going to be the biggest disaster we are going to have. It will melt down the network in Australia.' That was Telstra's reaction back in the 1990s, and now the internet is their biggest growth market. So those are the sorts of things that you have to do; that is the situation with incumbents that you have to get through. It requires vision to push that. You can use your government, your political powers, because it is a monopoly. If it were not a monopoly, why would we bother? We could open it up. But it is a monopoly.

Senator NASH—Exactly. So is the answer—hypothetically, in a perfect world—to structurally separate Telstra, or is there another way through regulation that you could have enough clarity to have that infrastructure as utility?

Mr Budde—I think that basically what the governments around the world are doing is coming up with things like 'open network equivalence'—blah, blah, blah. You have a set of what I would call the open access principles. Here are 12 principles. It is one sheet of paper, not a 1,500-page document. Do you agree with these principles? If the answer is 'yes', then we can sit around a table and sort it out ourselves. We do not need any regulators. But if one party says, 'No, we are not going to do it,' then obviously we have a problem. In the industry group that I am talking about—140 companies—all of them agree with open access. When Optus et cetera started and I said, 'Guys, if you are going to be part of this group, you have to accept open access principles,' quite a few people in the industry were surprised when Optus said, 'Okay, we agree to that.' Every company involved in that accepts the open access principles. Every company accepts some sort of structural separation.

How do you get there? If you have a cooperative incumbent, you can sit around the table—as happened in Switzerland, the Netherlands et cetera—and solve it that way. We have not had that cooperation from Telstra—in any case, not so far. Will they turn around? Will the new CEO become more friendly towards this sort of situation? We do not know yet. We hope. If that is not the case then, sorry, you have a hell of a lot of work ahead of you. There is legislation involved in it. There are endless court cases involved in it. It will be a disaster for one or two years but, unfortunately, if that is the price we have to pay, so be it.

Senator NASH—Thank you; that is very enlightening.

CHAIR—Thank you, Mr Budde.

Proceedings suspended from 2.45 pm to 3.15 pm

WILLETT, Mr Edward Campbell, Chair, Communications Committee, and Commissioner, Australian Competition and Consumer Commission

CHAIR—We welcome Mr Willett of the ACCC, one of the few witnesses today appearing before this particular committee for the first time. The proceedings of the committee are public. If at any stage you wish to give evidence in private, then please so request and we will consider your request. It is unlawful and potentially in contempt of the Senate for any party to attempt to interfere or influence evidence that would otherwise be provided by a witness to the committee, and it is also potentially unlawful for a witness to provide false or misleading evidence to this committee. Do you have any comments to make on the capacity in which you appear?

Mr Willett—I am also a member of the Australian Energy Regulator.

CHAIR—Would you like to make an opening statement?

Mr Willett—Just a few brief comments along the lines of a process issue that follows a theme that I am sure you have heard before. Firstly, thank you for the invitation. It is a pleasure to be here this afternoon. In responding to the invitation to appear here today, the commission CEO, Bryan Cassidy, on behalf of myself and others in the commission, suggested that the commission is always happy to assist the Senate whenever we can but we did face, at least at that time, the possibility that the probity processes associated with the RFT and tender arrangements and the government's consideration of those proposals would still be effective. That is certainly still the case. The government, as I understand it, is still considering those proposals. So I am constrained by those probity arrangements from saying anything about details of those proposals or the commission's advice to the panel or other advice to government. I do want to be as helpful as I can be here today, so what I do is seek to address questions by drawing on previous work of the commission and material that is in the public domain already and previous thinking of the commission. I will be careful not to say anything that might lead to inferences being drawn about what the commission has said to the panel and to the government. I will ask the committee to bear with me in that and recognise that such inferences cannot be drawn. Otherwise, I am happy to deal with questions as I can.

CHAIR—Thank you, Mr Willett. Senator Minchin.

Senator MINCHIN—Just a couple of questions despite the constraint. As I understand it, the ACCC was more than happy to release its report to the government, so we invite you to release your report today as a matter of course. You are free to decline, but I am disappointed that you are not able to present your report today given, as I understand it, your willingness to do so in earlier evidence to the Senate. Is that correct?

Mr Willett—I do not think that is quite correct. I understand that Mr Dimasi in the previous hearing said that the commission has a general interest and a general desire to as an independent regulator behave in as transparent and open way as possible. But I think those comments and comments by Mr Cosgrove recognise that there are times when the commission is providing some advice to government on competition law and regulation issues, access issues, it cannot immediately be made public although eventually we always look to the government releasing

that information. In this context we have a competitive tender process where confidentiality is an important part of the competitive tension in the proposals. That process, as I understand, is still going on and so the commission is constrained by the probity arrangements associated with that RFT and tender process and so we cannot discuss or release any information as part of that advice.

Senator MINCHIN—Because you choose not to? When you say constrained, you are choosing to be constrained?

Mr Willett—No, we have all undertaken obligations under the probity arrangements. Each of us who had exposure to the details of the proposals, we have all signed up to a set of arrangements that require us to respect the probity arrangements in that document, and I think we are obliged to do that.

Senator MINCHIN—Just to explore that, what does that mean? Presumably the government asked you to provide this advice to the expert panel.

Mr Willett—Yes.

Senator MINCHIN—But they said, 'We don't want your advice unless you are prepared to sign here on the dotted line that you will observe all the probity arrangements surrounding this tender.' Is that how it works?

Mr Willett—Well, the process was a bit more extensive than that. It involved probity clearance and adherence to a set of principles that applied to everyone who was involved in the process. And I think the department has provided advice to you that there is a probity officer dedicated to this process, and we are constrained by that.

Senator MINCHIN—But presumably you were a free agent in all this. You could have chosen not to be so bound.

Mr Willett—Yes, and as a consequence I would not have been involved in the process.

Senator MINCHIN—But you chose to (a) be involved and (b) be bound by this process.

Mr Willett—Yes, and I think that, given it is a tender process that is designed through confidentiality arrangements to engender competition, you would defeat that objective by anybody who is involved in the process openly talking about the details of those proposals or the very sensitive advice that we have given on the efficacy of those proposals. That competitive process is still going on and so it is important, to preserve the integrity of that process, that everyone involved in it does not release details.

Senator MINCHIN—In earlier evidence to Senate estimates, the ACCC made it pretty clear that the demands upon the ACCC in providing this advice over, I think, a few weeks over Christmas was going to be extraordinarily demanding upon the ACCC. Was it in fact so demanding? And was it difficult for you to do what seemed to me to be a quite unreasonable task of examining all of these bids and providing advice in a few weeks over the Christmas-New Year period?

Mr Willett—It was certainly difficult and demanding; I would not say unreasonable. It was certainly difficult and demanding particularly on the staff who were working on the project. I have got to say that, in the time available, I think we did a very sound job. I think the quality of the advice we have provided is high. I did make a point, late in the process, of asking senior staff if they were happy that we had had enough time to provide sound advice and whether they felt we needed more time to ensure the efficacy of that advice. The very clear answer was yes and no—that no more time was needed, we were happy with the time we had, and that the advice was sound.

Senator MINCHIN—Did the government provide you with additional resources to ensure that you were able to meet this rather extraordinary time line?

Mr Willett—No, we accommodated the work within our own resources. We had had notice that this was coming for some time, obviously, and it is part of management of resources to ensure that those resources are available when they are needed.

Senator MINCHIN—So it did not detract from other very important work that the ACCC does?

Mr Willett—Not in a material respect, no.

Senator MINCHIN—You didn't have to divert resources from other tasks?

Mr Willett—Inevitably there is some diversion, but not in a way that materially affected the work we were doing or the work we were obliged to do.

Senator MINCHIN—Are you operating on the basis that your report will be released when the government makes an announcement, which we have been told will be this month?

Mr Willett—It is a matter for the minister, as it always is, when the minister asks us to conduct some work in a policy context. I understand the view he has expressed is that he will release at least core details of the work that we have provided, subject to ongoing confidentiality requirements. Yes, I would hope that would give everyone an understanding of the work we have done and the contribution we have made to this process.

Senator MINCHIN—Did you provide just one document to the minister?

Mr Willett—It is one document but it has a lot of components.

Senator MINCHIN—How long is this document?

Mr Willett—It is sizable.

Senator MINCHIN—What—200 pages?

Mr Willett—Yes, it would be of that magnitude.

Senator MINCHIN—All right. We will look forward to reading it.

Senator NASH—Given that this new network is going to be open access, can I have your interpretation of the definition of open access, as the government has proposed it?

Mr Willett—I do not want to touch on what is involved in the NBN process.

Senator NASH—Okay, a general principle.

Mr Willett—As a general principle, what does open access mean? Open access is an obligation on the part of the owner of a bottleneck infrastructure facility to provide access on fair, reasonable and equivalent terms to the basis on which they provide services to themselves in those instances where the service provider is vertically integrated, in order to promote competition in dependent markets, usually downstream markets. In this instance, if you have, say, Telstra's ubiquitous copper network, the principles of access regulation are, first, that it is a bottleneck facility because it is the only ubiquitous fixed network that exists in the country—no-one is going to build another one like that—and that competition in a lot of downstream markets, including phone services, data services, broadband services et cetera relies on competitors to Telstra seeking access to that infrastructure in order to provide value-added services. So the principles of access are that that access should be provide on reasonable terms such that it facilitates and promotes competition in the dependent markets.

Senator NASH-I am going to try and phrase these questions broadly .

Mr Willett—Sometimes there is no short answer and I am sorry for that.

Senator NASH—Could you outline for the committee what process a successful tenderer would go through if, hypothetically, they needed to gain access to existing infrastructure?

Mr Willett—I cannot really comment on that because that would depend on the nature of the proposal and whatever consequent changes to access legislation are associated with the successful proponent. To be helpful, I know the issue of unbundled local loops and unbundling subloops has been a question before this committee. Without saying anything about what is in our advice or what different proponents have wanted, I point you in the direction of some work the commission has done on the question of subloops. We, back in 2007, were requested by the then G9 consortium to vary the then UL loop service to insure that it included access to subloops. We engaged in that process most notably in late 2007 and issued a discussion paper on that question. From page 7 of that discussion paper, there is quite a good section on the technical aspects associated with subloops unbundling. I think that is more than you would need to address this subject, so I can refer you to that. I might say that shortly after that we came to a view that there was probably not going to be much short-term interest in that question of varying the service declaration for the ULL and we ceased that particular process. We have now combined that into our generic fixed services review and we issued a discussion paper in the fixed services review in November last year. Again, on page 54 onwards, there is a discussion on the question of subloop unbundling. I think that would bring you up to date on that issue.

Senator NASH—Thank you; I think that will be very helpful. One of the earlier witnesses was discussing backhaul and some of the difficulties that they had found in terms of trying to access this. Could you provide for the committee the ACCC's role in general around backhaul and any regulatory framework that applies specifically to backhaul?

Mr Willett—Backhaul services are transmission services from exchanges back to a central core point. Transmission services generally have been declared under part XIC. We have exempted that declaration where there has been competition in the provision of transmission services, most notably intercapital city around the eastern and southern seaboard of Australia and on some high-volume regional routes. So the routes of interest in backhaul are declared. We do hear on a regular basis—

Senator NASH—Could you explain that for the committee just so that we have it on record?

Mr Willett—Apart from the intercapital city transmission network and some regional routes, transmission infrastructure in Australia is declared. What that means is that if anybody cannot negotiate access to that infrastructure—and this is by and large Telstra transmission infrastructure—they have the option of seeking an arbitration of a dispute by the ACCC. I was going to go on to explain that, while backhaul has been in the public domain a contentious issue and people tell us it is a problem getting access to some of these backhaul routes, we have had no disputes that have gone to full determination and only two disputes lodged with us that have been subsequently withdrawn—despite on a regular occasion us saying that we are happy to resolve those access disputes if people want to bring them us. While I acknowledge that backhaul is potentially a substantial problem, particularly in the provision of broadband services—because backhaul is often where the real bottleneck is—it is difficult to comment on how big a problem it is given the fairly limited dispute activity we have had before us.

Senator NASH—What determines the cost of backhaul to an access seeker?

Mr Willett—That is a question that is very difficult to answer briefly. I guess the very short answer is—

Senator NASH—We've got plenty of time!

Mr Willett—access prices should be determined according to the cost of providing those relevant services. But, of course, when you have different infrastructure going over different routes, different distances, different impediments to the rollout and different utilisation of that infrastructure, it is very difficult to calculate a generic access price. We have issued some access principles and pricing principles for those services but, if we get a dispute on a point-to-point basis, we are still going to have to do a fair bit of work to work out what an appropriate price for a particular transmission service is. That might be one of the impediments to getting these issues resolved, because often it is easy to see that access seekers might want a particular backhaul route yet the costs of seeking resolution of that dispute are quite high relative to the level of service that they might be seeking to acquire. That is a potential issue. I do not know how big an issue that is, but it is certainly a potential issue.

Senator NASH—So in layman's terms it is not necessarily worth their while or it is prohibitive to actually go down that route for something that might not in the end provide what they need?

Mr Willett—That is a potential answer to the question: why is there so much public fuss about this issue and so little dispute resolution activity?

Senator NASH—What determines the cost of doing that for a carrier who is seeking access?

Mr Willett—To resolve a dispute means bringing it to the commission. The commission embarks on a dispute resolution process that involves a series of orders and requests for information and some confidentiality impositions. The commission goes to great lengths to try to minimise the cost of that process. It is an administrative process so it is certainly a much lower cost than a judicial process. Nonetheless, it is not costless. I can understand that in relatively small matters—if it is not life and death for an organisation; if it is a relatively small organisation—an access seeker might think twice about seeking resolution to a dispute.

Senator NASH—So they throw up their hands and say, 'It's all too hard'?

Mr Willett—Or they settle on what terms they can.

Senator NASH—One of our earlier witnesses was talking about backhaul and actually made the point that it was more expensive to access that backhaul than to build their own. Would you agree that that is an entirely possible scenario?

Mr Willett—That is possible. In fact, we have seen competitive rollout of transmission services, as I said, on the major routes. So it is not clear that that is an inefficient investment in infrastructure on high-volume routes in particular. But it may also be an abuse of monopoly power by the incumbent.

Senator NASH—Sorry; could you say the last bit again.

Mr Willett—It may be that rolling out competitive infrastructure is an entirely efficient solution on high-volume routes because there is enough capacity there to justify the cost, but it may also be, on lower volume routes, that the incumbent is abusing their monopoly power by charging excessively or seeking to charge excessively for access services to that backhaul service.

Senator NASH—Okay. If that happens, the only way that can be resolved is if somebody comes to you wanting a dispute resolution?

Mr Willett—That is right.

Senator NASH—If it is all too hard, then it just stays as the status quo.

Mr Willett—That is right.

Senator NASH—Indeed, it would seem then, too, in the regional areas—we unashamedly come from regional areas and bat for regional areas—

CHAIR—Proudly so.

Senator NASH—and proudly so; thank you, Chair—that the economies of scale for perhaps other carriers to access the backhaul from the incumbent just become prohibitive and they just cannot do it.

Mr Willett—That is certainly a risk. The reason we keep regulating some transmission services providing backhaul is that it is not efficient for anyone else to come along, or no-one else has come along and said, 'Okay, I'm going to roll out that infrastructure as well.' So it is a recognition of the bottleneck nature of some transmission services in lower volume routes—that is important—but, on the other hand, there are high-volume routes where competitive infrastructure is quite viable.

Senator NASH—Yes, and I take that point absolutely. But it is a bit of a conundrum, isn't it?

Mr Willett—It is.

Senator NASH—if you've got backhaul in this particular area where it is held by an incumbent and it becomes not worth the while of another carrier to go through the whole process of trying to gain access at a reasonable cost. Would you see then that some regional communities have perhaps in the past missed out because of that conundrum, if you like? That is probably a bit difficult—

Mr Willett—It is hard for me to comment in detail because we have had so little before us. I am only speculating that the cost of seeking access to those particular services is the impediment. It may be that there is another problem; I do not know.

Senator NASH—Finally—you may not be able to answer this, of course, and I understand that—it does seem quite extraordinary that the regulatory framework was not determined before the RFP, before the whole process. It seems—to a layman, anyway—that, if I were going to be a bidder in this, it would be a bit of an unknown quantity to go down the road not knowing what the regulatory environment is going to be. Do you think it would have been more useful if the RFP had been subsequent to a regulatory framework being determined rather than them happening concurrently?

Mr Willett—I think I can understand a view that says, 'We don't want to constrain the detail or technology that is going to be employed in meeting this RFP, and if there are particular regulatory arrangements that would facilitate that particular project design or technology then proponents can make submissions on that.' That is my understanding of why we have the process as it is. So I understand the point, but I can also understand the counter point, which is that there is good reason to do it that way.

I was just trying to think whether I had experienced anything like it before. The closest thing would be back in my days at the National Competition Council, where we in effect developed an access regime in conjunction with the government developing the project with a proponent on the Darwin to Alice Springs railway. It was not a competitive tender process, so it was different in that respect, but that was an example where there was a proponent to build it; there was a policy to try and get the project completed; there were public funds available to assist in that; and there was also a need to meet the objectives of part IIIA of the Trade Practices Act, the relevant access provisions in that case; and so the proponent in effect developed the access regime in sync with the development of their proposal. That is not an easy process, but it is understandable in some circumstances where that process is desirable.

Senator NASH—Another thing that has been quite prevalent throughout all the submissions is the issue of structural separation. We have had quite a deal of discussion around this as it relates to the incumbent and also as it relates to a potential successful NBN provider. Do you have some views you would like to share with us in both of those cases?

Mr Willett—I am constrained to some extent, but let me say this. Certainly in my time with the commission, and I am in my sixth year now, and I think before that, the question of the structure of Telstra, its size, its ubiquity across all services, has been a prominent issue in the facilitation of competition. The early work I can remember was in 2004 when we did some work on emerging market structures, where we advocated that some horizontal separation arrangements should be considered, and they were designed to try and invigorate the sort of cable versus copper competition we have seen overseas, particularly in the US and some European countries. That was really staved off in Australia because of Telstra's involvement in pay TV. More recently, we have said some things about functional and operational separation of course involved in the development of some enhanced accounting separation rules. You would have seen comments by the commission chairman particularly that we are not terribly enamoured of those current rules. So, yes, it is an issue.

I would like to say this about the difference between structural separation and some lesser form of structural reform, because I know that has been an issue for you. The important point that is sometimes lost is that full structural separation which involves the bottleneck being owned by someone different from downstream providers is designed to remove all incentives on behalf of the bottleneck owner to favour a particular downstream competitor. It is the only way to do that. That is not to say that functional separation, some lesser form of structural reform, does not serve some purpose, but it never deals with that basic incentive for the bottleneck to deal with its affiliate downstream on more favourable terms than the competitors of that downstream firm. The only way to deal with that affiliate problem is to get rid of the affiliation.

Senator NASH—Yes.

Mr Willett—Lesser forms of structural reform are designed to make more transparent the provision of bottleneck services and dealings with the downstream affiliate. The purpose of that is to make it possible, easier perhaps, to make judgements about whether access terms and conditions to third parties reflect the sort of terms and conditions that are implicit between the bottleneck and the downstream affiliate. The reason that is important is that, if there is not equivalence between services provided internally to the affiliates and externally to third parties via access, competition downstream is distorted and you do not get effective competition downstream.

So it is important recognise a couple of things. Firstly, full structural separation is at one end of the spectrum that is designed to achieve something that cannot be achieved by any other mechanism. There is then a continuum of different structural reforms from the sort of accounting separation we have at the moment at this end to the sort of separate company structure we have in the gas access rules in Australia, whereby you have separate accounts and a separate company structure—you do just about everything you can except separate ownership. The purpose of that is to make those dealings between the affiliates, the bottleneck and the downstream component, more transparent to get good access terms in place for third parties.

Senator NASH—I suppose anything other than structural separation is going to potentially give greater transparency but not necessarily certainty that there is that separation.

Mr Willett—If you see the fundamental problem being the bottleneck favouring its affiliate, there is only one way to deal with it. Other forms of structural reform do not deal with it. That does not mean they cannot do some good things, but just not that.

Senator NASH—Absolutely. Finally, in this brave new world we are entering into with a new NBN provider, would you like to see the ACCC with further resources or being structured differently in order to do your job even better, if you like? That might be something that you would like to have asked even without the NBN process.

Mr Willett—I could advocate a better communications commissioner!

Senator NASH—That is a quite serious question—

Mr Willett—Yes, I know.

Senator NASH—despite the fact that we are smiling about it—because obviously it is going to be very important to get the regulatory environment right with whatever happens out of all of this. You will probably tell me that you are very well equipped to do it, but what if there were things you could change to be able to do your job even better? I am not saying that you cannot do a complete job in the current circumstances but refer to things that would improve your ability to do your job.

Mr Willett—If there were, we would already have put them to government.

Senator NASH—I thought you might have put them to government but you just did not get the right response!

Mr Willett—In the context of the NBN, we would need to see what our role is first. Then I am sure there will be discussion about what we need to undertake that role effectively. In terms of our current role, inevitably if you have more resources you can do more things. But if you are asking me whether there is something that we really need to do our job effectively and which we are not doing now—including more resources to do that—I cannot identify that.

Senator NASH—Thank you.

Senator LUNDY—I have a couple of issues to address. The first question I have for you with respect to the issues that Senator Nash raised on structural separation, different forms et cetera, is: what international examples would you point to that are instructive in what constitutes a successful structural separation for the purposes of removing bottlenecks, transparency equivalents et cetera?

Mr Willett—The common example is of course the UK and their functional separation approach. I certainly see some advantages and some desirable aspects to that reform process. It is perhaps early days to make definitive judgements about how successful that will be, but we certainly have our eye on that as perhaps a lesson in a form of functional separation. In terms of

structural separation you can look to Singapore. They have a quite successful approach and have ended up with a fully structurally separated network and service provider who is willing to provide services at very low prices. I think the broadband access price is US\$9 a month in Singapore. Singapore is of course a different country—it is very urban—but that is an impressive result. There are other examples throughout Europe of different approaches to structural reform. I do not know that I want to single out any particular one for favoured comment. In all of this, the whole structural reform debate is still in relatively early days. There is certainly a lot of thought going into it in a lot of countries and it is certainly on the agenda of a lot of countries.

Senator LUNDY—Earlier in the day we had some discussion about an article in the *AFR* relating to a problem that iiNet appears to be confronting with respect to plans by Telstra to embark on what is described as a network upgrade. I understand that this issue has been picked up by a number of organisations, including the Competitive Carriers Coalition. The committee understands that my husband works for that organisation, but, notwithstanding that, it is within my constituency that this is occurring. I was approached directly by iiNet late last week and they are concerned about this. What is the ACCC doing about this particular problem, where the physical network can be changed, effectively rendering existing services by other companies null and void? They cut the service off.

Mr Willett—We have only just become aware of that issue. I certainly understand the problem. We have been highly cognisant for some time that there was a risk of installation of RIMs stranding DSLAM investments and other electronics investments. There can be quite legitimate reasons to install RIMs. Do you understand RIMs?

Senator LUNDY—I know what a RIM is, yes.

Mr Willett—Telstra already has a lot of them out there. That is one of the ironies of the NBN debate, that there is already a bit of NBN out there. Having said that, there can be anticompetitive reasons behind that sort of network upgrade and anticompetitive effects, particularly with relatively short notice periods—I think 15 weeks has been provided in this example—and if there have been no offers of accommodation through a different service, like a bitstream service. So we will be having a look at those questions in relation to this particular instance and, if there is a case that is contrary to the provisions of the act, we will be taking action on it.

Senator LUNDY—Thanks for that. I do not know if it is a RIM that they are putting in.

Mr Willett—I think it is.

Senator LUNDY—I have not had that confirmed with me. I was going to pursue it with Telstra.

Mr Willett—It is some form of network upgrade that would involve fibre going into the network such that there is no ULL from the exchange in effect. So that is the nature of the problem.

Senator LUNDY—That is right. That is all I have. Thank you.

Senator IAN MACDONALD—Just a quick one, Mr Willett. What role will the ACCC play in drafting the regulatory regime?

Mr Willett—At this stage, I cannot answer that question until it is appropriate for me to do so. I would certainly expect that to be part of the role we have in providing advice to government.

Senator IAN MACDONALD—I am not wanting you to talk about advice to government but obviously the government will say who the preferred tenderer is and what the rules are. Then they will no doubt say that they have to put a regulatory regime around this. Is your commission equipped to do the drafting or do you just deal with the draftsmen and parliamentary staff?

Mr Willett—The usual process is to develop a policy and then for legislative drafts people to do the drafting. Drawing on previous experience, the policy can be in various stages of development. So we would be looking to get as much detail into that policy as we can to make it clear for the draftsmen about what is needed.

Senator IAN MACDONALD—So you would be putting the input into the policy.

Mr Willett—As a matter of course, the commission is consulted by policy agencies on amendments to the act. I think that is just a sensible arrangement.

Senator IAN MACDONALD—So once the government gives the broad picture, you become proactive in saying, 'Well, from experience, we'd recommend you do it this way', or 'Don't do that; don't fall into that trap', or 'This hasn't worked in the past'; all that sort of thing.

Mr Willett—That is quite a common role for the commission and I would expect us to perform that sort of role in this instance.

Senator IAN MACDONALD—Is that classed as advice to government or is it simply advice to the draftsmen once the government has made its broad intention?

Mr Willett—No. It is providing advice, inputting into the policy development process, which a regulator does do quite legitimately on a regular basis.

Senator IAN MACDONALD—Very legitimately, I would say. You would be the experts to do it.

Mr Willett—I think that is recognised. It is just sensible.

Senator IAN MACDONALD—Do you normally deal with other groups of people that might have an interest in it? Do you consult with them on the way you are thinking that the government policy be implemented?

Mr Willett—No, policy development is the role of the executive. We have an input into that process, drawing on our expertise. It is then a matter for the government to determine what sort of consultation is needed. Generally there will be some consultation on legislative amendments. That is quite standard. But the government does that not us.

Senator IAN MACDONALD—So the government does that not you.

Mr Willett—That is right.

Senator IAN MACDONALD—So the Law Council usually would have a technical interest in the legislation or the regulations rather than the policy.

Mr Willett—Yes.

Senator IAN MACDONALD—But the government says, 'Here's what the draughtsman's done with input from the ACCC. What do you think about it.' That is how it works.

Mr Willett—That is right.

CHAIR—Thank you very much.

[3.56 pm]

GALLAGHER, Mr Bill, General Counsel, Public Policy and Communications, Telstra Corporation Ltd

QUILTY, Mr David, Group Managing Director, Public Policy and Communications, Telstra Corporation Ltd

WARREN, Dr Tony, Executive Director, Regulatory Affairs, Telstra Corporation Ltd

CHAIR—I welcome the witnesses from Telstra. Thank you for your, in most cases, further appearance before this committee. As you are aware, the proceedings of this committee are public. If at any stage you wish to give evidence in private then please make a request to that effect and the committee will consider it. It is unlawful and potentially in contempt of the Senate for a person to attempt to interfere with evidence that would otherwise be given by a witness before this committee and it is also potentially unlawful and a contempt of the Senate for a witness to give false or misleading evidence to this committee. Would you care to make an opening statement?

Mr Quilty—No, we do not have an opening statement. The only thing I would like to do is to present a document we have titled *Critical issues to be addressed in the NBN decision*. We are happy to provide that document to the committee for its consideration.

CHAIR—Thank you. That will be eagerly-devoured reading no doubt.

Mr Quilty—We are obviously happy to answer any questions.

Senator LUNDY—The story du jour appeared in the *AFR* this morning. I took representations from iiNet late last week about notification they had received from Telstra about a network upgrade in the Canberra suburb of Phillip apparently emanating from the Deakin exchange. The issue as described sees the copper effectively being cut for iiNet's customers between them and the exchange and replaced I think by fibre—I think that is what they have been told. But that has the effect of preventing iiNet from maintaining current customers on what they call their 'naked DSL product'. So my question to Telstra is—and, as I said earlier, this issue has attracted some attention today through the course of this inquiry—what are Telstra planning to do and how does this impact upon previous comments made by Telstra in relation to your capacity to upgrade your network?

Mr Quilty—My advice is that Telstra has to move its subexchange from the current leased premises in Phillip in the ACT because the lease has expired on the building and the building is being demolished. Hence, Telstra has, obviously, no choice in this particular matter. In terms of the affected services, I am informed that there are 18 affected ULL services and 24 affected spectrum sharing services across six Telstra wholesale customers, so a total of 42 services across those six customers. I am informed that, as a result of this lease expiring and this building being demolished, this subexchange is now moving to a new site, the MLC building in Phillip and, as a result of that—I would say, forced—move, Telstra will be upgrading its network in terms of

making ADSL2+ available to customers in that exchange area. So there will be some benefits for customers.

I am told that Telstra wholesale customers may be able to supply ULL and spectrum sharing services from this new subexchange, but this will require an external interconnect and will be at some cost to them, as there is no room for the racks to be installed in the new location. Obviously there is only a small number of services, however, so we do not envisage that the cost will be very significant. I would like to simply stress that, from the advice I have, this is something that is being forced on Telstra and will result in the vast majority of those costs being incurred by Telstra since we are having to move this subexchange because of what has happened with the building. The number of wholesale services affected is 42. My advice is that this sort of situation is pretty rare. I think Dr Warren has indicated that, in total, over the last 12 months there has only been one other example around Australia where this has happened. In total, we have had 47 services where we have had to issue notifications and this amounts to 0.005 per cent of the total ULL and SSS or spectrum sharing services that we offer.

Senator LUNDY—Thank you for that explanation. Is the subexchange at the MLC building a remote integrated multiplexer?

Mr Quilty—I am not aware of that. I will have to take that on notice. There is nothing here in my advice that indicates that it is.

Senator LUNDY—As to the impact on customers accessing a competitor's service via ULLS, is it possible for Telstra to configure the network in such a way that you are able to continue to be able to allow access to your network through that kind of service, as opposed to providing it, as you say, as an external build to the subexchange? I think you described that as the only way they could go forward.

Mr Quilty—The advice I have is that there are two choices in terms of wholesale customers. They could upgrade the external interconnect by providing, if you like, some capability outside the building and continue to provide ULL or spectrum-sharing based services using that external interconnect. Alternatively, they could migrate those services back to Telstra resale products. So those are the two choices that are available.

Senator LUNDY—Yes, I am sure they realise that. Can I ask if you advised iiNet or any of the customers in my electorate if the proposed network upgrade as described by Telstra was as a result of the building being demolished?

Mr Quilty—The advice I have here is that we have, in accordance with our contract terms, advised our customers that ULL and spectrum sharing will no longer be available in the affected DAs and that we have provided our customers with the notice required under the customer contracts in the contracted notice period.

Senator LUNDY—Sorry, Mr Quilty. I do not think anyone is suggesting you did not provide adequate notice; I am just asking you if you gave them the background to the issue—that is, a building was being demolished and that led to the change.

Mr Quilty—My advice here does not indicate either way, so I would have to take that on notice. It does not say we did; it does not say we did not.

Senator LUNDY—I am curious because it makes it all seem far more reasonable if, in fact, a building is being demolished and changes have to be made. It does not excuse the fact that it is changing the competitive nature of that part of the network, but I think that for the purposes of my constituency it would assist them in understanding what is going on.

Mr Quilty—My response, a little cheekily, would be that it would take one phone call either from them or from somebody else who might represent them or be interested in the issue to someone like me to find out the facts. What seem like perfectly reasonable explanations would be found and provided.

Senator LUNDY—Let me put it back to you, somewhat cheekily, that it does not take much to tell the whole story the first time around.

Mr Quilty—My advice in what I have written here is that people were given the requisite notice. We did advise our customers in accordance with the terms, but my advice here does not say either way whether that included the explanation of the circumstances, so I need to check. I just do not know.

Senator LUNDY—I suspect not. Can you confirm that some years ago Telstra gave undertakings in the context of, I think, the Besley inquiry that no more large pair gain systems that had a broadband-blocking capability or effect, either in whole or in part, were being installed in the network? Is that still the case?

Mr Quilty—I would have to check that. I do not know the answer to that. I do recall that there was agreement reached on the rehabilitation of large pair gain systems, and I know a program was put in place in that regard, but in terms of any such commitment as you are referring to I would have to take that on notice.

Senator LUNDY—I do recall that. Can I ask you, then, if Telstra is still installing RIMs, or remote integrated multiplexers, for the purposes of rolling out new infrastructure?

Mr Quilty—I would have to take that one on notice as well. I do not know the absolute answer. Certainly it is not a large part of our capital works program at all, but as to whether there are any at all being installed I cannot be definitive.

Senator LUNDY—With respect to existing RIMS, are you aware of any work being done to improve their capacity to host DSLAMs or ADSL ports?

Mr Quilty—I might have to take that on notice as well.

Senator LUNDY—While you are there, could you also take on notice the extent to which any competitors are able to locate their DSLAMs within the remote integrated multiplexers of Telstra and if, in fact, that has ever occurred. Thank you.

Dr Warren—I will just add one extra thing on an earlier question. I thought I had seen this, and I apologise for not having it more closely to hand. In our answers to your questions on notice last time, it says: 'Telstra ceased its purchase and general deployment of RIMS in 2002. There have been a small number of installations over the last three years for specific technical reasons.' Then we go on to list the areas concerned. I think it is fair to say that as a general matter we do not. I am pretty certain that with the Alexander building example the MLC building is not a RIM. We will double-check that for you, but my sense is that RIMs are no longer—for obvious reasons given that they are a broadband blocker—a key factor in our rollout schedule. Let us double-check the specific questions you asked there, but I think that might help answer that initial question.

Senator LUNDY—I certainly appreciate that, Dr Warren, and I would be interested in any information you have about remediation of RIMs and their broadband-blocking characteristics.

Dr Warren—Sure.

Senator LUNDY—Thank you.

Senator MINCHIN—Mr Quilty, thank you for tabling this document on critical issues to be addressed in the NBN decision. Could you just help the committee a bit by explaining the status of this document, why it was prepared, who it is for and what you are trying to achieve with it?

Mr Quilty—As you would be aware, Senator, late last year we were excluded from the NBN request for proposals process by the Department of Broadband, Communications and the Digital Economy. We made it clear at the time that, while we do not agree with that decision, we have moved on. However, that does not mean that we do not have a vital interest in making sure that whatever is decided in relation to the NBN makes sense from a technical and a security point of view. It is highly likely that any network that is built will interconnect with Telstra's network infrastructure at particular points. It is highly likely that Telstra's customers could be impacted in some way as a result of those interconnections. There are a wide range of issues in terms of national security and network security. The provision of a variety of services-emergency services and other services-which are largely the responsibility of Telstra could potentially be impacted. Telstra is also, more generally, obviously very interested in the provision of highquality broadband services in Australia using the best possible network infrastructure and in the issues around the upgrade of that infrastructure and its ability to deliver services, particularly high-resolution video services. So, regardless of who actually does the job or what the outcome of the NBN is, Telstra retains a vital interest. The purpose of this paper was-and is-to inform people who are interested in this issue about what we see as the range of key matters that should be considered and deliberated upon in terms of the decisions that are being taken. We have made this paper available to a number of people in the government. It is our intention to continue to make it available to people in the government, and we thought, given the Senate committee's interest, that it would be worthwhile for you to have it as well.

Senator MINCHIN—We appreciate that, and it does raise a very significant number of issues. Of course, the biggest thing that has happened since we last saw you is your exclusion from the process. Others may want to go into the details of that, although you have spoken publicly about it, said you had moved on and indicated what your future strategy might be. But,

just as an aside, when you say you have moved on, are you reserving your legal rights with regard to the matter of being excluded from this tender process?

Mr Quilty—As any company probably would in this situation, we have reserved our rights. However, taking legal action is certainly not a priority of ours in this regard. We have not undertaken any actions, if you like, to prepare at all for litigation. We have no idea how the process will end and what the result will be, so it would be entirely premature for us to be focusing on issues around legal action. On the contrary, our focus is on using what we think are our world-leading network assets to continue to deliver the best possible services to customers. We retain a vital interest in this issue, not only because of the fact that we have such a significant customer base and such a large investment in broadband network infrastructure but also because we retain a key interest in the importance of ensuring the outcome actually continues to encourage competition and investment in broadband and competing infrastructure in this country. We will have to see how that comes out. It is fair to say that, while we have reserved our rights, that is not our priority at this point.

Senator MINCHIN—Obviously in the surprising absence of Telstra from the tender, there is a lot of speculation about what the government might or might not do. The minister assured us in Senate estimates that it is still his ambition to make an announcement this month. I think this committee would be interested, given Telstra's obvious interest and background, in what you are speculating regarding the outcome, and, through your networks and contacts in the industry, what you are hearing as to when an announcement might be, when you are expecting that announcement—in other words, your contingency plan: what are you planning for and what you are expecting?

Mr Quilty—The first thing I would say is that there has been no communication between the government and us subsequent to our exclusion in December. Obviously whatever is being considered is happening without our input. We have indicated to the government that, if they wish, we are happy to talk to them. At the same time we have made clear that we have copped the decision of the exclusion on the chin, that we have moved on and that our focus is on using our existing assets. In terms of anything that we are hearing or being told, it is certainly not being told to us directly by the government.

Senator MINCHIN—They have not told us either.

Mr Quilty—I see things in the media and we obviously have various advisers and consultants and there are people in the industry who talk with government on an ongoing basis. It is probably best for me to talk in terms of options which, if you like, may be on the drawing board. I need to stress that, in terms of those options, I have no brilliant inside insights—quite the opposite. As you say, it has been made very clear that an announcement might happen in the next week or two. In terms of what the particular models might be, one possible model I see is one where an alternative wholesale network is committed to by the government. The equity owners may well be the government and a number of, if not all, the remaining bidders through the RFP.

In terms of such a network, the big question of course is: how would it be financed? It is pretty clear, from the information we have seen and the financial advice that we have been given, that the remaining bidders would have great difficulty in the current financial climate in actually raising the money to build what would be a \$10 billion to \$15 billion network. The government

has made clear that its maximum investment is \$4.7 billion, so the question is: where is the remaining money coming from? I think Optus has indicated publicly that it does not see itself investing more than \$1 billion or \$2 billion in the network. One would have to surmise from that that the remaining money would be coming either from an increased investment by the government—the government taking a greater stake in the network—or from the money being raised through the debt markets, which, in our view and from our advice, would be exceedingly difficult in terms of the bidders that remain in the game, unless the government were to provide them with some sort of debt guarantee. Again, I have no inside information but it would seem to me that the only options available to fund such a network are through an increased government stake or through the provision of some sort of taxpayer guarantee in terms of the debt that is raised by the other bidders.

In terms of such a network my assumption would be that it would be a wholesale only network. My assumption would be that it would be a combination of a fibre backhaul network or the provision of fibre to the node, or certainly to some points in Telstra's network in a lot of locations, but that none of the bidders would be advocating that they could get fibre to the node to 98 per cent of the population. Hence you would envisage that such a network would involve a combination of fibre, wireless, or backhaul for wireless, and satellite and that a number of those who might be investing in a wholesale only network, particularly Optus, would also be retailing off that network and providing last mile solutions on that network. One envisages they would include some sort of interconnect in Telstra's copper access network to the homes, so there would be a need for regulated pricing in that access. One would envisage as well that the pricing would include a national uniform retail price as well as a number of wholesale products. That is one option and, without any great inside knowledge, I think that that is probably the more likely option being considered.

Another potential option is to basically mandate the government's core requirement. The core election promise was to provide a minimum of a 12-megabits-per-second downlink broadband service to 98 per cent of the population. Obviously the preference was to do that using fibre to the node, but that clearly is not technically the preferable option. What could happen is that the government may decide to mandate—that that 12 megabit promise will now be a new statutory or licence condition requirement. My presumption would be that if it is a requirement it would be implemented in a similar way to the USO or the digital data service obligation, which was an obligation put in place in 1997 to provide 64 kilobits to 96 per cent of the population.

Under such a model, one would presume that a significant proportion of the population would get access to the 12 megabit minimum. Under normal commercial operating procedures, it will be provided commercially. One would presume that, in addition, the government's \$4.7 billion may be used to actually encourage the provision of that service in places where it is not provided now or where it may not be able to be provided purely commercially. Then, in terms of any gaps that exist, the designated provider—which we presume would be us—would be required to fill the gaps either with or without government funding. I think my view of that particular proposal is that what it does is ensure that we end up—particularly for people in regional areas—with what would be the cheapest and probably the least capable result rather than encouraging people to invest and to innovate and to use the best possible technologies. If you mandate a requirement, effectively a company which is not commercial but which has to meet that requirement has virtually no choice but to do it in the way that is cheapest. That is most likely going to result in

the least capability and it probably is not going to result in any significant upgrades in the future. So I would encourage the government not to go down such a route.

A third possible route would be to simply have a very large government capital subsidy program whereby you would think that the commercial rollout would occur, hopefully, with the right level of regulatory certainty. You would look to cover as much of the population that way and then, in terms of the remaining population that cannot get 12 megabits, just as you have with earlier government programs, you may have government funding—in this case, capital funding—available to enable providers to make a business case in those less than commercial areas. So that is another possibility.

Senator MINCHIN—Thanks for that. I want to defer to my other colleagues, but I would first raise with you this practical issue. Your paper reminds us that the NBN came from you coming to government-and I declare an interest: I think I was present at the meeting, in August 2005, proposing an upgrade. The then government of the day was disinclined to proceed with the sort of regulatory changes which Telstra then thought would be required to provide the requisite environment for that upgrade, but it was always based on an upgrade of the existing Telstra network. Then, as you say-and, I think, quite rightly-Labor, in a sense, picked up your proposal and turned it into its election policy. But my point is that it has always been based on an upgrade of the existing network, whereas I think a lot of Australians have had in mind that this NBN involved a sort of stand-alone and quite separate fibre network. I am just trying to get my head around the idea that if it is not you upgrading your own network then it is someone else upgrading your network. Does that mean that the existing Telstra network will not be there because it will be dug up and removed? We had an earlier witness saying that they envisaged, on one level, the government ordained and subsidised NBN and then, on a second level, your current broadband network operating on copper and operating, in a sense, in competition with the NBN. Is that sort of scenario technically possible, or is it impossible to have the NBN tender winner laying out fibre alongside your copper and you continuing to operate your copper from the exchange? In terms of your painting of scenarios, is that a possible scenario or not?

Mr Quilty—Tony, would you like to answer about the technical side of things?

Dr Warren—Just on that, let me be clear upfront that, of course, it is possible to have competing networks. That is not an issue at all. In fact, it is the norm in most of the world except Australia. It is the norm in mobiles as well. The technical issue, though, is that if you are going to do an upgrade of our network to a fibre-to-the-node network, it is not really possible to do a fibre-to-the-node upgrade but keep the copper running. There is no reason why you cannot run the fibre out next to the copper.

Senator MINCHIN—In the same duct.

Dr Warren—But at the node, unless you had a situation where you cut the copper and said, 'Actually, we're going to put that copper line back and keep that running out because that's going to be used by Telstra, but this copper line we need to put in the back of the node, being built by the winning bidder.' That is what we call sub-loop unbundling and jumpering at the node, and it is really not possible because we are talking about tens of thousands of nodes. The idea that you have people rolling out to these nodes in people's streets and saying, 'Well, this bit of copper is now going to go in the back of the node' or, in fact, it is going to go back to Telstra,

is just not physically possible, so what you do and what we think would happen is you cut the copper at the node, stick all the copper pairs into the back of the node and then it goes back through the fibre, to the exchange, and that piece of copper basically becomes redundant at that point.

Senator MINCHIN—So Telstra's existing copper from the exchange becomes redundant.

Dr Warren—If Telstra or anyone else were trying to service the customer using the copper from the exchange, it would no longer work. They would have to get on to the fibre, go through the node and then pick up the copper at the node to go out.

Senator MINCHIN—So that is an area—continuing to operate your existing copper network—which is simply not practical.

Dr Warren—Someone, presumably it would be us, would clearly continue to own and maintain the copper sub-loops from the node out to the customer, and we would have our interexchange thing. I take you to the diagram on the front of the paper we dropped out. You would have a situation where the copper was owned and operated presumably by Telstra, the node and the fibre owned and operated by the government funded model or whatever comes along, and then you would have a whole series of backhaul operators hanging off the exchange with their own interexchange networks.

Senator MINCHIN—So would you have two wholesalers? You would have a wholesaler of the optic fibre from the exchange to the node, and the wholesaler of the copper from the node to the home.

Dr Warren—That is one of the questions we were raising—

Senator MINCHIN—And then retailers coming in on both those wholesale—

Dr Warren—The problem we have is that nowhere in the world has done it where you have someone upgrading someone else's network. Those are questions we really do not know the answers to.

Senator MINCHIN—You highlight these in your paper, presumably; do you?

Dr Warren—Yes.

Mr Quilty—The advice that I have had from engineers is that, in terms of doing this practically in a way that will ensure reliable services and a reliable cutover of services, the only option you really have is to get all of the copper pairs at each node and cut them over to the fibre. You have to cut them over individually. That presumably is the only practical way to do that regardless of whether it is our fibre or somebody else's. The idea that you go into these trenches and decide, in terms of each individual pair, where it should go, and you do that not only on day 1 but whenever a customer decides to move from one provider to the other, that you go down and you find in the absolute multiplicity of these minute pairs which one is the correct pair to move back or forth—and you are talking about often working underground in muddy water and snake-infested pits, to actually go down there and try—

Senator NASH—Please give us some more detail!

Mr Quilty—We are happy to take you through a demonstration.

Senator MINCHIN—He has not mentioned the funnel webs.

Mr Quilty—You are not working in pristine conditions. When we are envisaging, we do this. Our people were basically losing sleep thinking about how they could reliably move all of these pairs in one go. That was seen as a huge challenge, particularly given that these are the copper lines used by people who need to have them available 24/7 for business purposes, emergency services and all those sorts of things. They were very concerned about the ability to do them all in one go. To think that you can start to pick and choose and move these backward and forward at whim, depending on where services are going, is totally unrealistic, certainly in terms of the advice I have.

Senator MINCHIN—Thank you. In view of the time, I will defer to my colleagues.

Senator NASH—Gentlemen, thank you very much for this paper. You certainly raise some very interesting issues. One can only imagine that, if you had put as much thought and detail into your proposal, you might still be in the game. I take you to the section where you talk about further separation of Telstra. You say:

If further separation of Telstra is being contemplated what are the risks, particularly in terms of the timing and the total cost of the NBN build?

I understand that is a question you have posed to government, but what does Telstra see as the risks of further separation? Do you have a view on that or is it a general—

Mr Quilty—Our view is that separation increases costs, reduces investment incentives, makes it more complex to provide reliable end-to-end services and it has not been demonstrated to work anywhere in the world. Not only that, it is an Old World solution that has been put forward to overcome problems in the old copper environment which will largely be overcome by technological enhancement in the new fibre environment. We see it as largely a campaign by others in the industry to do harm to Telstra. We do not see that it will result in any benefit for end users-customers. We think it would be very discouraging in terms of investment. It would put back the speed of any rollout of an NBN because what you would be asking Telstra to do-and this is very hypothetical because it assumes Telstra would do the NBN, and we are excluded—is to embark on a very large and complex capital works program in terms of the NBN and at the same time basically completely reconfigure our business. To think that you can do both of those things simultaneously is unrealistic. I think it would significantly prolong any build-out, and I do not think that any real benefits would be derived. Having said that, obviously it has become a hypothetical issue to a large extent, in my view, because we are excluded. We are obviously not under consideration in terms of building this network. One envisages that, if the government does build this network, it will build a wholesale-only network. My grave concern—and this is one point that I would like to get across to the committee—is that, whatever the government does, we need to ensure that it actually encourages competitive infrastructure and does not result in a new monopoly, which would be to some extent a government funded monopolySenator NASH—Are you saying there is an existing monopoly?

Mr Quilty—The huge difference, in terms of Telstra, regardless of what side of the debate you are on—and obviously people like you, Senator, have been on one side of the debate—is that there is no prohibition for people to build new networks. We have seen cable networks built in cities and we have seen three national wireless broadband networks built in regional areas, and as a result people are getting very significant services. What is being asked for by others in terms of this particular proposal is that the government outlaws competing infrastructure. Nowhere in the world that I am aware of has any government ever outlawed competing infrastructure. If you have been fighting for decades to get competing infrastructure out into regional Australia, as I know you have, and then support a proposition whereby somebody will build a network, the government will pay for that network and nobody else is going to be allowed to actually build something that will compete—and it might use different or better technology—to provide real choice in terms of services to customers, just makes no sense to me.

Senator NASH—Do you think in those areas, particularly regional areas, where there is not a business case, where there is not economy of scale, competition is never going to deliver there anyway, so—

Dr Warren—Then you do not need to outlaw it.

Senator NASH—That is a fair call. I am just making the point that there is a significant area across the country where competition is not going to deliver, so something else will have to be in place to deliver services to those people. That is something I have said for years and does not particularly relate to this.

Mr Quilty—It is a bit of a myth that there are large proportions of the population in regional Australia where there is no competition. We have a wireless broadband network out to 99 per cent of the population; Optus is going to 98 per cent; Vodafone to 95 per cent. All of those networks are providing wireless broadband, and the capabilities of wireless broadband are going through the roof. If we can liberalise some spectrum, if we can actually get some spectrum to go to the next generation of wireless broadband, we can start providing real high-resolution video services on wireless broadband. Not only that; we obviously have satellite that is available to 100 per cent of the population. If we can get some sensible policy in areas like USO, it is my very strong view that we can get some very worthwhile investment in the more rural and remote areas in terms of upgrading radio concentrator systems and the like.

In terms of services to rural Australia, the bottom line is that that will be solved overwhelmingly by providing incentives for people to invest and for people to actually start utilising advances in technology. To close all that off by putting all your bets on one network that will be basically underwritten or paid for by the government and then to outlaw any competition to that network would seem to me to be a very silly thing to do. I am not suggesting that this is going to happen, but if there is one message I would like to get across it is that it makes no sense at all to close off competition to any NBN that is built.

Senator NASH—You have made that point very clearly, Mr Quilty. We will certainly take that on board. Given that, as you said, you are excluded, what then is the relationship, in your view, of any further separation of Telstra and the total cost of the NBN build? This paper is

obviously going to government to inform them of issues which concern you, but you are excluded so you have not written it as the builder of the new network. So what relationship is there, in terms of this document, between any further separation of Telstra and the total cost of the NBN build?

Mr Quilty—We have received advice from Access Economics in terms of what the various economic impacts would be in different scenarios. We have not asked them to model specifically the impact of further separation of Telstra. One of the reasons for that is we obviously are now excluded and, hence, we think that it is a rather hypothetical and pointless exercise—

Senator NASH—Sorry to pull you up, Mr Quilty, but we are short of time. That is precisely my question: why is this particular question from you in this paper, given that you are excluded? I am just trying to get the link between, as you are putting forward, 'the further separation of Telstra' and your reference to 'particularly in terms of the timing and total cost of the NBN build'? I am just trying to get the link.

Dr Warren—I think we are in agreement, Senator. We would say that, now that we have been excluded, the separation of Telstra is off the agenda. Telstra is really not relevant to the story as it currently stands. However, that does not mean—and I think you have heard over the course of today—that others are not still trying to talk about this issue. So the point that we have made there—and I think one of the visiting experts last year made this point—is: if you are trying to put a man on Mars, do not separate NASA at the same time. What we are saying here is: do not try to do to two rather huge activities like separation of Telstra and the building of an NBN at the same time because these two things would be rather crazy.

Senator NASH—Okay; so government does not have the capacity to do both at once.

Mr Quilty—In New Zealand and the UK, various separation models have been pursued. In the UK we are now more than five years into it, so it is still being completed in terms of the development of all of the separated systems and the like. It is not something that happens overnight.

Senator NASH—I do understand that. So in essence this is here in a rather self-serving way to say, 'Well, if you are going to build the NBN, you cannot possibly separate Telstra at the same time, so put that off the agenda.' Is that kind of what you just said?

Dr Warren—That is one point, but there are lots of other points. It is a very interesting question as to why the separation of Telstra is on the agenda.

Senator NASH—I do not think it has ever been off the agenda, has it?

Dr Warren—I suppose the point that we are making is that it does not help you at all with the NBN—which is, I thought, what most people were interested in. So our point here is that, quite clearly, if you start messing around with separation it is really just a distraction usually designed—as David said before—by those trying to hamper us rather than as any way that is going to facilitate investment. I heard the comments by Mr Willett before and I would suggest that every country—and there are not many—that has gone down the separation route is a

laggard in broadband investment. There is a strong relationship there, and that relationship is that separation harms investment; it does not help it.

Senator NASH—Okay. One very quick final question: we have had conflicting views on what the successful network provider will need in order to perhaps access some of Telstra's existing infrastructure. We have had conflicting views about potential litigation around that, some saying that it should not be an issue and others saying that we might end up in a litigious process for five or 10 years. Would you rule out long-term litigation in terms of access to any of your infrastructure should it be necessary?

Mr Quilty—We have a responsibility to our shareholders to ensure that we do everything possible to make sure that wholesale access prices reflect the actual costs of the provision of those services. So that is not our priority. In fact, my view is that this is a sector which has been beset with, and held back by, litigation. I am not looking to absolve Telstra or anyone from that. In fact, last week I outlined what I believe is a much more sensible pro-investment way forward, and I outlined a range of the issues that need to be resolved, and resolved as much as possible in an amicable manner, to try and move past this decade of litigation and confrontation. That said, obviously everybody who is involved with the corporation would not say that we do not reserve our rights; we do. But that is not our priority and I think that everybody needs to be looking at a better way forward.

Senator NASH—Is that a no?

Mr Quilty—I said that we obviously reserve our rights.

Senator NASH—Okay, thank you.

Senator IAN MACDONALD—In view of the time, I have four very quick questions, the first of which you may prefer not to answer. Is it galling to Telstra that, having negotiated with the Labor Party to write their policy, you are now excluded by them from the process?

Mr Quilty—We did not help them to write their policy. We did put forward a plan to the previous government which was made public, and clearly there are significant similarities between that plan and the Labor policy. But it is not right that we helped them write their policy.

Senator IAN MACDONALD—Okay, I will accept that. In this paper—which I am finding, in a quick skim of it, very useful—you suggest on the first paragraph of page 3, in the first dot point, that the 'proposed financial arrangements potentially leave the taxpayer exposed', including in relation to the government's own \$4.7 billion contribution. Could you elaborate on that? How could the taxpayer be exposed?

Mr Quilty—Obviously, if the government makes a capital contribution, be it through equity or debt, to the builder of the NBN and some time down the track the builder goes broke, then the question will be: how much of that government money will it be able to recoup?

Senator IAN MACDONALD—I would assume the government would not be giving out a \$4.7 billion cheque on day one. One would assume that it would be progress payments.

Mr Quilty—I am not sure. It may well be.

Senator IAN MACDONALD—Thank you. That answered my question. It is a very valid point. The other point—and I cannot for a moment think which of your competitors you might be referring to—is on the issue you make about security risks. This is all a bit cloak-and-dagger to me, but how serious is the risk to Australia's security by having a non-Australian company—and this is what I suspect you are referring to—in charge of the national broadband network?

Mr Quilty—I do not think the primary point relates to ownership per se. The primary point is that, in today's environment, obviously a great deal of the country's commerce and governance occurs on these networks, so it is critical that they are secure and it is critical that people have every confidence that they are. The fact of the matter is, for better or for worse, there are people, criminal elements and those who may have other motivations, who would like to utilise these networks to our detriment and who seek to do so to some extent on a daily basis. Not only that but, in terms of how we counter both criminal elements and possible terrorism, the use of these networks by our law enforcement and national security agencies is critical.

Senator IAN MACDONALD—Given the silly and hypothetical example that, say, al-Qaeda somehow had a front company that ended up owning the Australian NBN, are you suggesting that it could be a threat to Australia's security because of the fact that a non-Australian company owns it, taken to extremes?

Mr Quilty—It is not the ownership per se. However, it is the case that around the world there are examples of people using their capabilities to bring down utilities and the like which rely on these networks. It has happened largely in Europe. There are some documented examples of this. It is not an unknown threat. My point is that we need to be absolutely vigilant in ensuring our networks are secure, probably more for commercial reasons, or as much for commercial reasons as for national security reasons. Part of that is to have very good end-to-end visibility of what is happening on your networks. That is what is relied upon by law enforcement agencies and national security agencies in terms of pre-empting any physical or non-physical attacks on this country. To the extent to which an NBN is built—which involves a combination of our networks and others interconnecting in different ways with our networks—one of the critical issues is to make sure that law enforcement agencies and national security agencies can still do the work they do, pick up the information they do and pick up the intelligence they do, in terms of what is carried on those networks, to obviously pre-empt and combat any potential attacks.

Senator IAN MACDONALD—There are a lot of things that I would love to explore more, but finally, on page seven in the first paragraph on coverage risk, you make it quite clear—as I think everyone understands and as OPEL understood—that giving 98 per cent of the population access to fibre to the node was never a feasible proposition.

Mr Quilty—Certainly regarding the RFP that was put forward by the government, Telstra, in terms of its calculations and given the amount of government capital that was available, was not in a position to come up with any solution involving fibre to the node for 98 per cent of the population, and nor was any other bidder.

Senator IAN MACDONALD—But that was the promise of the government before the whole process started.

Mr Quilty—I do not want to interpret others' promises, but the way I see the promise is that the core promise was to provide a minimum of 12 megabits to 98 per cent of the population, and the preference was to do that through fibre to the node. It seems clear to me that it cannot be provided entirely through fibre to the node and that a mixture of technologies will be required. I think that all of the bids that have been put in make that clear.

Senator MINCHIN—Quickly, Mr Quilty, given that Senator Nash made a rather cheeky aside about the quality of your *Critical issues* paper compared to your actual tendered documentation, I wonder if we should offer you the opportunity here to explain for the record why you did only lodge a 12- or 13-page tender document and why you did not lodge with it a small business participation plan.

Mr Quilty—I will start off. It is very kind of you, Senator.

Senator NASH—We are like that!

Senator MINCHIN—You do not have to take up the opportunity.

Mr Quilty—I am just not sure whether I should take up the opportunity for protection against Senator Nash's cheeky comments! The fact of the matter is that we prepared a very detailed proposal of more than 5,000 pages. We would very much have liked to put that detailed proposal into the process, and we spent months seeking clarification on a number of issues which were critical, and uniquely critical to us—namely, the campaign by our competitors to use this process to further separate Telstra. We sought to get clarity from the government that further separation would not be part of this process, but we were not able to do that. We also—I think pretty importantly—sought clarity on the use of the very detailed information we would be providing, which would go into our core intellectual property around our network capabilities and plans. We sought clarity that that information could not be used in government deliberations with other bidders, and we were not able to get the sort of clarity that we were seeking there either.

As a result we, in good faith, put in the proposal, which was a short-form proposal—it was only 12 or 13 pages. It did, notably, commit the company to \$5 billion of capital investment. The proposal did not include an SME plan, though it did refer to our SME capabilities. We certainly looked very closely at the RFP in terms of what the mandatory requirements in it were, and we remain firmly of the view that we met the mandatory requirements. That said, obviously Patricia Scott, who excluded us, has a different view. She has indicated that there were multiple legal advices; we have not seen them. We do not know what question was asked in those legal advices. We were certainly very aware of this issue before we put in our proposal, and we believed that the RFP did not require the provision of the SME plan with the proposal. We remain of that view. Bill would be happy to go into any further detail if you wish.

CHAIR—Thank you, Telstra, colleagues and Hansard.

Committee adjourned at 5.00 pm