

COMMONWEALTH OF AUSTRALIA

Official Committee Hansard

SENATE

SELECT COMMITTEE ON THE NATIONAL BROADBAND NETWORK

Reference: Implications of the proposed National Broadband Network

THURSDAY, 20 MAY 2010

SYDNEY

BY AUTHORITY OF THE SENATE

INTERNET

Hansard transcripts of public hearings are made available on the internet when authorised by the committee.

> The internet address is: http://www.aph.gov.au/hansard To search the parliamentary database, go to: http://parlinfo.aph.gov.au

SENATE SELECT COMMITTEE ON THE NATIONAL BROADBAND NETWORK Thursday, 20 May 2010

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

Senators in attendance: Senators Fisher, Ludlam, Lundy and Ian Macdonald

Participating members: Senators Abetz, Adams, Back, 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:

b.

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

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

WITNESSES

ASHER, Mr Allan, Chief Executive Officer, Australian Communications Consumer Action Network	2
CULLEN, Mrs Marianne, First Assistant Secretary, Department of Broadband, Communications and the Digital Economy	54
FREEMAN, Ms Elissa, Director, Policy and Campaigns, Australian Communications Consumer Action Network	2
HEAZLETT, Mr Mark, Assistant Secretary, Department of Broadband, Communications and the Digital Economy	54
HILVERT, Mr John, Communications Director, Internet Industry Association	11
MORGAN, Mr Kevin Leonard, Private capacity	33
QUINLIVAN, Mr Daryl, Deputy Secretary, Department of Broadband, Communications and the Digital Economy	54
SINCLAIR, Mrs Rosemary, Managing Director, Australian Telecommunications Users Group	21
SPENCE, Ms Pip, First Assistant Secretary, Department of Broadband, Communications and the Digital Economy	54

Committee met at 9.18 am

CHAIR (Senator Ian Macdonald)—I declare open this public hearing of the Senate Select Committee on the National Broadband Network. The committee's proceedings follow a program which we have circulated. These are public proceedings. The committee may also agree to any requests to hear evidence in camera. In giving evidence to the committee, witnesses are protected by parliamentary privilege and it is unlawful for anyone to threaten or disadvantage a witness on account of the evidence given to the committee. If a witness objects to answering a question, the witness should state the ground on which the objection is taken, and the committee will then determine the issue.

[9.21 am]

ASHER, Mr Allan, Chief Executive Officer, Australian Communications Consumer Action Network

FREEMAN, Ms Elissa, Director, Policy and Campaigns, Australian Communications Consumer Action Network

CHAIR—Welcome. I invite you to make an opening statement and then subject yourself to some questioning.

Mr Asher—Thank you for the opportunity of appearing before this committee. I have just a couple of opening points. Our organisation, as you would know, is a relatively new one. We were established to better represent the interests of the wide spectrum of consumers of communications. That includes mainstream consumers, microbusinesses, consumers with disabilities, consumers living in rural and remote areas and consumers in Indigenous communities. It is a very broad range. We are a membership organisation with 130 members, covering all of that field.

On the implementation of the NBN, our first point would be that it is not about the NBN; it is about the communications infrastructure in our society, it is about preventing actions that will foreclose the continued development of an inclusive society and it is about ensuring that all Australians are able to participate fully in the communications dimensions of their lives. That led us to a couple of quick principles that we use to assess all of these developments. I have to send into you, after this hearing, a written elaboration of these.

The first is that the system just has to be built around overtly being accessible, affordable and available communications for all Australians. That is not a trite thing to say. It is a view that does shape the technology, the expense, the rollout and a whole range of things like that. We think it is vital that greater efforts be made to incorporate consumer views throughout this whole process too, because without that there are severe risks of decisions being made which will mean the system does not work in the way that it should for the interests of consumers. Put another way, consumer preferences should be built into the system, not bolted on afterward when we find that there are things that are forgotten, people that are left out, arrangements that are not made—that sort of thing. We are at a stage where that can and should be done, although time is ticking by.

To put just a few more bones on that: it is about ensuring proper levels of consumer protection, the philosophy of choice, availability, looking at pricing, quality, service and performance standards. The construction of the NBN and the way that works will inevitably affect and shape all of those downstream issues, even though we appreciate it is not intended that the National Broadband Network Co. will engage in those functions. But, depending on the structure and its role, that can either be foreclosed or it can be guaranteed.

In migration terms, we have got a strong principle that consumers should be no worse off as a result of this and that the migration process should be as seamless as possible. Consumers who simply want to still make phone calls at the end of it should be able to do that without being

interfered with, cut off for a period or put to huge expense in anyway when that is not what they want.

A critical one, and we would urge the committee to look particularly at this, is the consumer information program. It is actually a two-way thing. We want to urge on you a consideration of the excellent work that is being done by the Digital Switchover Taskforce. Their community based work, their training, their provision of information and the two-way gathering of views from affected people is itself somewhat redesigning that implementation process. If you do not ask people you will not know and if you do not know, you will make wrong decisions that will be costly and not deliver the benefits that it should.

The final principle is a need for the total reinvention of the regulatory system that we have got here. It is currently a hodgepodge of self-regulation at the consumer end and very heavy handed competition rules at the other end, which are not apt for the large majority of smaller access seekers. If this is going to unleash a torrent of innovation, new service delivery and a whole new economy then we need to have a much more responsive and smarter regulatory system that is able to deliver those things.

In the process of that there should a reinvention of the universal service obligation as well. Currently, it is pretty well down to access to a voice-grade telephone in circumstances now where society increasingly demands—the demands of people in rural areas and people with disability—digital services for health, education, welfare and entertainment but our system is not up to that. That is the backdrop upon which we approach this and we would be delighted to fill out any of those points or answer any particular questions on the implementation study.

CHAIR—Thank you very much for that. That is very useful in the broader context. We appreciate the work you do on behalf of consumers. As you know, because your organisation has appeared before, we have issued a number of reports but today we are particularly looking at the implementation study. My first question to you would be about the implementation study—whether you are happy with the process of the study and whether you had an opportunity to have a good look at it. What are your thoughts on it generally? Is it helpful? Is it accurate? Where do the assumptions in that come from? Are your members better informed now or not? Or are you uncertain as a result of it? Perhaps you could just give us a general comment.

Mr Asher—I will do that and then invite Elissa to add a few points. On the whole we think it has filled in a huge number of gaps in our understanding. It has exposed, in a way, the thinking of the models and it has given us for the first time some indications about possible wholesale costs from which one can start to form some views about possible retail prices. There is a lot in there but we also say that there is a lot that is not in there. It is those areas I suppose in particular that we would like to draw to your attention. For example, the silence on consumer protection generally or the lack of clarity about the competitive philosophy on which it is going to proceed. To put it another way, there is no recognition in the implementation study that how these first decisions are made about structure and rules is going to determine the shape of this market for 10, 20 or 30 years.

Is it going to go down the path of repeating past errors and leaving us with a small number of large operators with market power—in other words, an oligopoly model? Or are we going to deliberately try and move to a much more open model in which access to the system by

competing providers, and hence a wider range of consumer choices, is going to be enshrined? We argue that there is very much a need for a government statement of intent that fills that bit out and that it should not be left to simply negotiations by the NBN Co. and the existing major telecoms operators to decide how that would work.

CHAIR—Would it be only the NBN doing the wholesale work, or could it be the NBN and others doing the same thing? What is your understanding of that?

Mr Asher—I think that the philosophy of the report does not foreclose others from being in that market, although the cherry-picker rules mean that there will be some equalisation in meeting the costs of community service obligations for people who might enter parts of that market in competition with the NBN.

CHAIR—Does the implementation study give you any confidence about pricing and numbers of people signing up, in view of the fact that yesterday, as you probably saw, Primus announced their pricing for Tasmania which, as I understand it, was an introductory offer of \$45 for 15 gigabytes at speeds of 25 megabits per second for downloads but going up to—after, I think they said, six months, though it might have been nine months—\$90, when you would probably be aware that others are already providing comparative services at prices under \$40? So I am just wondering what your thoughts were on what the implementation study's information was in relation to pricing, perhaps comparing it with what we understand, as of yesterday, might be the practical—

Mr Asher—With the reference model, as it were, in the study of a 20 megabit per second service for voice and data at wholesale prices of from \$30 to \$35 a month, we think—to the extent that the modelling behind that makes certain assumptions about levels of uptake and things like that—that that does put it quite squarely, potentially, in the range of current service offerings. Later in the report there is a bit of a transition path to higher costs, and that is something that we have already publicly commented on—that we want to know what is in that box. Is this a two-year special introductory offer, after which you would be faced with unaffordable costs?

CHAIR—Is this the two per cent every year anticipated increase?

Mr Asher—Halfway through the report, I think, there is a little price transition chart which suggests that after three or four years the wholesale prices might begin to escalate.

CHAIR—You mentioned the \$30 to \$35 wholesale price. As an expert in the field, what would you guess you would then get a retail price for?

Mr Asher—I am not an expert in the field, but our understanding is that from \$55 up is the way that that would convert. But that is entirely dependent, of course, on the intensity of competition. If you look at what has been happening, we have had an unseemly outbreak of real competition in the wireless markets recently, and we have seen prices plummeting and we have actually seen quality of service increasing. That is the competition philosophy. And if that were applied now, we would not be faced with this inquiry at all because we would have a system that would deliver consumers' needs.

CHAIR—You mentioned that, as a result of the implementation study, you had a better idea on pricing. You mentioned that consumer protection was not as clear as you might have hoped. Just very briefly, could you give us an indication of what else you think might have usefully been addressed in the implementation study, and/or what has been addressed where you are suspicious of its reasonings?

Ms Freeman—One recommendation we were quite pleased the see was a recommendation that the NBN Co be required to develop a charter that outlines how it will conduct its affairs to best meet the needs of stakeholder groups, which we include to mean consumers and end users as a major stakeholder in this process. Indeed, this meets some of the concerns that ACCAN has held about how consumer views will be incorporated into this process and built into the decisions that are being made. But this is one of those recommendations where we say, 'Good, but there is more work to be done.' We would like to see greater obligations on NBN Co and other key agencies to not just have a charter, but to also have a statement of intent about how that will be implemented. To have on the public record, for example, a five-year plan to be reporting annually against those objectives, so something that has clear and measurable deliverables for consumers. We do not want the pretence of having taken into consideration consumer views; we want to know that they are being incorporated throughout the process.

Another concern of ours is how people are generally going to be informed of the changes that are taking place and how people with more marginal interests are going to be included in a very large change in the way that we operate as a community. For this reason, as Allan pointed to, we look to the digital television switch-over task force as a prime example, a best practice example, of how to work with the community to develop good policy and to implement policy in a way that meets the needs of the community. Indeed, we would go so far as recommending that you do not need to recreate an entire new institution, but simply to take that existing vehicle and expand it to take on a broader role in the implementation of a broadband society. We would like to see the 'television' dropped and simply have a digital switch-over task force.

Mr Asher—So you would get asked specifically about the consumer protection measures too. It occurred to us that at the moment there are lots of transition issues happening, whether it is codes of practice, access arrangements for retailers wanting to get into the market, and there will be a new set of processes and bodies, there are new powers proposed for the ACCC—part 11B and part 11C are being revised—but there is not yet any clarity about how any of that will be implemented. We would propose that where such codes are developed by whatever means—self-regulatory, regulatory or through standards from the ACMA—that it ought to be a simple requirement for the NBN Company that, as a condition for granting access to its systems, it be satisfied that people have signed up to those requisite codes. That would be a way of delivery.

CHAIR—Have you, by any chance, had a private briefing from McKinsey at all since the implementation study?

Mr Asher—No.

CHAIR—Do you have any comment about the process of the implementation study? Have you really been able to look through it in detail, or are you still doing that?

Mr Asher—A bit of both. We are pretty familiar with the overall design, but there are lots of bits of it that we do not understand and that we are keen to follow up. Also, along with others, we are somewhat critical that they were not all that open in reaching out to people who might have some input to provide. There are lots of things that they were doing. However, we think that consumers are not totally irrelevant to this process.

CHAIR—I am absolutely certain of that.

Senator LUNDY—On that point about NBN Co's obligations and responsibilities to consumers and consumer related matters, to what extent do you think those issues are the purview of management of NBN Co as opposed to the type of advice that was commissioned through the implementation study per se? How reasonable is it to have expected more in the implementation study about the issues you describe?

Mr Asher—I think I would say that, from a consumer perspective, the point is that it is done, that somebody is responsible and somebody has looked after it. It is not all that helpful to wonder who did not do it. While I do of course understand that there are lots of things that will continue to happen—and even now the NBN Co. itself is playing a much greater role in dialogue, and we welcome that and we are engaging in that too—our concern is that there is a real time problem here; that, as the days go by, certain policies, practices and investment dollars are going into the system which once made will be very, very difficult to change and that they themselves will determine the structure, conduct and performance of the market. It is just wise to look at where there are some critical issues that might not have been properly dealt with—access arrangements and quality of service, for example. There is nothing in there about maintenance of the performance standards. There are some calls in there for development by the ACMA of standards, but that is pretty vague. It needs to be more precise. We do not know, for example, whether an access seeker might themselves be able to then retail a service at a much lower quality of service. So that has to be dealt with.

Senator LUNDY—To what extent, if any, do existing consumer safeguards like the consumer service guarantee transfer across to the new services delivered on a wholesale backbone of the NBN?

Mr Asher—That is one of the really big issues that we think need to be dealt with. There is a recommendation that more or less seeks to reinvent the universal service obligation, and that is to be done—

Senator LUNDY—And the CSG?

Mr Asher—Well, the customer service guarantee is an important part of delivering effective services to people. We think, though, that the question is a broader one of ensuring that the principle is an adequate level of functionality to every Australian that at least society expects of them to participate fully as citizens, whether it is a person who is hearing impaired being able to see captions or a sight impaired person where there is provision in the broadband system for that. So the USO and the customer service guarantee ensure that people are going to have seamless access to basic services, and they will need to be defined and implemented—and the whole issue of how that is funded with the current either licence or USO obligations.

Ms Freeman—Could I add to that as well. I think for us the critical point is that the implementation study has identified the USO as an important aspect of the policy setting for our broadband future. We would not necessarily expect this implementation study to deliver what the new USO is going to look like—I do not think that would be possible or appropriate—but what it does do is say, 'This needs priority attention from the government.' We look forward to engaging in those discussions about how the customer service guarantee and the universal service obligation will be recreated in this new broadband world.

Senator LUNDY—On another issue: I am relatively familiar, as I know you are, with the problems that occur when consumers experience bad service and with the buck-passing between the ISP and the carrier. Pair gain systems are a very good example, but there are many others where the carrier has a tendency to say, 'It's your ISP,' and the ISP is flummoxed by the practices of the carrier. Have you given much thought to what this area of contention may look like—so it is a question asking you to speculate—and what the areas of contention may be between the wholesale provider, NBN Co., and retailers competing at the retail level? What might they look like under the new model?

Mr Asher—Again, we always approach these things from the perspective of consumers, but this is most obviously going to come up where a consumer attempts to use a service and it does not work. All I have is a piece of customer premises equipment, whether it is a handset or a computer or something like that, and it does not work. What do I do? Who do I go to? If there is a panel on the wall with one, two, three or eight outlets, how do I know who to contact? It is the line of responsibility—one-stop shopping for at least filing some dispute.

I understand that the NBN Co are talking about having a pulse beat system for every service so that at least they will know if the service is operating or not and be able to help with the diagnosis. But the point is that there is a high risk of fragmentation because some consumers are going to want to acquire one telecommunications service from one carrier and another from another and often it is going to be over the same connection, and there is going to be contention about that. That is also about scaling the equipment. Are there going to be enough points for people to make competitive use of it? Who is responsible for, say, providing the backup power and things like that? Those are issues that traditionally can be the source of all sorts of buckpassing between backbone carriers and value-added service providers.

Senator LUNDY—Finally, on the accessibility dimension, what is there, if anything, in the implementation study that recognises the opportunity to resolve a large range of accessibility issues for people with disabilities, whether it is vision impaired and so forth?

Mr Asher—The most powerful part of the study that does that is the dimensioning of the system itself. To our mind the most crucial determinant of giving affordable, available access to consumers with disabilities is just much broader consistent bandwidth so that the vast new range of services that are coming online for consumers with all sorts of disabilities can be accessed, so a guarantee of at least the wholesale prices being the same across Australia and of a minimum consistent quality. That provides a really good platform on which various other government initiatives and a renewed disability equipment program and captioning systems and all those things that are happening as Australia seeks to implement its international obligations under these areas, there will at last be a vehicle through which they can be provided. By the way, that does not say it is going to be affordable, and that is one of the big issues that is of concern.

Senator LUNDY—Perhaps I could ask you to take on notice providing the committee with an update on the progress across those areas. I know that government has reviewed and embarked on several programs to try and progress these issues but I think it would be useful for the committee in this context to have a brief update from ACCAN about that.

Mr Asher—You might be aware of the report that we produced on the possibilities for consumers with disabilities that come from broadband systems. Perhaps I will recirculate that too.

Senator LUNDY—Yes. Thank you very much.

Senator LUDLAM—Thanks for coming in this morning. I will pick up on a couple of issues you have addressed in part. The minimum service standards you are talking about, I am wondering if you could sketch for us how you see them being implemented when we have got an eight-year lag between people who are on copper at the moment or not getting any kind of service to coming on to the NBN, and also that we are establishing effectively a two-tiered system for the seven per cent or whatever it is going to be that will not get fibre. How will minimum standards work when you have got those kind of lags in the system?

Mr Asher—For a start, we believe those minimum levels ought to be in place right now and not just in consequence of the broadband network. When it comes to effective levels of consumer protection, access, the way in which retail service disputes are dealt with, the definition of standard telephone service, all of those things, as you would know, are features of existing draft legislation in the parliament. Once that is sorted, it will be a transition into that rather than simply starting with the National Broadband Network.

However, one of our principles was about a seamless transition. We were concerned in particular that, sadly, Australia has a bit of a record of very lumpy developments where consumers might find themselves worse off either permanently or for a while and where costs might be out of kilter with the level of service, and we want to ensure that those things are done in a smooth and planned way. For the 97 per cent—as that is rolled out—we think that these measures need to be built into that model and not added afterwards. There is no reason that a lot of these provisions cannot apply even to those who do not have broadband access. We are talking about quality of service, price, choice and those basic consumer rights.

Senator LUDLAM—From your reading of the implementation study, if we establish this company and create another monopoly entity to manage the wholesale assets and the traffic, in 15 years or whenever it is sold back down into the market again, what is stopping them doing what private companies do and what Telstra has been doing—given that as an access-seeker you will have no choice—and just starting to ramp up the price to get more of a return?

Mr Asher—I think that is a real concern that we have already expressed. There are two ways. One, it requires a rethinking of the regulatory framework so that, if the organisation is subject to wholesale price regulation, then the access arrangements provide the point at which that can be done. But that would be irrelevant if they were still allowed themselves then to compete in downstream markets in ways that might be predatory and eliminate others, or be collusive, for that matter.

CHAIR—But NBN cannot do that, can they?

Mr Asher—Well, that is the issue. There does seem to be some doubt from the expressions so far—

CHAIR—From the exposure draft—

Mr Asher—in the exposure draft about what role that would be. Clarity that limits their role to either a clear wholesale role, but a role that ensures that the market does work effectively at that wholesale level, not at a retail one, plus sound regulation, would mean that the only incentive for revenue maximisation for the National Broadband Network is high-quality throughput. That is the best protection. The incentive would be that they would gain greater returns through greater volume. That is really the very best protection, I think, against abuse of market power by a monopoly.

As to the bigger questions: what are the incentives for dynamic efficiency and what is going to make them want to invest and be modern rather than become a lazy monopolist—I think that these are serious global questions that need to be dealt with. Traditionally, the way of fixing that is to ensure at least the theoretical possibility of competitive bypass.

Senator LUDLAM—That will not exist in this case, really, will it, because we are not proposing that anybody comes along and builds another network backbone to compete with them.

Mr Asher—Except in the very highly trafficked areas and of course a lot of that network is already in place.

Senator LUDLAM—Okay. That sounds like a bit of an open question still. Lastly, in your previous submission you talked about unfair conduct and getting into trade practices legislation the notion of unfair conduct, and I believe you are not just talking about telecommunications markets. Can you just sketch for us what impact that would have if that were to be brought about?

Mr Asher—At the moment Australia has a huge hodgepodge of consumer protection rules that are about fairness, unconscionability, franchise laws, small business regimes and things like that, many of which were developed right back in the mid-1970s when the Trade Practices Act was implemented. Indeed, the very section in the Trade Practices Act says 'unfair practices'—this is in part 5, clauses 52 and 53—and it is clear that around the world increasingly authorities are saying, 'Actually what we are really trying to attack here is the problem of unfair dealings.'

We are suggesting that a simple principle like that in the Trade Practices Act would cut away the need for vast amounts of detailed rules and codes and would provide a much greater incentive set for service providers to deal with consumers in a different way. It would have a liberalising effect and yet would deliver better forms of consumer protection. There are so many rules, especially in telecommunications. There are thousands and thousands of clauses in dozens of different codes, most of which are very arcane, hard to follow and not well implemented anyway. Ironically, if the NBN could be a platform for fixing a national uniform civil consumer law, that would do as much as any other measure to enhance consumer welfare. **Senator FISHER**—If I have understood it correctly the remaining 10 per cent of the population—or, depending on the implementation study, seven per cent—might get speeds of at least 12 megabits. But the implementation study concludes that doing that would be prohibitively expensive and would take the cost of the NBN beyond the target of \$43 billion. Do you agree that the implementation study effectively proposes that the NBN be built in a way that is a bit different from the government's stated objective of giving all Australians broadband access of 12 megabits per second?

Mr Asher—There is an interesting chart in there that looks at the costs, and I guess that is what you are referring to. It seems to go into an almost vertical climb the closer you get to 100 per cent. That can mean one of two things. It can mean that governments do not try to provision in that way with fibre—although the report did seem to suggest that there was a combination of satellite and fixed wireless that might reduce the number at the very end of that tail to perhaps just four or five per cent. I do not quite understand the technologies proposed there, but it did seem that what they were holding out was that, with a redefinition of the way that last seven per cent is provided, you could still get most people to a level of functionality considerably higher than they have now. But there is a trade-off that consumers are constantly having to make, and we would not want to see the costs of the entire system being any higher than they need to be, given that they are all going to feed back into consumer prices. On one hand we have already asserted an absolute need for inclusiveness to allow every Australian to function in society to the extent society requires of us. We have to have our welfare payments paid into bank accounts and increasingly health services are going to be provided digitally, so we say there is an absolute obligation on the system to ensure that everyone has access to that. But when it comes to whether that is done at 10 megabits per second or 12, it is a bit beyond my capacity to give you a meaningful comment. So we would make it a functional test rather than a speed test.

CHAIR—Does it concern you as a consumer group that the initial promise of 12 megabits to everybody is, according to the implementation study, prohibitively expensive? Does that ring the warning bells?

Mr Asher—It certainly means there are questions that we would ask, but it is beyond my technical capacity to form a view as to whether that is going to materially disadvantage consumers or not. That is why I am saying there must be a means found for all consumers to function within society from a communications perspective to the extent that our system requires of them. I would be open to expert views from others as to what the consequences of that would be and whether there are other means of achieving it such as satellite black spot programs and the other fill-in arrangements.

CHAIR—Thank you. We very much appreciate your coming along and sharing your expertise with us.

[10.05 am]

HILVERT, Mr John, Communications Director, Internet Industry Association

CHAIR—Welcome. Thank you very much for coming along. You would be aware that these proceedings are parliamentary proceedings, so they are covered by parliamentary privilege. If there is anything that you feel you would rather talk about in private, make a request of the committee and we will go into that then. First of all, would you like to give us an opening statement? Then we may ask you some questions.

Mr Hilvert—Earlier I circulated a copy of our opening address and, if it is possible, I would like it treated as a formal submission. The Internet Industry Association has been around since well before broadband. We arose in the mid- to late nineties and we represent the major suppliers, the major content creators, many of the developers and many of the lawyers. We have one message for you guys: Australia deserves broadband and we need it now. We have one shot. Please do not blow it.

We do not have a strong view about the governance issues or, in fact, the technical issues or the like. We are very much in the same bed as our colleagues at ACCAN—we are on about function. Australia deserves the best, most accessible and fastest possible broadband and we are running late. Only today Neelie Kroes, the EU digital affairs commissioner, pledged that the EU will have universal broadband by 2013, admittedly at a much lower rate, but our main concern is about overall functionality. We really risk being an IT backwater, a digital backwater, compared to other countries.

Our message is that it is a user generated thing. It is effectively a business thing. It was users that were demanding broadband and it is user generated content that is behind this desire for more and faster broadband. Back in 2006, the Internet Industry Association responded and launched some targets in a report. Those targets were relatively modest by today's standards, but, if even they had been achieved by 2010, we would have been delighted. But they have not. Those targets were for both fixed and mobile. We have no big issue—we think it is a phoney war between wireless and terrestrial. They are both important. They are both vital. We thought, four years ago when we put the targets up, that something would happen. We were delighted when the current government decided to run with a very ambitious and worthy system and model. Our targets were basically driven by the fact that demand is a user driven issue. I will repeat that: it is a very strong user issue. That is what is happening now. If you want to get a feel for what is happening, look at YouTube. YouTube in 2007 consumed as much bandwidth as the entire internet did in 2000.

Senator LUNDY—That is amazing.

Mr Hilvert—It is an exponentially increasing demand. We think it is quite absurd for people to say, 'Where will the demand be, where will it happen?' We have it now. In Australia Facebook is probably the most popular application on smart phones. There are eight million subscribers on Facebook now and growing, and many people put out videos. They expect almost instant response and they expect genuine communication. In many ways it will probably replace the

telephone. In fact, yesterday the chief executive of Telstra commented that the amount of data on its wireless network doubles every nine months. We really would like the Senate committee to refocus or give a bit more attention to the users, to the consumers. What is driving the internet is not the government; we know that. We have had 11 years of governments talking about broadband. It is not the government; it is the users. The wireless technology, which is probably the thing that has stood out in terms of take-up, we believe, has occurred mainly because there has been competition. In many cases it is cheaper to purchase wireless.net than terrestrial. The reason for that is that it is one of the few cases where we have had a decent competitive market.

Senator FISHER—Do you think the competition and the lack of access of terrestrial services is what has driven the demand for wireless?

Mr Hilvert—Yes.

Senator FISHER—When you talk about scalability in terms of wireless, are you saying that the more people use it the slower it gets—is that what you are talking about?

Mr Hilvert—That is precisely what I am saying. In the US already there was a report that US smart phone users are wrestling with sluggish performance right now, so it is—

Senator FISHER—More people are using it not necessarily because it is better; it is the option when there is less terrestrial.

Mr Hilvert—It is there; it is easy.

Senator FISHER—In your view.

Mr Hilvert—It is not in our view; it is in the user's view. The users are basically voting with what is available, and what is available at the moment is very strong competition in mobile, and that was the theme of Telstra's talk yesterday. Our concern though is that that is very short term. Wireless is a natural fit and a complement but it is no substitute to wholesale access to a reasonable fast broadband to all Australians.

Senator LUNDY—We know that this issue about the uptake of mobile—and I think the points you makes are extremely valid in the context of the current discussion. I would like to pick your brains just for a moment about the broadband inhibitors that are currently in the existing network and the proportion of services per exchange that are able to deliver a terrestrial broadband service—that is, what proportion of the services offered exchange are actually able to deliver a terrestrial ADSL 2 Plus style service. The most recent evidence I can recall was from Telstra, where I think it was Mr David Quilty who admitted that it was barely 50 per cent. How much do you think that constraint on the provision of terrestrial based broadband services in the existing network would be contributing to the explosive growth in mobile data? Have you got any comments on any relationship between those two features of our network?

Mr Hilvert—I have not seen any reports that could confirm or reinforce that. To us, there is a more accessible business model at the moment which is based around getting on the internet via wireless.

Senator LUNDY—So if there was an NBN-style service available, you think that would start to be taken up—wireless would not necessarily be what people chose in an environment where there was an affordable terrestrial fibre based service in the market.

Mr Hilvert—Exactly. Perhaps I could give an example of my two daughters, who are at the University of New South Wales right now. They need internet for their studies. It is not a big issue; they do like to download video but it is mainly about study. There were four of them boarding in quite a good area, in Kensington, and they worked out that the cheapest and most efficient way for them to manage their internet was to get those little wireless thumb drives. It is not efficient, because they are running at a much slower rate—they are probably doing barely one megabit a second—but they are getting the functionality. I think it is functionality and ease of access that is driving the internet, as well as their own educational demands.

CHAIR—Mr Hilvert, did we interrupt you? Were there more things you wanted to say? We do not want to rush you, but we do have a lot of questions.

Mr Hilvert—Our second concern is that we believe very strongly in competition driving broadband. We think that the biggest issue in the future NBN is to make sure there is a very strong, transparent set of incentives and reporting to ensure that competition is ensured all the way through the years ahead. It is too easy for oligopolies to develop, unless this is properly attended to. The experience we have had over the last 11 years or more has shown that small discretions in legislation, the occasional leaving open of matters to codes and the like, will be ruthlessly and quickly exploited by many players. They also will have a chilling effect on encouraging future business investment. If the nature of NBN as a wholesale market and a wholesale supplier is not clearly appreciated, the fact that it might slip into some areas for all sorts of reasons might be just enough to simply get several players who are interested in working with our new broadband economy to say no, it is too hard, there are too many discretions here. So our second message is, please nail the competitive aspect; please leave discretions that are not properly considered by parliament out of the legislation and let us move on.

CHAIR—Were you happy with the implementation study addressing of those issues, which is sort of what we are focussing on today?

Mr Hilvert—Recommendation 68 was the only one where we had an issue, where they said that NBN should be a wholesale operation subject to the minister's right to make exceptions. We think that, despite some good intentions, that will be misused and exploited, and it will be the birth of more oligopolies in our view.

Senator LUNDY—I want to go to your reference to the US study about mobile services and congestion of the networks over there. Are you able to provide the committee with an insight into the response of the telecommunications companies to this congestion? I know of areas or cells in Australia that are already experiencing this kind of congestion with mobile data services, so I am just trying to get more of an insight into the telecommunications company response to these kinds of complaints, because of course the fine print in the contract says 'up to' as far as their bandwidth, so consumers in that regard have not a leg to stand on as far as the service they have purchased is concerned. That is the case, isn't it?

Mr Hilvert—Yes. The problem in America is that I think the most popular phone, the iPhone, is substantially put out by AT&T, and as a result they cannot go to other suppliers at this stage; it is part of the deal. That is an example where lack of competition has caused that.

Senator LUNDY—So consumers with iPhones are bound to the AT&T telecommunications network, so if there is a high take-up of that particular device in a given area it is inevitably going to lead to congestion of the network.

Mr Hilvert—Agreed. It may well be that, if we can make terrestrial and Wi-Fi a little bit more popular, that may ease some of that, although in America prices are much more competitive terrestrially as well. It is one of the implications and consequences of our current environment. Our plea is that, in forming your recommendations, you make a note that we do not want to do that again, please.

Senator LUNDY—I am asking these questions in the spirit of the contention that is often put forward that somehow the wireless mobile data services are an alternative to a fibre-to-thepremises network. My view is, of course, that they are not, so I am keen to explore further. The next question I have is on the nature of a service contract for mobile data. I am happy for you to take this on notice. Does an 'up to' bandwidth commitment mean there is no minimum bandwidth provision guaranteed to anyone purchasing the mobile data service? Is that the nature of those products?

Mr Hilvert—I will take that on notice, but that is my impression.

Senator LUNDY—Secondly, is there anything within those contracts or within any service obligation or consumer service guarantee that requires the telecommunications company to install more towers to cope with the higher densities of mobile data services in a given geographic location when the service has degraded beyond a certain point? Are you aware of any regulation?

Mr Hilvert—No, it would be mainly be market forces.

Senator LUNDY—Can you envisage a time when, I guess, the style of product—a maximum bandwidth offer as part of the service and charges associated with download—would change to be a flat rate or a minimum bandwidth service provision? Can you see that day? I certainly cannot. You probably have a better bead on the market than I do.

Mr Hilvert—We believe that, if there is sufficient playing field at the retail end, there will always be scope for a value-added provider that will say, 'I'm willing to put my hand up and guarantee this, and if we don't we'll provide compensation or the like.' At this stage, it is very hard with our current regulatory arrangements.

Senator LUDLAM—I want to pick you up on some issues. There has been a lot of commentary on uptake and the modelling in the implementation study that says there is going to be a very high level of uptake compared with overseas experiences where, some analysts are saying, uptake of fibre broadband to the home has plateaued at 30 per cent market penetration. The implementation study says that the cost assumptions for the NBN rely on much higher uptake. Do you want to comment, from the point of view of some of the info you have given us

this morning about how rapidly these services are expanding? Do you want to use a crystal ball and say, within the build-out time of the NBN, how many of us are going to be using it?

CHAIR—And is the 30 per cent in Holland and the USA accurate, in your view? That is just an addition to Senator Ludlam's very good question.

Senator LUDLAM—It is, because there has been some contention around that as well—around whether the uptake really has plateaued or whether it is growing continually.

Mr Hilvert—We have seen no evidence of plateauing at all.

CHAIR—In Australia, you mean?

Mr Hilvert—No, even overseas. As I said, the EU digital affairs commission is committed now to a rollout of a minimum of 30 megabits a second for all of the EU. It is as simple as that. We are talking about infrastructure and we are talking about demand, admittedly, but they are also talking about trade. They have an EU digital affairs commissioner not because of consumers but because the EU are conscious of the fact that they are basically in competition with other countries, like Singapore and America, in ensuring that they have infrastructure where business can be done, especially amongst small to medium enterprises. We see absolutely no evidence of a slackening of demand.

CHAIR—But do you agree with the figure of 90 per cent, bearing in mind that 20 per cent of Australian households do not have computers—or so it is alleged? Perhaps you do not agree with that figure either.

Mr Hilvert—We will talk about Australia. The Bureau of Statistics notes that there was a 40 per cent increase in wireless broadband in six months. Telstra has also seen a record uptake.

CHAIR—Of wireless?

Mr Hilvert—Yes.

Senator LUDLAM—Because that is all there is.

Mr Hilvert—Yes, because that is all that is available, in many cases.

Senator LUDLAM—Just to cut to the chase, from your reading of the implementation study, are they realistic projections of how we will take up the system?

Senator FISHER—The figures are 70, 80 and 90. They have a few scenarios.

Mr Hilvert—We think the modelling is fair. We have no reason to question that. If anything, we think the figures are a little bit modest, from our members' experiences.

Senator LUDLAM—You said right at the outset that you did not really come here to talk about governance. I am going to put a question to you anyhow, to see whether you have a strong view one way or the other. We are shifting from a situation where we have a vertically integrated

monopoly providing services right up and down the value chain, as it were. We are taking the wholesale infrastructure back into public hands and running that as a utility providing access to all comers. Do you have strong view one way or the other as to whether that wholesale architecture should stay in public hands, chugging along and making a seven per cent rate of return, or whether it should go back to the market at some stage in the future?

Mr Hilvert—No, we do not have a strong view. We do think it needs a single, coherent build, frankly. If it is attractive to other parties, so be it. It is nice to have that option, and it is probably wise of the government to flag that that is their intention. But, on the whole, it is something that I suspect will become clearer as the rollout continues. If you want an example, take a look at our highways. Many of them will continue to be in the hands of government agencies, but for many others—maybe high-traffic ones—there will be some private equity interest in there. That is mere speculation on my part.

Senator LUDLAM—Just to play devil's advocate for a second, what would be wrong with NBN Co. in future offering services directly to university networks or big public sector agencies without having some mediating retailer in the middle? I think that has been flagged in the draft legislation.

Mr Hilvert—Our concern is simply that it introduces a degree of uncertainty and it will probably make people who really want to serve that market think twice—think that there is always the possibility that the rules will change. We really are very tired of discretions that can be extended in ways that are not subject to appropriate review. If we really do want to promote the business, we need to be really clear on how far the NBN goes in its wholesale operations.

Senator LUDLAM—We have certainly heard that view from quite a number of different parties. Lastly on that proposition at the end of the bill to sell the Commonwealth's stake back to private hands, the implementation study proposed that a test be applied before that sale went ahead to make sure that the competitive structure of the market was sound and that that be undertaken quite rigorously. What do you think of that concept—or broader, as I am proposing—that a full-scale public interest test be applied that would capture whether the competitive state of the market was healthy before we sold the NBN down?

Mr Hilvert—We do not have a firm view about that. We certainly would welcome a public interest test. But, again, as I said, the government's issues are things that can be built into the design to some extent. We like very much that we are talking about annual accounting and transparency of the competitive market. I think that would give parliament and business a better feel for how it is shaping. But I think it is foolish to try to decide one way or the other on that particular point.

Senator LUDLAM—Interesting. Thank you very much for your time.

Senator FISHER—Senator Ludlam has explored much of the issue that I wanted to pursue with you, Mr Hilvert, but can you dig a bit deeper in your response about—if I got it right—the modelling in the implementation study about a take-up of 70, 80 or 90 per cent associated with costs. I think it was something like this: if there is 70 per cent take-up and a cost blow-out, then the profit is projected to be some three to five per cent; if there is 80 per cent take-up and there is no cost blow-out, then the profit is projected to be some five to seven percent; and if 90 per cent

take it up and there are cost savings, then it is projected that NBN Co.'s profit will be some eight to nine per cent, or thereabouts. Not just in respect of take-up rates but including in respect of take-up rates, can you expand on your observation that you think the modelling is fair?

Mr Hilvert—Not really.

Senator FISHER—Maybe a simple 'no'.

Mr Hilvert—The government has invested \$25 million in the modelling. I do not have an alternative model.

CHAIR—Not for free, anyhow!

Senator FISHER—You are kind of going, 'I hope so.' Are you?

Mr Hilvert—Senator, with respect, no.

Senator FISHER—I am glad there was respect to that no!

Mr Hilvert—We have had two of our leading accounting firms actually doing this modelling. I would like to know what the basis is for challenging that. There are a lot of naysayers that will do that. There are people with their own agendas that will say, 'So say you.' Our view is that there is a generational growth of interest that is taking broadband as being similar to a utility like water and electricity. It is a little bit like: 'Let's save money and just have cold water.' Okay, we can do cold water. No-one ever died from just having cold water. But, trust me, if there is hot water available they will take it. As far as we are concerned, fast accessible broadband is hot water to this generation.

CHAIR—Perhaps some would say with the implementation study that if you are paid \$25 million and you are given where you have got to end up—which is what McKinsey actually said; they were quite restricted in their terms of reference—perhaps that is why you get the results you do.

Mr Hilvert—Okay, you can make that critique, but we do not see anything outlandish about that modelling, nor does the EU.

Senator FISHER—You said, if I got it right, that the naysayers should trump up with the basis upon which they are criticising the findings. I guess that also begs the question as to upon what McKinsey based its findings in the 25 mil report—the supposed evidence upon which McKinsey based its assumptions that there would be a 70, 80 or 90 per cent take-up, cost blow-out, cost neutral, cost saving. That is a fair observation in the other direction, is it not? For 25 mil you would expect to know as well upon what they based their assumptions or presumptions, wouldn't you?

Mr Hilvert—Yes, indeed, but I do not have the report with me at the moment to—

Senator FISHER—I am not convinced it—

Mr Hilvert—Are you saying that they just did that on the back of the envelope?

Senator FISHER—I would hope not, but I am not sure it is clear from the report the basis upon which they did come up with the modelling. That is something we would pursue, I think, at another time. It is not really a question.

Mr Hilvert—I understand your point.

CHAIR—I think what Senator Fisher is saying is that the Holland and the US experiences are said to be plateauing at 30 per cent. It is also reported that 20 per cent of Australian households do not have a computer. That makes it difficult to understand how you can get to figures like 70, 80 and 90 per cent on the basis of those backgrounds and, as you rightly say, with the huge take-up, for whatever reason, of wireless.

Senator FISHER—People would agree with you that this is hot water to this generation, but this generation is so 'yip-yip quick' there may be something beyond hot water that you and me ain't even thought of, Mr Hilvert, that this generation would leap to and just skip the hot-water step.

Mr Hilvert—That could well be.

Senator FISHER—I have a question about wireless versus fibre. I am not a tech-expert in this. Are you convinced there is no way through scalability in terms of wireless? Have you or your members seen any evidence that there is a way to resolve this, that if it be wireless we can make it so that the more that use it do not stuff it around? Is that a way through that or is it accepted worldwide that there is nothing you can do about that problem with wireless?

Mr Hilvert—On what we know at the moment, wireless is a very important complement and an important part of the take-up of the internet, but it will not scale. We know that today from America where we are seeing what will be happening three to five years from now. It will not scale.

Senator FISHER—Okay.

CHAIR—Mr Hilvert, you said at the beginning that Australia needs a very fast broadband service. I think everyone agrees with that. But at what cost? Do you think it should be there regardless of cost? Is it important to have the very fast regardless of what it costs us? That has been the concern, of course. It is \$43 billion, plus, it now appears, everyone who is going to be connected will have to pay to be connected as well, so the taxpayers will be paying the \$43 billion, plus getting the thing connected. Sure, let us have it, but is cost an element?

Mr Hilvert—Cost is obviously an element. When we had digital TV, did anyone ask about the cost of a new TV? I do not remember that. We happily went ahead. Where was our business plan? Where was our major implementation rollout plan? It ain't there. It was taken as something that was quite natural and was thought to be appropriate for our future in terms of spectrum.

Senator IAN MACDONALD—It did not cost the taxpayer \$43 billion, though.

Mr Hilvert—No, but I am taking your point that some of the costs will be shared. Some people will be willing to pay for their premises; others will be looking forward to subsidies. We are not saying 'irrespective of the costs'. This is a good model. It is being viewed very carefully overseas as a benchmark for how substantial rollouts are done over large regions like this. This is a fair cost and is not in any way—

Senator IAN MACDONALD—Do you know what percentage of Australian users could now get up to 20 megabits per second, at a cost? Would you agree that would be currently about 50 to 60 per cent of users?

Mr Hilvert—The Bureau of Stats published some figures on that. I would have to check. It is the fastest-growing area and it is the area where, significantly, the telcos are offering their best deals. In terms of value for money, for many people the real value for money is at the high end, the 20 plus.

Senator IAN MACDONALD—You said you represent lawyers and big users. Obviously they would be very keen on 100 megabits per second, but have you done any research on how many of Australia's prospective total user base would want 100 megabits as opposed to 12 megabits or, if they are really keen, 20 megabits?

Mr Hilvert—We are talking about capacity and flexibility. The model that is being rolled out by NBN allows for that flexibility through various value-added offerings by retail providers. I do not think we have to second-guess the market in that regard. What we are talking about is making sure that we do not constrain ourselves to such an extent that we become a digital economy backwater.

Senator IAN MACDONALD—You would have seen Primus's announcement yesterday. They said that their introductory offer in Tasmania would be \$45 going up to \$90. My information is that there are at least four other providers at the moment who are providing the same speeds for \$40. Do you have any comment on why people would pay \$90 when they can currently get about the same take-up for \$40?

Mr Hilvert—No. I have read about the news release but am not familiar with it. Obviously this is the nature of competition. There are probably other value-added services. Some ISPs, such as Internode and iiNet, offer free downloads. We do not know the full picture. It is not just a utility-pricing thing. The nature of retail markets is to put in a whole series of value-adds over and above. We do not think much is gained by just looking at the downloads at all.

Senator IAN MACDONALD—The NBN will give us all 100 megabits per second if we want it. Whether we want it or we do not want it, we can get it—that is, except those of us who live in the country, as I do, who, following the implementation study, may not even get the 12 megabits promised to them. You mentioned the EU being committed by 2013. Do you know what speeds they are talking about?

Mr Hilvert—They are setting 30 megabits per second as their target at that point.

CHAIR—And yet Australia, which is much smaller and more diverse, is going for 100 megabits per second. Do you think there is any inconsistency there?

Mr Hilvert—No, we do not think so. Let's not get hung up on the ultimate speeds. What we are talking about is infrastructure. Once the infrastructure is there, it can scale via optical fibre. There is no necessary limit to how fast it can go. We will find that, if there is a lot of interest in 3D TV et cetera, that is going to use even more bandwidth. The real issue is that it has to be fast; it has to be more reliable. We suspect 100 megabits may be, if anything, inadequate by 2020, frankly.

CHAIR—Pity poor Europe with only 30, then.

Mr Hilvert—No, they are talking about that by 2013.

CHAIR—I will leave it there. Mr Hilvert, thanks very much. We do appreciate your time; we know you are very busy. We particularly appreciate your giving us the benefit of your expertise—and we are not paying you \$25 million for it, mores the pity!

Mr Hilvert—Sir, we have one shot—please get it right.

CHAIR—That is all what we are all here trying to do, I can assure you. Thanks very much.

[10.46 am]

SINCLAIR, Mrs Rosemary, Managing Director, Australian Telecommunications Users Group

CHAIR—Welcome again, Mrs Sinclair. You have been to almost as many of these hearings as we all have, so I will not go through the rigmarole of introductions, except to again thank you for your time and the contributions you have made to the important work of this committee. You are aware, of course, that parliamentary privilege applies; and you know that if there is anything you want to say that should not be said in public, you should mention that to us. Would you like to make any sort of opening statement? We had you before us a few weeks ago. We are looking towards the implementation study now, but we are pleased to hear your comments.

Mrs Sinclair—I have a very short set of comments. I have come this morning to be part of the conversation, because ATUG's formal submission back to the government on the report, and to the committee, is not finalised yet. So what I can contribute is our thoughts so far, based on member forums that we have been having.

CHAIR—Excellent.

Mrs Sinclair—With that background, these are just some general comments about the report from our point of view, representing business end users. In general terms, when we read the study we see that it is very much focused on the build of those parts of the network that will be built by NBN Co. and not as clearly focused, as we would like, on the long-term interests of end users ongoing—so, for service quality, repair performance and life after the thing is built.

Our second point is that the study is talking about building the NBN Co. part of the National Broadband Network, which, if you like, is a concept. We will wind up with a network of networks. Where there are existing NBN like networks available, NBN will not be building there, in general terms. So an important issue for us is ensuring that we have end-to-end service performance and interoperability from this network of networks, known as the National Broadband Network.

We think the study focuses on existing industry structure, and we are not sure that it clearly supports the evolution of the sector's structure to a services based innovation and competition model. It focuses on outcomes for the government, in terms of the coverage objectives and outcomes for NBN Co. in terms of the cost, but again not so clearly on outcomes for end users in terms of take-up retail prices and service performance.

We have a question of how we got back up to peak speeds, average speeds, and regulated price increases. We are not at all sure about the wireless bit of the implementation study. We have a clear role for NBN in fibre and satellite, and a more complicated position that we are still working through in terms of a tender for the wireless component—the tenderer being able to offer wholesale and retail services.

CHAIR—It seems to me that we have heard about that before—it was called Opel.

Mrs Sinclair—Yes. We are not sure; we are just thinking our way through that. My last comment is that we are very supportive of the report's recommendations about preserving the options for competition down the track by requiring NBN Company, where it builds the National Broadband Network, to allow for wavelength and physical unbundling some way down the track. We think the recommendation about topology—home run, I think they called it in the report—is good. Those are our thoughts so far. Perhaps if I stop there, we can get into the conversation.

Senator LUDLAM—Thank you very much, Mrs Sinclair. I think you were in the room before when we were asking the association what they thought about the implementation study's views on uptake.

Mrs Sinclair—Yes.

Senator LUDLAM—We will start there. What do you think of their modelling on the range of uptake of the service?

Mrs Sinclair—On the quick read that we have had so far, we think that is fine. Our experience with the uptake of the telephone service, the mobile phone service, the first generation dial-up data services and then the first-generation broadband services is that over the sort of period of time that they are talking about you will get to that 80 or 90 per cent. We think that there needs to be more thinking about what can be done to encourage take-up, but we think the approach to pricing—which is, essentially, that you use current market prices and offer better speed packages—is very good. It is quite a different approach in that you price to encourage people onto the network as quickly as possible. We think there needs to be a bit more thinking about that. But, overall, we think the modelling is reasonable.

Senator LUDLAM—A number of commentators have raised concerns about the exposure draft indicating a willingness on a case-by-case basis for NBN Co. to engage in, arguably, retail activities—selling directly to government, for example. Do you have a strong view either way on that?

Mrs Sinclair—Yes, we do. We support that.

Senator LUDLAM—That is interesting.

Mrs Sinclair—In fact, I just got back from the United Kingdom, where I had a discussion with the regulator there. Built into their current model, where you have a functionally separated open reach, is that anybody can request wholesale services—big banks, big government organisations, big mining companies. Anyone can go to open reach for wholesale services. They do it to create additional competition in the sector. The carriers, of course, have the option to indicate where they add value for their retail margin, and mostly people buy from the carriers. But built into that system is the option for people to acquire wholesale services and then add their own value.

Senator LUDLAM—Is the system in the UK done on the discretion of the minister, or is the market just setting it out?

Mrs Sinclair—No—the market is that open.

Senator LUDLAM—So what is your definition of 'big'—what about a small bank or a corner store?

Mrs Sinclair—It is defined by those customers who wish to acquire wholesale services and add their own additional equipment, operational ability and so on and so forth to turn the wholesale services into services that they need for their operation.

Senator LUDLAM—Are we not risking, particularly once NBN has been sold back into the market, creating another publicly funded Telstra that we are selling, that can potentially use its natural monopoly capabilities to out-compete other carriers?

Mrs Sinclair—I do not think so. We are happy with what is in the exposure draft, which is that we watch this market and if the promised level of wholesale services, the layer 3 wholesale services, do not emerge then after a proper inquiry the minister can exercise the discretion. We can live with that. My comment was that it was just interesting to get over to the other side of the world and have people say, 'We don't have a problem with this. If you want to buy wholesale services you just rock on up. You don't have to have a carrier licence or any other bit of paper from the regulator, you can buy the services you want, funnily enough, to run your health department or your education service or whatever.' I thought, 'That's an interesting other way of thinking about it.' But we are happy with what is in the exposure draft. The other side of that coin is, do I think that those people who have a foot in the retail camp will actually offer a higher grade of wholesale services? My worry is that the incentive structure is such that they will not want to do that, they will want everyone to come through the retail front door and the emergence of the layer 3 wholesale services will be stifled because of the complex incentives. But ATUG is always prepared to let the market have a go and somewhere down the track, five or 10 years down the track, we say, 'We don't think the market is working, we need a different response.'

Senator LUDLAM—Have you formed a strong view either away on the proposal to sell down the Commonwealth stake in NBN Co and put it back into the market after a predetermined period of time?

Mrs Sinclair—Our thinking about that is modelled on history. We like the implementation study's recommendation that there be a public inquiry at that time to determine whether in fact that is the best thing to do. We would like the criteria to be the long-term interests of end users. We are a bit of a broken record on that particular point.

Senator LUDLAM—Keep saying it.

Mrs Sinclair—Yes. But we think it is the best way of capturing the balance between things that are important to all of us.

Senator LUDLAM—But it does shift the government's policy to a degree. At the moment we have got a policy of automatically selling down the majority ownership of the NBN as long as the price is right. The Finance Minister has a role there in making sure we are not selling into a falling market. But that would change the tenor, that becomes a decision about whether it is in the public interest to sell it rather than being automatic.

Mrs Sinclair—Exactly. The other interesting thing in the recommendation is this notion that you might structurally separate NBN Co before you sell it, assuming that it has got into active service delivery in competition with other people. I thought that was quite interesting. I think we are comfortable with the caution that has come out of the study of a particular issue. Rather than just do it, we think about it and then maybe do it.

Senator LUDLAM—This might be the point where the chair accuses us of being socialists, so I will check to see whether we have strayed into that terrain.

Senator FISHER—Which accusation you would gracefully accept, wouldn't you, Senator Ludlam?

Mrs Sinclair—As long as we are not rural socialists we might be all right.

Senator LUDLAM—Agrarian socialists.

CHAIR—None of us in this room are agrarian socialists, I might say.

Senator LUDLAM—Now we are really in dangerous territory.

Mrs Sinclair—We are old friends, I think.

CHAIR—None of us on this side.

Senator LUDLAM—I might leave it there. I will come back if there is time later.

Senator LUNDY—I would like to talk to you about the forecasts in the implementation study about take-up and ask you if you are familiar with some of the assumptions made and the basis on which the implementation study foreshadows the take-up rates that it does.

Mrs Sinclair—I would have to say not deeply familiar. When I was looking at the six per cent or seven per cent a year over the period of time it just seemed reasonable to me, but particularly because of the pricing structure that is being proposed. The question I have about that is how do we make sure that that wholesale pricing structure flows through to retail. If it does then I think the assumptions about take-up are okay. If it does not then we do have a question.

Senator LUNDY—In the ACT when TransACT built their fibre-to-the-node network the take-up rate for that was very good in the context of effectively an overlay of fibre and copper infrastructure to the existing Telstra ADSL-based network. I want to place on notice with you any observations you have about how the market responded when the TransACT rollout occurred given that they were able to offer minimum bandwidth services at a higher bit rate, better speeds than the ADSL in the market.

Secondly, TransACT's very presence in the market prompted Telstra to offer higher level ADSL services like ADSL2+. I guess I am trying to give you a leading question: how does that inform what your expectations are about NBN rollout, even in places where there is a Telstra exchange providing ADSL2+ services to an optimised environment, which would be barely 50 per cent of the services running from that exchange?

CHAIR—Bearing in mind that Canberra is hardly a typical Australian community.

Senator LUNDY—In what sense?

CHAIR—It has the highest level of income and people are more educated.

Senator LUNDY—Average income. But you will find that the areas of rollout of TransACT are across the diversity of Canberra and not necessarily in the more affluent suburbs. It is a leading question in that sense but, again, I use it as an example to draw out your insights. I am happy for you to take it on notice.

Mrs Sinclair—I am happy to give you a quick reaction, having watched the TransACT development over a number of years. The response we saw was very positive. There was the difficulty that TransACT had in accessing the pay TV content, but in spite of that the uptake was very good, there is no doubt about it. This is not only in Canberra. I can recall some of our roadshow experiences where we have been to Geraldton, Broken Hill and all over the place, where you get investment in an area and the offering of innovative services, then Telstra responds. So I think it is absolute proof that you get a better competitive outcome in an area when you get that sort of investment, but not in the same old services. When the investment is combined with innovation-when people get new services-you get a response, which is more innovation from the other competitor and a much better outcome for end users. This is so much so that I recall significant pressure on both TransACT and Telstra about: 'When are you coming to my street? This is all well and good over there but how come you are not over here and when are you coming?' And we all remember great discussions about pair gain systems throughout Canberra and the like, making that quite difficult. So Canberra, in that sense, with those provisos about income and green votes, is a nice little study, I think, of where you get innovative technology and services, people will come into the market.

Senator LUNDY—The other direction I want to take you in is with regard to your observations of the market with the provision of a bandwidth service where the service can guarantee a minimum bandwidth, as opposed to ADSL, and as we were discussing earlier, mobile data where most of the service contracts that consumers enter into are for an up-to speed, and how that impacts on the user experience. Can you provide the committee with your observations about how that will make a difference to (a) the user experience and (b) the competitive advantage that services offering a minimum bandwidth will provide against services that can only offer a maximum bandwidth?

Mrs Sinclair—I think that will be a fundamental change in the market, when people can be sure that they get what they think they are buying. We have had a lot of discussions amongst the membership about 'up to' really not being a contemporary way that people want to think about their broadband services. Looking down the track, more and more, once we have got this sort of platform in place, we will be using services where 'up to' is not really going to be the measure. For example, if we are using ubiquitous broadband access to provide radiography services for people in regional Queensland and a specialist is looking at the results of a breast screening test, 'up to' is not going to cut it; you absolutely need to know that when you press the button you will have a guaranteed speed that will allow diagnosis and analysis to be made on very solid ground. It is the same with education and the school environment. When you have a classroom of kids who all have their computers on and they are interacting with a professor at Harvard or

with some other classroom full of kids, you do not want to be looking at a degraded service because the bandwidth is being shared. So the sorts of uses I see in the future are going to require a much stronger guarantee that what you think is going to be available to you is actually going to be available to you.

That brings me back to my point about the network of networks. We have got NBN Co. doing one bit of the National Broadband Network and other companies doing their bit of it. What we have to do is find a way of guaranteeing end to end through that network of networks and that patchwork quilt of commercial agreements that end users will actually get a guaranteed speed at the other end. There is quite a bit of work to be done on that.

Senator LUNDY—Allan Asher made a similar point in his evidence this morning from the perspective of consumer safeguards and universal service obligations. He said pretty much the same thing. He is keen to see the detail of what the consumer interface would look like, with the commensurate guarantee that, whatever that interface is, it will be able to solve whatever the problem is. One of the details he is still seeking from the process we are going through now is whether that interface will be through a body external to NBN, or part of NBN or part of a body that is responsive to NBN and the other players. It seems to me that you are keen to see the same sort of thing. To what extent do you think the answers to that lie in the further discussions about the nature of the USO as it applies to the NBN and the consumer service guarantee, which is the natural extension of that?

Mrs Sinclair—I have got to say that, when I saw that USO recommendation, I thought: can we do this one more time? We have had a number of reviews of the USO, and I think we probably know all about the USO in terms of its role and function. But the process we need to go through now is to determine the role for NBN Co. and the other companies in ensuring that we get whatever we decide on—and I think we will decide that people in Australia have a right to have a voice service and a broadband service of some dimension or other. We have a National Broadband Network that is going to be delivered to us by NBN Co. in part and by a whole lot of other companies. NBN Co. is not going to overbuild where there is effective infrastructure and competition in a particular market and the area is 'effectively served'—I think that is the definition.

CHAIR—How do you know that?

Mrs Sinclair—There is a process of determining 'effectively served'—

CHAIR—No, I mean how do you know that they are not going to overbuild?

Mrs Sinclair—Taking the report at face value, where an area, the CBD in Sydney, is effectively served, then I am really not expecting to see too much NBN Co. activity there. There might be a question about whether I want to see them, coming back to 'effectively served', because I would not want anybody to think that two bits of fibre coming into a building and not being able to get up the building because there is no room in the building riser means that the people in that business building in the middle of Sydney are effectively served by competition. Nor would I want anybody in the backhaul part of this equation to think that two bits of backhaul fibre might mean that is a contestable market. If one guy is wanting to charge you \$500 per

megabit, then you have two bits of physical infrastructure but you have not got an effectively competitive market from our point of view.

CHAIR—One of those bits is a group that has a \$43 billion capital cost on which they have to get a return, and the other one is an old one that has already paid for their copper—and their fibre, indeed, in the capital cities. It does not have the same capital costs, so there is going to be an unequal cost and perhaps it will be uncompetitive because one simply will not be able to be competitive with the other.

Mrs Sinclair—These concepts of effectively served or effectively competitive need to be thought through and I think the outcome for the end users is the benchmark. Essentially, part of our thinking about this is that we have been very optimistic about the power of a competitive market to produce results for end users. The economists amongst us remain very optimistic about that. The fact of the matter is that the government is responding to market failure in this area with a very big response. Given that, I think we need to be very cautious and very practical about what the market is actually going to produce and we need to test assumptions that if you have got two bits of fibre somewhere, you have got a contestable backhaul market.

Senator LUNDY—I come back to the USO. I would imagine that in the consideration of how the USO will apply to NBN—and I do not know this; I guess I am testing the theory with you—that new style of USO would apply where the NBN has been rolled out and is in operation, and the old USO will apply to areas not yet rolled out to, so we might well have a transition period where two different styles of USO might be functioning in the market, rather than trying to adapt the NBN Co. based fibre to the premises network to an old-fashioned USO or indeed trying to apply modern USO rules applicable to a fibre to the premises network to the old part of the network. Is that plausible or conceivable? Is that what is envisaged? I am really just throwing this up out of the blue. I can imagine, in the context of a USO change, that there would be some significant differences, not least because I know competitive carriers have in the past accused Telstra as the incumbent carrier with monopolistic tendencies of using the USO to lock other carriers out of provisioning the default service across the country.

Mrs Sinclair—Your point that this is a complicated issue is absolutely right, and we have a transition period to manage over the next eight years, until the NBN is rolled out. So we do have to think our way through, alright, that is NBN style USO but what are we going to do over here. For example, the report talks about notice periods for decommissioning of copper exchanges. That is the point at which you say okay, Ultimo is going to lose its copper exchange; have we got NBN or NBN equivalent type services to everybody so that they can move over and get whatever communications guaranteed package, voice and broadband of some sort, that we are talking about now. Greenfield estates right now are very interesting, where Telstra as the universal service provider has the obligation but it has the choice to deliver its obligation using wireless services in estates where the government position is that there should be fibre from 1July. When we think about that, we also think, 'Is that a backward step that we have right now got a USO being delivered by a wireless service ahead of NBN turning up?' We think the other thing about the USO is that it will need to be restructured around NBN being a wholesale USO provider and then retail providers on top of that having an obligation to actually deliver the service so that you can talk to someone.

Senator LUNDY—It is food for thought.

Mrs Sinclair—It is a big piece of work.

Senator LUNDY—I guess my final question relates to the point you make about 'effectively serve'. The worst-case scenario is that we face a fibre-to-the-premises equivalent of the pair gain bottlenecks, particularly in commercial buildings or large multiresidential buildings that have pair gain systems in the basement. But I think you make the point well that such a prospect would not constitute 'effectively serve' as per the implementation study. So my expectation is very strongly that choke points analogous to the placement of pair gain systems in the network will not be an issue with the rollout of the National Broadband Network.

Mrs Sinclair—Yes. We have to assess 'effectively serve' from the point of view of the end users in whatever premises we are all looking at.

CHAIR—Was ATUG consulted by McKinsey?

Mrs Sinclair—Yes, we were.

CHAIR—You did better than ACCAN, who were not.

Mrs Sinclair—Perhaps it is because I am noisier or ruder—I am not sure.

CHAIR—I would not have described you like that. It is always good to talk to you because you represent users, and users are clearly, I would assume, very concerned about the cost of the product. Is that right?

Mrs Sinclair—Yes.

CHAIR—You have mentioned students and hospitals. Both are at the financial end of the spectrum. Neither have much money to access anything, let alone 100 megabits per second. Since you last spoke to us, some answers we were given by the department suggested to us—I think for the first time—that, whereas we accepted greenfield estate users would pay for their connections of fibre to their premises, now everybody else might have to pay for that as well. Was that news to you or a revelation?

Mrs Sinclair—Not a revelation. It has been something we have been thinking about. When you listen to NBN Co, and even in this report, we have NBN Co firstly rolling down the street. When a service is required during the drop from the street to the house and putting the ONT box either outside or inside, at that point there will be costs for end users in terms of recabling—

CHAIR—No, this is payable to NBN, as I understand the department—in the same vein as, if the legislation is passed, it will occur in greenfield sites.

Mrs Sinclair—I will have to check that. My understanding of the greenfields discussion was that the developers would pay as they do now to make sure that there is a copper connection to houses in greenfields estates to the house. Within the house the consumer or the buyer of the house pays for the internal cabling as part of buying the house.

CHAIR—Sure, the developer pays it, but the developer will pass that on to the buyer. We are talking about figures of 3000. It was accepted for greenfield sites, but we were all under the impression that when it came to my house I would not have to pay anything to get it to the door. Once it was inside it was all right. But the answer from the department suggests that maybe I will have to pay to get it to my door.

Mrs Sinclair—I will have a look at that, because the basis on which we have been working is that the connection from the street to the house and then on to outside or inside the wall would be at NBN's expense, and then it would be the retailer's.

CHAIR—I might have that wrong, but that was my understanding of the answer from the department. If you would not mind having a look at that, that would be helpful.

Mrs Sinclair—Sure.

CHAIR—We all want a very fast broadband, though whether we want 100 megabits today or even in 10 years time is something we can only guess about. You would have seen the release yesterday about Primus in Tasmania talking about a \$45 introductory offer of a download of 15-and 25-megabits-per-second speed. It was an introductory offer of \$45 but the real price was \$90. I am told that there are four other suppliers providing much the same speed and in some cases greater download at what seems to be an anticompetitive price of \$39.95. Do you have any comment on that and why the study would suggest that there will be take-ups of 70 or 80 or 90 per cent—and it is a curious thing that 20 per cent of Australian households do not have computers—and whether that take-up would be at all believable from a user's point of view, which you represent, when they would have to pay more than double for the same speed?

Mrs Sinclair—My understanding of the Primus package—and I think we all need to just have a look at the details more clearly—is that that package includes line rental and a component for voice services. So the \$90 would be the broadband package plus the monthly line rental and voice component. Whereas, the \$39.95 package is likely separate from a voice telephony package so you have to add the \$39.95 plus whatever voice package you have got to get the full communications package. But that, Senator, is a quick read of the Primus package. I thought it was interesting because that \$45 was including a voice component.

CHAIR—My information is that prices of \$29.95 a month are available for similar packages to the above if the broadband services bundle with the residential fixed-line telephone service. This is just some research my adviser has given to me and, whilst I trust him implicitly, I am not guaranteeing accuracy. But on those figures—

Mrs Sinclair—It is just a little experience of the 'confuseopoly' that end-users experience in trying to compare apples and apples, or apples and oranges.

CHAIR—But by the same token, \$90 is a long way away from \$40.

Mrs Sinclair—Yes, but if for the \$40 you then have to add another \$40 for your rental and your voice calls, then you have got \$80. When you are comparing the \$80 to the \$90, if the \$90 gives you significant uplift of speed and bigger downloads and whatever—

CHAIR—That is not my understanding. My understanding is that the \$40 is all-in. But perhaps you could have a look at that, if you would not mind—

Mrs Sinclair—I will just give you our views on what I think of the package.

CHAIR—You will recall at our last get-together we were a bit surprised that with NBN starting in Tasmania in less than a month now no-one had their pricing out. Primus has now publicly put theirs out and iiNet have related theirs to Point Cook. But again, with those figures I am curious about what do you think the take-up might be. Sure, everyone wants very fast broadband but we all have limited budgets, so I am just interested in your views on that.

Mrs Sinclair—I think people will move if they see that they are getting better value for whatever they are spending, and that is going to require quite a deal of education of the endusers to say, 'This package includes broadband at this speed with this download limit and all your voice calls, whereas, what you are paying now is a broadband bill and a telephone bill.'

CHAIR—That is certainly right for someone on my salary, but for someone earning \$50,000 a year the difference between \$50,000 or \$60,000 and \$90,00 is a lot of money.

Mrs Sinclair—It is big, yes. That is why we have been talking about entry-level packages, to make sure that there are packages, perhaps with lower speeds—the 20 megabits, for example—that enable people on lower incomes to come on to the National Broadband Network.

CHAIR—But entry-level packages is another way of saying that someone is subsidising them.

Mrs Sinclair—To my way of thinking, it is making sure that there is a package that people can afford so that they can come on to the Broadband Network. It would be 20 megabits rather than 50 or 60 megabits.

CHAIR—In Primus's case, the entry level is 45. My understanding is that after a period of time—and I am not sure whether it is in half a year, nine months or a year even—it goes up to 90, which is obviously their profit price for the same service. The 45 is a loss leader to get the custom. Good luck to Primus; I am not being critical of them. That is what any sensible commercial company would do. I am just raising that the context of the 70, 80 or 90 per cent take-up rates, which are essential if the \$43 billion capital cost is going to be justified.

Mrs Sinclair—My question is: how do we get from NBN's wholesale price to that retail price? What are the services? Is there a pay television component in there? I will take that question on notice and have a look and come back to you.

CHAIR—You may have better access to NBN Co. than we do, because they are still being very secretive about what their costs to their retailers are going to be. Somewhere between now and 1 July they are going to have to publicly indicate what they are charging the retailers.

Mrs Sinclair—Yes, although for the purposes of this exercise we could use the implementation study.

CHAIR—What was that—about 30 to 35?

Mrs Sinclair—It was 30 to 40. I would use that in the first instance.

CHAIR—Are you experienced enough technically to know, if the wholesale is 30 to 40, what the retail is?

Mrs Sinclair—I can get some information on that.

CHAIR—Could you make a guess?

Mrs Sinclair—I think it is about double.

CHAIR—Again, thank you very much. Have you been to London since you were last with us?

Mrs Sinclair—Yes. It was a very recent trip to attend to an international user group meeting.

Senator FISHER—Was it ashen?

Mrs Sinclair—There was a danger of not being able to get home last weekend.

Senator FISHER—We would have missed you.

Mrs Sinclair—Happily, the ash went in one direction and I went in the other direction.

CHAIR—With regard to Senator Ludlam's questions on the wholesaling, you have been very consistent. It is interesting that what you told us last time has been justified by what you saw in London and in Europe.

Mrs Sinclair—Yes. It was very interesting. In terms of creating another source of competitive pressure in the market, I thought it was very practical.

CHAIR—It does bring up the question of what the retailers might think and how excited they would be if they were not to get government contracts.

Mrs Sinclair—Indeed.

CHAIR—One would think it would make their other retail customers have to pay more.

Mrs Sinclair—It makes them excited, but the response is to prove absolutely that they add value and they earn their retail margin from those very large customers, who do not have a lot of choice. When you think about the operations throughout an entire country, there is not a lot of choice. It is one of the things that we are hoping to see from NBN Co. We are hoping that the entire market becomes addressable for a range of providers who can then talk to the government departments and Coles and ANZ and those sorts of people. It remains of interest to all of us.

CHAIR—Again, thank you very much for sharing your expertise with us. Can I just indicate publicly that the committee is now going to go into recess until two o'clock, when we will hear from Mr Kevin Morgan followed by the department. The reason for the recess, I just want to put on the public record, is that the committee invited McKinsey to give evidence before this hearing. McKinsey have indicated through the department that for reasons stated in their contract they are not able to give public evidence about the conduct and the contents and the processes around their report. They have indicated they would be prepared to give the committee a private, confidential briefing provided a departmental official was allowed into that briefing as well. The committee has resolved that, with the view to getting the best information for the committee, it will accept the offer of a private briefing. And so we have no last-minute problems we have also agreed to accept the presence of a departmental officer, although I might add that has given the committee some concern. But, nevertheless, at this hour the committee believes it is probably more important from the committee's point of view that we do have the private meeting. It is of course then a question for the committee at a later day on whether it exercises its authority as the parliament of the nation to require anyone to give evidence to a parliamentary committee, and that is something that will be determined in the future. So those of you who may have been interested in hearing what McKinsey had to say will be grossly disappointed today, but I just give that explanation to put it on the record and explain that it is not just senators needing a long lunch; we will be working until two o'clock.

Proceedings suspended from 11.31 am to 2.28 pm

MORGAN, Mr Kevin Leonard, Private capacity

CHAIR—Welcome. The committee appreciates not only your various appearances before the committee but also what you have written and said about various things that we have seen in a number of outlets, including Communications Day. You will see that we have quoted you at length in our most recent report, particularly as it related to the implementation study. From your previous appearances you are aware that this is a committee of parliament and therefore parliamentary privilege applies. If for any reason you need to give confidential evidence then you can request that we go in camera to hear that. Perhaps at the beginning you might indicate your views on the matters before us and then subject yourself to some questions.

Mr Morgan—Thank you again to the committee for the chance to appear. I had hoped to have a script today, being much needed these days, scripts—

CHAIR—We will believe you whether you have a script or not.

Mr Morgan—It is a parliamentary hearing so I have to tell the gospel! As I think members of the committee and the industry at large will acknowledge, the implementation study is a pretty challenging document. I do not mean this to slight it because of what it actually says but there is so much of it and it canvasses an awful lot of issues. It is not necessarily set out in what I would suggest is the most logical fashion, it is quite hard to work with. Indeed, the fact that the study itself lacks the nuts and bolts that underlie it, the various spreadsheets and the calculations that produced the findings in the study, makes it very difficult to test some of the assumptions and some of the conclusions the study has reached.

Nevertheless, that said, I think that the study demands some quite critical attention. Unfortunately on its release I was reminded of Joe Bjelke feeding the chooks, because is certainly got a very uncritical acceptance by the media at large. There was very little critical questioning notwithstanding the fact that if you look at the study it confirms a number of things. First and foremost it confirms that the government has walked away, and had to walk away, from the initial 7 April last year promise that this would be a public-private partnership, that in its initial phases the NBN could be built in partnership with the private sector. It seems that someone forgot to tell the Treasurer that, because in his speech the other evening he actually still referred to it as being a joint public-private partnership. But quite clearly one thing that the study does establish is that no private sector investor would readily back a national fibre-to-the-home network. Again no harm to McKinsey, I do not think he needed \$25 million to work that one out. I think that answer could have come up rather more quickly than that and rather less expensively.

So the study dismisses any prospect really of private sector investment, certainly in the first 10 or 15 years, in this fact until you get to the privatisation threshold, and says the only way to make this work—and let us be quite clear about what the study is. The study says itself it is not a cost-benefit analysis, it does not tell us whether this is value for money, it does not tell us whether there are alternatives that could be invested into to deliver high-speed broadband. The study, I think, and I do not think they would be too coy about it, backs in to the \$43 billion cost envelope. It puts a business plan within that cost envelope. Very conveniently; I think it is quite amazing that it came out with \$42.8 billion, suggesting a robustness in the original estimates that

I do not think anyone had conceived have been there. I must say that whoever did that original estimate has been extremely coy and reserved. If I had been that clever and got that number act together back in February-March of last year I would have claimed credit for it. But seemingly Treasury, Finance, DBCDE, expert group, no-one wanted to own the \$43 billion. Now they might regret it because it has been validated, but validated in a very curious way.

The business case that validates that \$43 billion is essentially one that is not sustainable. As I say, no commercial entity would invest in it and by the usual criteria of a business case no one would claim it is what might be called a bankable business case. You would not get finance for it. The only way you could get finance for this is to make some assumptions that the government is satisfied with effectively just getting its money back. I might be misunderstanding this, but if the government borrows money at six per cent and the rate of return in the project is seven per cent, that is not a very attractive return, and it is going to take an awfully long time for the government to get that money back.

It will only start to get money back, possibly, in year 10 of the project, when you start to see some significant rebate of that initial \$26 billion of equity, because the government has guaranteed the loans. It may all be off budget, but it still represents a significant liability, with the government effectively parking \$26 billion and not asking anyone: 'What is the opportunity cost of the \$26 billion? What else could we do with it? Could we do more effective things which would generate not just higher commercial returns but also higher social returns?'

The government will have parked \$26 billion and then agreed, if they accept the study's recommendations, to underwrite the loans that will start to displace that equity. Then, at some point in the future when this network enjoys either a de facto or, as the study implies, a legislative monopoly, the government will privatise it. I think it is a scandalous proposal to take \$26 billion worth of public money, provide it to a business—albeit one that is initially publicly-owned—not demand a return on it, guarantee its loans, possibly act through legislation to cement its monopoly and then privatise it.

Senator LUNDY—What sort of speculation is that? That is all that the government policy is.

Mr Morgan—It looks pretty much like that to me. You have to get the numbers to add up. I am not saying that there is anything wrong with that, because everyone who has worked on a business case knows that it is a sort of iterative process. You play around with the spreadsheets, and there is nothing corrupt or wrong in doing that, but basically you have to get the numbers to stack up.

The critical issue in this business case is that to contain it within that \$43 billion envelope and get a nominal return which appears to be a commercial return—small though it may be—and therefore keep it off budget, you play around with the demand and the prices. Anyone who has done a business case knows that you ultimately get those numbers to line up. In this case, the business case is predicated upon an entry-level price of \$30 to \$35 for what is implicitly a 20 megabit bit stream product, the equivalent of ADSL2 in some respects.

Senator LUNDY—Do you think so?

Mr Morgan—It is better, because—

Senator LUNDY—Thank you.

Mr Morgan—I am happy to come back to that one, if you want to.

Senator LUNDY—Yes, we will.

Mr Morgan—Although, given the contention ratios in backhaul and in international links, that 20 megabits may not consistently translate into 20 megabits to the user, even over fibre, and I think the study acknowledges that. But I have lost the thread—

Senator LUNDY—We will come back to the difference between fibre and ADSL.

Mr Morgan—To put those numbers together, you have this critical issue, which is what the study calls the 'point of indifference'. It has nothing to do with whether it produces an affordable retail outcome; that point of indifference—that wholesale price—is predicated upon finding a number, a magic price, at which the existing retail service providers will say, 'It's now worth our going onto fibre.'

If you look at the modelling, there are a number of assumptions there. It models it with a point of indifference that has to be struck at the current unbundled local loop price. The point of indifference is also modelled at what was flagged by the ACCC as a higher unbundled loop price. So there is a bit of uncertainty there as to how that may play out.

Obviously from the perspective of the viability of the NBN, in getting those numbers to work, the higher the ULL price is, the easier that transition. That begs a big question. I have not seen too many existing RSPs complain about being undercharged on ULL and I do not see them rushing to endorse a rise in the price of ULL that would then help them migrate to the NBN, but the study assumes that this can happen.

Whilst there is some precision in estimating that tipping point, that point of indifference that RSPs like Primus, Optus and whoever would come over to fibre, there does not seem to me and if you could point it out to me, I would be delighted—to be the same degree of precision in trying to identify the point of indifference to Telstra. That is partly understandable because the cost of ULL is known—it is \$16 roughly a month band 2, and that is what we are talking about because that is where it is all clustered. Rightly or wrongly, Telstra's underlying economics are fairly opaque. So I think the study itself could not really say where it would be in Telstra's actual economic interest to migrate from copper to fibre. It does make an assumption that Telstra's copper is ageing, that customers will perceive higher value in fibre, and that therefore Telstra, like other ISPs, will be selling fibre. A point will come at which the copper network effectively becomes uneconomic—the fixed costs that are then shared between fewer users of the copper network are rising, so you turn it off. That is an assumption, though, that the fixed costs are very large. They have to be considered in the context that the copper network is effectively a sunk cost. So that tipping point may be a little higher than the study implicitly suggests.

The question of Telstra coming on board, of course, is the real unanswered question. It is not one that they were asked to address directly. In reality, for this study to have had real value, there would almost had to have been two business cases. There would be a business case with Telstra's participation and there would be a business case without. Telstra's participation is acknowledged as being possibly important by the study, but not necessarily for just the reasons they identify. The cost savings that might come to the NBN from having access to Telstra's existing infrastructure system ducts, the pits and pipes in the streets, really is not known. Anyone who is familiar with the condition of that infrastructure would know that you would almost have to go street by street before you knew what was in there and what real value there was.

Senator LUNDY—Because Telstra's databases do not tell them the truth.

Mr Morgan—One of the first—

Senator LUNDY—I think the answer is yes.

Mr Morgan—Yes, because in 1993 one of the first units in Telecom, as it was then, where there was significant cost reduction after competition was introduced in 1991 was the maintenance of cable plant records. So cable plant records are not well kept. But it is also the physical condition of those ducts. Certainly in the mid-1990s Telstra people who were involved in the deployment of the hybrid fibre coax cable found that it was extremely expensive to use the existing ducts. They needed a great deal of rehabilitation. Hauling the fibre coax through the ducts when copper was in situ caused enormous damage to the existing copper plant. Technicians were delighted. They were working for months—overtime, weekends—repairing the copper. As you know, Telstra eventually went the same way as Optus and did an aerial deployment because there was not that value in the existing underground infrastructure that many had perceived.

The real value of Telstra coming on board, of course, is that it brings the customers. That changes the dynamics of the NBN fundamentally because then the NBN is no longer guessing about its market. If one can see a program in place where the NBN says, 'We are rolling out in the inner west of Melbourne,' and Telstra then coordinates the transfer of its copper customers and perhaps removes some copper so there is some access to ducts and so on, one can see a fairly logical relationship that would really make a profound difference to the rollout. More importantly, it would allow the customer to be connected when the cable is deployed. Instead of running a cable down the street—whether it is aerial or underground—and then having to come back once, twice, three or four times over the next few months to connect number 5, number 6 and so on and so forth, you can just do a whole street at one go. The economics of the thing become profoundly different.

Senator LUDLAM—Is that not what the thrust of the government's negotiations with Telstra have been for the last six months, to have that outcome take place?

Mr Morgan—I do not know what has been discussed. It has been a better kept secret than the budget or anything like that.

Senator LUDLAM—The broad thrust has not been kept a secret. It is to roll in Telstra's traffic and infrastructure where it is helpful to the NBN.

Mr Morgan—That is the objective of the competition and consumer legislation.

Senator LUDLAM—The negotiations are going on in parallel with that.

Mr Morgan—Yes. That would be the logical thing you would expect to be happening. But that begs the question then if that is the price that is on offer. If the price is \$30 to \$35 then Telstra, which is sitting on margins of 60 per cent plus on its copper because it is a near fully depreciated asset, may not find that terribly attractive. It would want compensation and that, of course, is the stumbling block.

If Telstra were on board, this business case would be risk-free essentially because it would be a monopoly business case. Where this study falls down is that this is not a risk-free business case because we do not know whether Telstra is coming on board. We do not know what its response to the NBN would be if it is not on board. We do not know whether it will sit passively back, whether it will invest aggressively in ADSL 2—for all its imperfections—or whether it may invest in hybrid fibre-coaxials. There could be a number of aggressive competitive responses. It might even contemplate rolling out limited amounts of new fibre itself and perhaps going back to some fibre to the node. The study is obviously sensitive to that competitive threat and says, perversely, there should be a cherry-picking levy; we do not want overbuild of this network. I find that very curious. It is as though Phil Burgess wrote a lot of this study; it is an essay in monopoly almost.

Senator LUNDY—That is an absurd comment to make.

Mr Morgan—Well—

Senator LUDLAM—Do you have a view that what they have sketched in the implementation study is effectively the worst-case scenario—that the government can get that six or seven per cent rate of return and keep its head above water in the first couple of years; that we are actually at war with Telstra trench-by-trench and duct-by-duct and that none of that stuff is going to come on board, and that if the negotiations collapse and we end up with the worst-case scenario this business can still succeed. Do you think that is what they have attempted to do?

Mr Morgan—I do not think it is the worst-case scenario. They have got a worst-case scenario where it sets down a return of 3.7 per cent or below four per cent.

Senator LUDLAM—It is a middle-band case assuming Telstra does not come to the party at all?

Mr Morgan—That is why I find the study a bit less than persuasive. When you look at the take-up rates that are posited, you would basically have to have all of the URL players come across pretty quickly and some of Telstra's customers come across too. Telstra would have to be selling fibre on behalf of NBN Co. which, if they are at war, is an unlikely scenario. I do not doubt that the underpinnings of this study and those spreadsheets will all add up. You do not hire McKinsey and get spreadsheets and numbers that do not add up. The critical issue is the assumptions. The assumption that Telstra, if it is not on board, will not engage in some kind of competitive response is a bit of a big ask. The other issue is—and I know it was canvassed quite widely this morning—whilst we have relatively high rates of broadband take-up for the lower speed ADSL1—1.5 megabit—services, it has grown for the ADSL2 services. We have seen this enormous explosion of wireless broadband and there has been a rather misguided debate, misfocused debate perhaps, that wireless broadband can displace fixed line broadband. For most users that is not the case.

I think the real issue is that when you have a certain amount of money to spend on broadband—and at the moment you may pay 30 or 40 bucks for a 1.5 megabit ADSL service and then another 30 bucks a month for wireless broadband—will you be prepared to spend another 30 bucks to up the speed of your fixed line and still keep your wireless? I think that once you have had a wireless service, with all its convenience, you will keep it. I think the issue of wireless competition is not about displacing fixed line broadband but that it is a competitor for the discretionary dollar. Really, higher speed broadband services are discretionary services. Once you have a basic broadband service, the utility that comes from going from one megabit to 20 megabits to 100 megabits is declining. You are spending a lot more money, but the actual utility you are getting out of it is declining. The utility allows you to get your email wherever you like. I think that is another assumption that has not really been looked at.

It is understandable, of course, because the study is looking at the customers of NBN Co., the retailers, not the retail customer out here. There is no attempt in the study to understand how the consumer will behave. They have talked to 140 stakeholders, so we are told. So they have had the views of the ISPs filtered through to them and the ISPs' understanding of customers' behaviour has been filtered through them.

Senator LUDLAM—There was quite a lot of material there, and I know that different people want to take up different aspects with you. But my understanding is that, quite aside from customer behaviour, if the ISPs and the retail service providers choose to roll their customers in, they will be doing so not on the basis of providing a lesser degree of service to the end user. The end user might not even notice the rollover. It may be completely transparent that the traffic is being served at the wholesale end through NBN Co. If the retailers are telling NBN Co.: 'Yes, at that price point we will migrate our traffic across,' then that is the end of the story. They are not going to be giving a lesser degree of service to their customers.

Mr Morgan—But the business case itself is contingent. This is the problem. There is so little data there. There are a few headline charts that draw together what is obviously an enormous amount of work, but in the absence of the underlying charts, you cannot really see how that chart is put together. But \$30 to \$35 is not necessarily the WARPU—that awful phrase—the wholesale average revenue per user. There is one chart in particular, on page 252, that is probably the most telling one. If you look at that you can see that the average revenue is going to be higher, obviously. So you have an entry-level product, but you expect, fairly confidently, that because this is now 100 megabits, not 1.5 or 20, the consumer themselves is going to be interested in the product that will really drive this, which is IPTV.

Senator LUDLAM—That is one of them, and there will be other things that we have not thought of yet.

Mr Morgan—Yes, but let us stick with IPTV. You will have a group of consumers who are happy to spend more to get high-definition TV over fibre and you will have other customers who want no more than something that emulates their current telephone service. They will not want broadband at all. So the entry-level price revenues do not reflect the kind of average revenue that the company will need to sustain itself.

Senator LUDLAM—That goes pretty directly to the issue of the take-up rate, which you have addressed a bit in some of the work that you have done. You and some other commentators have talked about take-up levelling off in other markets. You say 'at the kind of 20 or 30 per cent rate in the US and the Netherlands'. That is not my understanding and it is not what some other folk have said. We have heard that you are not getting a levelling off; you are just getting this geometric expansion of traffic every year that shows no sign of tapering or levelling off at all.

Mr Morgan—The problem in looking for international evidence to support the NBN is, of course, that there isn't any. There is no large-scale, wholesale-only network anywhere. There are small municipal networks in Holland, Sweden, the United States and other places. There was a fairly ambitious one in Utah which is not a very good one to look at if you want something encouraging about the wholesale-only economics.

CHAIR—Why is that?

Mr Morgan—The UTOPIA one in Utah originally was planned to serve 250,000 premises five years ago. It has 20,000 users at the moment. It is supported by tax pledges from the local authorities, which have doubled over the last five years from \$250 million to \$500 million. It is in an intensely competitive market. This is where this question of Telstra's participation or not becomes critical because when a municipality starts building a network like UTOPIA, companies—like Comcast, the cable operator, and Qwest—retaliate. So it becomes intensely competitive and they cannot get the take-up they expect.

You cannot find any parallels for it; there are no parallels. Even many of those municipal networks will not tell you a great deal because they are often layer 1 operators. They are basically just providing dark fibre. You cannot get to their finances because they are buried in municipal finances, cross-financed from other utilities and so on and so forth. That was the policy intent in those places. The phrase they use commonly is: 'We want a return of our capital, not a return on our capital.' That is essentially the business case the NBN has out of this study. But that is not what was promised initially.

Senator LUDLAM—Can we come back to that bigger picture though. The market, left to itself for however many years, got quite good at providing fast services to the inner cities and completely neglected regional areas. The government has made a policy decision to step in and cross-subsidise the far-flung parts of the country with revenues partly gained from accessing the big cities. As far as I am concerned that is a sound public policy objective, before we get down to the detail of the numbers. My question is in two parts. Firstly, what do you predict is going to happen? If the government and McKinsey have got the numbers wrong, what do you think we are heading for? Secondly, what is the alternative? If the government does not step in and provide this infrastructure, at what point is it going to arrive at Jigalong or Port Hedland?

Mr Morgan—Obviously there will be areas of so-called market failure. I have argued this for decades. The mistake made in Australia, given the uniqueness of the market and the particular challenges it faces, was this. The network was built on cross-subsidy, it was sustained on cross-subsidy and universal service is delivered through cross-subsidy, so when what was, in essence, cherry-picking competition was allowed from the early nineties, that started to unwind. There have been hosts of policy initiatives that have tried to redress that problem that was created by the initial introduction of competition. As to public policy: this is a natural monopoly

infrastructure, and it should be built as such. But it is being introduced into what is now a distorted market because it is a market that has been made competitive by regulation and by government policy.

Senator LUDLAM—It has been partly made competitive. We have got quite a dysfunctional and asymmetrical structure.

Mr Morgan—It begs the question of whether you can ever have a competitive telecommunications market. That is the challenge for policymakers which they have grappled with for decades. They have come up with some curious outcomes. The reason that high-speed broadband services are currently clustered in inner cities is ULL pricing. If there had been uniform ULL pricing, what then would the outcome have been? There would probably have been a lot less high-speed broadband in the cities and not very much more in the bush anyway because, for the \$30 price, most would not have entered the market. But the \$16 price in the cities where they can readily capture customers is a very attractive market. So how do we redress that now with a network which is, to an extent, dependent on cross-subsidy?

I do note the study itself says that although there should be uniform access pricing within fibre—this may not be quite their words but this is what they are coming to—they may not express themselves in uniform national retail prices, because there are other factors intruding such as backhaul, principally, and there should not be uniform pricing across platforms, there should be similar pricing, whatever that may mean. So, unless the RSPs themselves are prepared to average their prices, we are not going to get uniform pricing necessarily out of this model, so it does not redress that problem particularly The difference in pricing will not be the difference between band 2 and band 4 ULL at the moment, which is \$80 or \$90 or something; it will be much smaller than that. Nevertheless, there will still be distortions that come from it.

I will come back to your point about take-up and the take-up rates that are posited. The problem is: can you take the experience with Verizon as a model for the NBN? Verizon being a vertically integrated operator—a terrible phrase to use—it owns the customer. It basically knows its customer, and it goes and up-sells them to fibre. Here we have got a different situation. It may be Primus has this customer on ULL and will readily up-sell it, and that will take you some of the way. But if Telstra is not willing to do that, you are going to have a big hole in that demand curve.

Even if you do say, 'Okay, let's not worry about the fact that it is a vertically integrated operator, let's just look at what actually happened there,' the take-up rates with Verizon are now, I think, just under 29 per cent: year 6 of the fibre build, 29 per cent. And bear in mind that the Verizon build, like most fibre builds in other markets, is not a national build, it is almost a cherry-picking build. Verizon have gone into the neighbourhoods best able to support that product, and they will not go beyond 50 per cent of their service area with fibre—they do not foresee doing that. So at year 6 they have got 28.8 per cent penetration of their internet broadband product and lower penetration—I think it is 25 per cent—for the IPTV product, which is the one that yields the high revenues. This study says, basically, that at year 4 you will have in excess of 30 per cent penetration in Australia.

Senator LUDLAM—So not by having cherry picked one customer at a time; by offering people a lower product that will be faster than what they currently have effectively?

Mr Morgan—Yes, but the cost base is bigger, so 30 per cent as you are rolling out nationally. And then they say—I think this is the phrase in the report—this will grow at the international average of six to 12 per cent annually. Again, I do not know where that comes from. There is a chart at page 240 which shows grows of six per cent in France, five per cent in Denmark, six per cent in Sweden, 12 per cent in the US. Actually, I looked at the most recent Verizon figures and their year-on-year growth is about five per cent. If you are building a business case and you saying it could grow between six and 12—

Senator LUNDY—What is the analogy you draw between Verizon protecting their existing infrastructure and cherry-picking customers along to a higher level service with what NBN will do?

Mr Morgan—No, I have not said they are protecting their existing infrastructure.

Senator LUNDY—Of course they would be, in those markets.

Mr Morgan—Verizon?

Senator LUNDY—Yes.

Mr Morgan—No, they are putting fibre in.

Senator LUNDY—I know that. So you are saying that that is somehow comparable when they still have an investment with their copper. Let us look at Telstra's behaviour here, if we want a clue about how Telstra protect their existing investment—except Telstra took it to the extreme: it did not bother to invest in fibre because there was no competitive pressure on them to do so. You are saying that Verizon are not modifying their roll-out strategy and their sign-up strategy, like they are abandoning their copper investment? I do not think so.

Mr Morgan—Yes.

Senator LUNDY—I just think that is implausible.

Mr Morgan—I just tried to check that this morning because I heard some debate about that. It seems a bit mixed. Initially—

Senator LUNDY—They are not going to say that, are they? They are not going to say, 'We're going to try and keep some of you on our copper and bleed that dry,' like we have seen Telstra do with their ADSL product in the Australian market; 'We're going cherry pick the best of you who we can convince to pay more for a higher level service.'

Mr Morgan—I would not say 'cherry pick'. You are taking a whole neighbourhood and you are putting fibre in that.

Senator LUNDY—I think Telstra's behaviour in this kind of thing is instructive, and to assume that Verizon's behaviour was any different—

Mr Morgan—I have nothing to do with Telstra, all right? I do not own Telstra shares.

Senator LUNDY—No, but you are contending that Verizon's conduct and their take-up rates are analogous to what NBN's take-up rates are going to be, and I am challenging you on that.

Mr Morgan—I am awfully sorry; you have lost me. Let us go back to Telstra and its conduct. I think this study is quite instructive, because it says a commercial investor would demand 20 per cent. You may remember that Telstra was howled out when it made the infamous statement that it wanted north of 18 per cent. That is starting to sound like a reasonable call to me. Those are the realities of investing in commercial telecommunications markets in competitive markets. The government wants, as it is doing, to tear up 30 years of reform that started with the Vernon royal commission and the creation of Telecom Australia and the commercialisation of the telecom sector and to tear up the reforms under the Keating and Hawke government. Bear in mind that in the eighties Telecom did not get money at six per cent; money was borrowed at six per cent back in the sixties and seventies and Telecom was obliged to pay 13 per cent on it. So there was no free ride back then, but now the government wants to turn the clock back.

Senator LUNDY—So you do not think the market had failed? You do not think that we were having a problem because no telco was making the investment? I do not quite understand your point.

Mr Morgan—Telcos were prepared to make the investment at what was deemed to be a commercial hurdle rate, a commercially sustainable investment. If the government has decided otherwise—

Senator LUNDY—With a regulatory holiday, so at the expense of competition. You cannot disaggregate that from the equation.

Mr Morgan—No, they sought exactly the same kind of regulatory relief that has driven fibre deployment in the States, where there is a regulatory holiday for fibre, and in Germany, which is contested by the European Union.

Senator LUNDY—We have just heard there is vertical integration and companies still own their customers over there, so you do not have active competition functioning at a retail level. It seems to me that you are contending that it is good enough to have less competition in a vertically integrated company no matter who is deploying the network. We are not of that view.

Mr Morgan—There is an industry in the States called the cable industry which probably has more high-speed broadband customers than the telco sector, largely because of regulatory decisions in the nineties that fostered cable competition. There was asymmetric regulation. Cable operators were not subject to open access on bundling; telcos were. That had a profound impact upon investment by telcos. The competitive carriers that came in did not pick up the investment as was hoped, and that policy was basically dropped in 2002-03. But in the States you have a very vibrant alternative platform like pay TV and cable TV offering competition, and it is the missing ingredient here. There are a number of reasons for that.

Senator LUNDY—I know where you are heading. For Australia—

Mr Morgan—I am glad you do because I'm not sure.

Senator LUNDY—Let me second-guess where you are heading. The problem is that, whilst ever you have competing infrastructures, as you say, you have another way in to create that cross-platform competition. The reality in Australia is that we do not have that. It is unforeseeable that we will have an across-the-board competing platform for the delivery of broadband services. That is the point-in-time challenge that we are facing as a government— hence the absolute best model is to proceed with the wholesale-only fibre-to-the-premises infrastructure, notwithstanding whether you overlay the historic lessons of market function in places like the US compared to everyone else. That is not the reality here; therefore, the comparisons and conclusions you draw are not applicable to Australia.

Mr Morgan—Let us go back to April of last year. If the government had said, 'We need this infrastructure; it will be built as a social good,' and never mentioned commercial returns or mentioned private sector investment in its early phase, or privatising it subsequently, then I am sure many would have said, 'That is visionary.' But the government built a policy that is a dog's breakfast. It was purportedly going to attract private sector investment, but it has been pointed out rather forcefully by this study that that was a nonsense. So we now fall back to an argument that it can be justified on the basis of the externalities it will generate. The fact is that many of the institutions and sectors of the economy that will generate these externalities that will justify this \$43 billion are pretty well served with fibre now. Is it going to overbuild the research networks—AARNet? Is it going to overbuild fibre links that the New South Wales government has just commissioned from Telstra for \$258 million?

Senator LUNDY—We heard evidence earlier today about the rapid growth in bandwidthhungry applications and content. Again, you make these broad assumptions about there being limited externalities. All the evidence points to continuing strong growth in bandwidth demand from the consumer base. None of the networks you are describing go to the consumer base.

Mr Morgan—I do not know about that. Please explain. What are the—

Senator LUNDY—The institutions and business and universities and all the rest of it—that is not the market NBN Co. and the RSPs are going to be selling to at the retail level; it is the consumer market. They are the ones paying \$50 for 512 kilobits per second—it is still \$50, and for wholesale, \$38, for an ADSL service. That is what we are paying in Australia in 2010, and that is absurd. It is way higher than in any comparable market.

Mr Morgan—One of the problems—

Senator LUNDY—That is one of the preconditions that motivates the excellent policy of having a wholesale-only fibre-to-the-home network.

CHAIR—Senator Lundy, you have to let Mr Morgan answer your allegations.

Senator LUNDY—He just keeps making broad statements that are partially true—

Mr Morgan—I thought that would have comforted you. That is what this policy consists of—broad statements.

Senator LUNDY—Partially true but never quite the whole story—just enough to spin it around to his picture. And I feel compelled to draw the full facts into the story!

CHAIR—Senator Lundy, you are not here to debate; you are here to question. If you put allegations, you have to allow Mr Morgan to respond.

Mr Morgan—I would hate to cloud this policy with a few facts, but I will try!

Senator LUNDY—Your articulation of partial facts to paint your story in the absence of the full facts is misleading.

Mr Morgan—Partial facts, misleading—I do not think I have done that. I will stick my neck out on this. If you take the experience in the States, you are going to need a substantial increase in consumer spend to warrant this. Again, go back to Verizon. I do not know whether I can find the figures quickly; I will forward a submission with some facts in it, hopefully in context. If you go back to Verizon you will find that its average wire line—that is, copper—earnings per month are about US\$71. Its earnings on FiOS are about US\$142 or US\$143.

Senator LUNDY—I would expect so.

Mr Morgan—It has cherry-picked its market; it has put the fibre in those areas—

Senator LUNDY—And it has put its price point up on the fibre.

Mr Morgan—Yes, okay—

Senator LUNDY—So why would it not drop its price point down to get more people across the fibre? Because it does not have to; there is no market pressure on it to—my point exactly.

Senator LUDLAM—That was the point used this morning—they are cannibalising their own copper market, so why would they bother?

Mr Morgan—Typically, most Verizon local service areas would be overlaid with one of the major players' networks—I think Comcast. As I said, they are very aggressive players in the high-speed broadband market. So they are not operating in an environment where they can just make monopoly decisions—it is a competitive market.

CHAIR—Are you saying that there is another carrier besides Verizon that has a fibre network or a cable network available?

Mr Morgan—Yes, there is cable TV. The cable industry in states was turned around from a nearly bankrupt, debt-laden industry in the 90s into a very competitive and vibrant industry in the last few years where it now can and does compete with the incumbent telcos. As I say, that was in part a regulatory decision that favoured pay TV in the 90s against the telcos. That has been balanced up now because cable companies can stand on their own two feet. I do not know the dynamics of this and it might be worth looking at because it is obviously a huge question here but Verizon is not disadvantaged in its access to content. It is essentially getting the same

sort of content that Comcast would have anyway. That is a big issue here because the content is tied up principally by one company.

Senator LUNDY—And we do not have cable everywhere; we have cable in a few small markets.

CHAIR—Let me understand your point. The allegation is that one group is not pushing its copper people into its fibre network. The answer to that is that if they do not do it there is another network there that will be attacking the copper markets, so to speak, to get it.

Mr Morgan—Yes, that has been happening.

CHAIR—I do understand you correctly. It is not just a question of Verizon saying, 'To put fibre in now we will bully everyone over to it.'

Senator LUNDY—It would not be in their interest to if they are charging a higher price point for fibre and earning a great profit.

CHAIR—But the competitor might. Perhaps I could ask few questions and if we have got time we will come back to others. I have made this point to other witnesses but have you seen the Primus announcement for Tasmania, in that they are having a—

Mr Morgan—I heard you refer to it this morning. I do not have any detail.

CHAIR—You have not been aware of that. I understand that Primus announced yesterday or the day before that they were having an introductory price of \$45 I assume to get their customers and then going to \$90, which is more their way. I am also informed that there are four other players that will provide a similar service for \$39.95 each. Do you have any comment on that?

Mr Morgan—ADSL pricing has become much more competitive. That is a function of the sort of investment profile that that industry has gone through. If you were an early entrant to the ULL market and you invested in DSLAMs that you put in Telstra's exchanges you have got the benefits of the \$16 ULL price, which you onsell to your customer for \$30. That is the typical line rental. So you have got a significant margin there. But you also put in a DSLAM perhaps four or five years ago that has fully depreciated, it is a sunk cost you sweated, and so you are quite happy to reduce your prices.

CHAIR—That is from the provider's point of view but from a customer's point of view why are they going to pay \$45 or \$90 to get basically—

Mr Morgan—This is in Tasmania.

CHAIR—Is it in Tasmania? For basically—

Mr Morgan—I have not seen the detail of the actual pricing. Tasmania is an interesting one because it was initially the model. It is quite funny actually. If you look at what this study does not do, on its terms of reference it was actually asked to recommend how you integrate the Tasmanian operation into the bigger picture of the National Broadband Network. I do not think

that was an issue that was addressed. Anyway, it would seem that the idea of a separate Tasmanian NBN Co. has sort of slipped away. Funding goes through NBN Co.; it does not go to Tasmanian NBN Co. That is by the by.

Senator LUNDY—What point are you talking about?

Mr Morgan—In Tasmania it was taken as being somewhere that was advanced in this and was a good model for it. Better than your 20 per cent, 30 per cent of households in Tasmania do not have a computer.

Senator LUNDY—The motivation was that they actually needed investment down there and despite all of the funding that was gifted to Telstra over many years under the previous government serious progress still needed to be made in Tasmania; hence, it was the focal point of the investment early on in the rollout of the policy.

CHAIR—I do not think that is a question. That is part of the debate.

Senator LUNDY—I know. But again, statements are not backed up by the facts.

CHAIR—Perhaps if you have a question when it is your time again—

Mr Morgan—If you take that pricing differential between wireline and FiOS in the states, to get the kind of higher wholesale average revenue per month that this will need, you will need people to start taking up IPTV, which demands the higher bandwidth and demands the higher speeds. Obviously, there is a segment of the market that will do that, but whether it is large enough to support this model as it is, I think, is questionable. In Tasmania, particularly, which has a large number of poorer households it may be a challenge. It may be a challenge nationally. Other factors may impact. My children are in their 20s and they do not have an interest in fixed broadband, particularly.

CHAIR—Mr Morgan, we have to move on very quickly. For what was recommended in the study as \$30 to \$35—which, in my simple language, is the wholesale aspect—are you aware what Telstra now charge Optus, iiNet or one of the others for a similar wholesale connection to Telstra's—

Mr Morgan—What are they wholesaling ADSL2 for? It would be around that top-end price point. I cannot readily find the chart but I think it is around \$38 or \$40 that they talk about—the tipping point for people who are just pure resellers of Telstra's facilities.

Senator LUNDY—That is right, but remember customers also currently pay line rental for a service on the top of that in our market.

Mr Morgan—Yes, but \$30 to \$35 wholesale is not going to give you connectivity. You would then have to get an RSP, who is going to package up various things for you and charge you for them.

Senator LUNDY—But you are going to get more than 512, which is what the \$38 wholesale gives you.

Mr Morgan—Yes, you may get 20 at a different entry level.

Senator LUNDY—The difference is 512, half a meg, 20 meg—it is probably worth a dollar or two.

Mr Morgan—I do not know what the percentage is. I would have to go to the ABS statistics, and I would be happy to forward them to you but you probably more familiar with them than I am.

Senator LUNDY—Do you think most Australians are happy with a half meg service and paying that much money for it, given the international average?

Mr Morgan—There is substantial academic literature that points to the dangers of these international comparisons and I am happy to forward some of that to you. Making comparisons about broadband pricing and speed internationally—

Senator LUNDY—You are happy to make it when it comes to Verizon.

Mr Morgan—I did not introduce Verizon into it, the study did. I am just trying to fill in some of the detail underneath that, that is all. I am happy to forward you the last quarterly accounts, which give you all that detail.

 $\textbf{CHAIR}\mathchar{--}\mbox{The}$ implementation study's suggested price of \$30 to \$35 for the NBN wholesale---

Mr Morgan—What will that translate into as a retail price?

CHAIR—Yes.

Mr Morgan—We had a guesstimate—Rosemary Sinclair's—which is as good as anyone's, double it.

Senator LUNDY—Let us take an in-market example now. How much of the margin do our ISPs currently put on top of the \$38 wholesale price for the provision of their service, to compete with Telstra in the market?

Mr Morgan—Not much.

Senator LUNDY—No. So why would it be doubled?

Mr Morgan—Because you have to put a service on top of this

Senator LUNDY—No, it is not ULL, it is comparable. It is not about installing your own DSLAM, it is a bit-stream service provided by a retail service provider.

Mr Morgan—It is a bit-stream service, so you have to have a layer 3 player and then you have to provide service. All of these things will cost, so they have to be built-in. You have this

concept of double marginalisation, which is a fairly respectable concept in economic theory, where you have two companies now engaging in marking up and profit maximising, so you will get distortions that come through that.

CHAIR—Taking Senator Lundy's point, in the Primus quote I have given you—I am not being critical of Primus, good luck to them—if they are getting the service from NBN of \$30 to \$35 for the network in Tasmania, why are they charging \$90, which is more than double?

Mr Morgan—You will have to ask Mr Bhatia. I am sure he would explain it very readily!

CHAIR-I was really asking Senator Lundy, but hoping that you-

Senator FISHER—Mr Morgan, I did not realise you were a medium as well as everything else.

Mr Morgan—I am happy to help.

CHAIR—Somebody explain it to me, because what I understand you just said in answer to Senator Lundy was that it is \$35 plus not very much.

Mr Morgan—I will give an answer that Senator Lundy will like. It is because of that evil, evil monopolist Telstra, which still controls most of the backhaul to and within Tasmania. So this wonderfully cheap access network is being distorted because there is not a competitive backhaul market. That is a whole other set of issues that come out of this study.

Senator LUNDY—I do like that answer.

Mr Morgan—Is that all right? Am I forgiven now?

CHAIR—Tell me why people are going to pay Primus \$90 for a 15-gigabyte download and a 25-megabyte speed when they can get practically the same from Netspace for \$39.95?

Senator LUNDY—And it is with ADSL. I am sure Mr Morgan will explain the difference between 'up to' on an ADSL service and a guaranteed service on fibre.

CHAIR—Perhaps he could then.

Mr Morgan—I cannot think of it offhand but I can give you a part of a fact. The ABS survey says that most users do not have a clue what speed their service is.

Senator LUNDY—I know, but it is a technical point and it is a vast difference when people think they are buying a multimegabit speed service. They never get that speed. With fibre, you can say, 'This speed will be delivered'—

Mr Morgan—To a point.

Senator LUNDY—to a point, but much more so than with ADSL.

CHAIR—Senator Lundy, we are going to put you over there and get evidence from you shortly, as an expert!

Senator LUNDY—I am sorry. I will keep quiet now.

CHAIR—Mr Morgan is an expert witness and as such we value his opinions and that is why we call him. Instead of the cross-subsidisation with the NBN, wouldn't it be better for the commercial companies to cherry-pick into the populous, profitable areas and then for governments to pay those commercial operations as a taxpayer subsidy for those like myself who are in the sticks? Isn't that what happens now?

Mr Morgan—There will be the broadband guarantee attempts to fill some of those gaps in rural areas with satellite delivered services, which are heavily subsidised. Yes, there is an attempt to fill those gaps. What I find difficult with this policy is that, after having had 20 years of policy with the intent of delivering competitive infrastructure or competition based upon independent infrastructures, we now suddenly revert to the monopoly model. The point is that you have an existing investment in fibre in CBDs, you have fibre in much of the local network and you have hundreds of thousands of kilometres of fibre backhaul all principally owned, I agree, by one company. Surely a set of tax incentives—it does not even need to be direct subsidy; it could be investment incentives as are being considered in other markets—could change the commercial equation for those companies to deliver those services at an affordable price. However it came about, Telstra had proposals to deploy fibre. It was deemed that it was anticompetitive because that is basically where fibre takes you. As this study confirms, it takes you back to monopoly. But Telstra's monopoly was worse than the government monopoly that will be subsequently privatised. That is a judgment call.

Senator LUDLAM—The government's monopoly is only going to be at the wholesale level, though; it is not going to be vertically integrated. I am sure you will agree that is a very significant distinction.

Mr Morgan—It is, because it is doomed to failure.

Senator LUDLAM—That is a big call.

Mr Morgan—I have worked on probably the only advanced attempt to split a telco to create a wholesale-only network in a telecommunications company. That was Eircom in Ireland. Ultimately that was owned by Babcock and Brown. They had a wonderful plan and all these arguments about telcos as utilities, networks as utilities, how you could gear them up, how investors would want a lower rate of return. When that was given over to the numbers men, given over to the likes of Rothschild, they said: 'No, it does not stack up. This business case does not add up. It will not be bought by the markets.' That is the only attempt to split a telco that got somewhere down the track. I am not denying we can come up with innovative and new approaches to policies in Australia, but it seems to me passing strange that the question of structural separation, wholesale-only operations, has been considered in every major market and discarded. Mention was made this morning of the EU's target. As far as I am aware, the intervention in the European Union to support the target of 30 megabit speeds by 2020 at the moment stands at 1.1 billion in a market of 500 million people. It is very small.

Senator LUDLAM—Could I draw you back to a question I put before with a couple of assumptions implicit in it. If this legislation clears parliament, the government has its way and does what it is proposing to do, where do you think this is heading? Are we going to be bailing this entity out in 10 years? What do you think are the consequences if your warnings are not heeded and we carry on?

Mr Morgan—I think that this will represent an ongoing liability to taxpayers.

Senator LUDLAM—So not even a six per cent return but some kind of continued drain on taxpayers?

Mr Morgan—Yes.

Senator LUDLAM—What kind of magnitude?

Mr Morgan—You would have to run a little business plan of your own and I have not done that. As I say, I do not want to put down the innovativeness of Australian policymakers, but the European Union has looked at it and discarded it, in the United States it has been set aside and Ofcom has never gone down this path. It is in the charter, at page 240, for practically all of the countries which have leading fibre deployments, the key is a strong vertically integrated incumbent. That is the company that is driving the fibre deployment, perhaps to a lesser extent in Korea than in, say, Japan, but certainly in the United States it is true and in Europe it is true. In Sweden now, after those initial simple fibre deployments, the real commercialisation of fibre is coming about through TeliaSonera, the incumbent.

We have chosen a unique unproven model. We have decided to back it possibly with a minimum of \$26 billion. It is one heck of an experiment. It is an enormous experiment. Like others, I do not travel overseas very much now but I was in the UK recently talking to people in the industry and, given my background, typically people in the union movement—although Senator Lundy may not appreciate that—as well as people interested in policy in the British Labour Party and so on. With that wonderful British understatement people say: 'We are watching what you are doing down under with great interest'—in other words, 'Are you mad?'

Senator FISHER—In your response to Senator Ludlam you said it will continue to go south or cost taxpayers. That is not the business case that the implementation study presents. Are you basing that on your disagreement with the business case in the implementation study and/or the lack of a cost-benefit analysis, be it in the implementation study or anywhere else?

Mr Morgan—The question of cost-benefit analysis now is a separate issue. If you are going to run the argument of externalities, you would like to reassure yourself that the externalities are larger than the cost of doing this. The business case is a distinct thing. The business case is set within such tight parameters that, basically, the sun and the moon and the stars would have to line up for this to go well.

Little more than a month ago at the industry briefings from NBN Co., which were excellent, one learned more about this proposal in a couple of hours with their engineers talking about it than any amount of reading and so on. Engineers are terribly frank; they are very straightforward. I said to them, 'What is the comparative cost of going aerial compared to going

underground?' They said, 'We do not know.' There is an industry rule of thumb that it is 10 times more expensive, which to me sounded rather high—

Senator FISHER—Which is—

Mr Morgan—To go underground is 10 times more expensive than aerial. Little more than a month ago, after the study was completed, senior personnel from NBN Co. were straightforward enough to say that they still do not know what the per-metre costs of rolling this thing out are, and they tell you that that is why they are doing their trials.

When their trials are complete in those five different geotypes—inner urban, rural and so on then they will have some real evidence to say, 'Okay, now we have got a better handle on the costs,' and that might be the appropriate time to then start to get a firm business case. Then you can have a real understanding of what contingencies have to be built in. There is very little contingency built into this proposal—very, very little indeed. So if something goes badly wrong—the take-up rate is lower, the cost of build is higher—then this could become an ongoing liability to taxpayers.

CHAIR—You should tell those ignorant engineers to read the implementation study, then they would get their costings.

Senator FISHER—So you are saying that there is not enough room, for example, in the 70 to 90 per cent take-up estimates if costs blow out, if costs are as predicted or if costs are less than predicted, and the resulting three to five per cent profit, or five to seven per cent and eight to nine per cent—and they are essentially the three scenarios that the implementation study portrays, aren't they—do not have enough give in them?

Mr Morgan—There is not enough in this document to tell you what those sensitivities are. Obviously, as any prudent business planner would do, and I am sure that McKinsey and KPMG would do—and I think it is referred to as they modelled various contingencies—until you see the raw data, these spreadsheets that they produced, you will not know how big that risk is. So while it has taken me an awfully long time to come to this point, really, this is very interesting. It draws together a huge amount of public record information in one document that takes people like me on my crummy 1.5 megabit an awfully long time to find on the internet. But it basically consists of public record information with a few glimpses into the modelling that they have done for their business case. But, frankly, until this is presented with that underlying material, it is valueless in my view, because you really cannot test it and judge it on its merits. You can go on the brand name, and I am sure that you could not find a flaw in the arithmetic that KPMG and McKinsey have undertaken, but it is almost an act of faith to say, 'Here are some assumptions and here are our conclusions from them,' without seeing how those assumptions have been modelled through.

Senator FISHER—Even if you were to get all of that, is that going to mean that Kevin Morgan rests, or is Kevin Morgan still going to say: yes, but you need a cost-benefit analysis, because with the best will in the world in terms of a business case, there still needs to be, does there not, for the risk involved potentially in the taxpayers' spend here, an analysis of the benefit in order to reassure ourselves that people will actually want us to do this and that it will work?

Mr Morgan—I was not dismissing the need for a cost-benefit analysis. They themselves acknowledge that they cannot do that. They were not asked to do that.

Senator FISHER—That is right.

Mr Morgan—The first question you would ask yourself is: are there alternative platforms that exist? You would do an audit to measure the possible competitive impact on their business case. They are pretty well aware of what is out there now. You would do an audit of existing infrastructure and its capabilities and then determine the incremental cost of upgrading that existing infrastructure to deliver your objective of higher broadband speeds. The speeds may not be a universal 100 megabits. This itself says that is not possible. There are pockets in rural areas that will not get 100 megabits. But you would ask: can we do this for less than the \$26 billion we are going to lock up for 10 or 12 years? That has not been done.

Senator FISHER—Are you qualified to comment on whether a cost-benefit analysis could be done?

Mr Morgan—I could say it should be done. But could I do it? That is another question!

Senator FISHER—Are you qualified to say it could—not 'should'—be done?

Mr Morgan—Yes. The process has been somewhat distorted here. The Office of Best Practice Regulation, the body in Finance, says upfront: before we start doing things there must be a cost-benefit analysis. It is an essential ingredient in making—

Senator FISHER—The question is whether the comparators exist internationally to do a costbenefit analysis, isn't it?

Mr Morgan—Yes. The point is that high-speed broadband is being delivered in a number of markets that we would like to compare ourselves with and, in them, it has not called for massive government intervention. In fact, the rules of the EU preclude such an intervention. Anticompetitiveness considerations—competitive neutralities, as we would call them in Australia—basically mean that interventions in the European Union are very small. In the United States \$10 billion is going into broadband through their stimulus package—although some of it is going to smaller, municipal-owned companies, but not very much—and essentially that is going to incumbents. Curiously, a lot of it is going to cable companies, because they are the ones best placed to most rapidly offer higher speeds, the headline speed of 100 megabits.

CHAIR—Before you go, I understand that McKinsey have been briefing a lot of analysts. Have you been briefed by them?

Mr Morgan—No.

Senator FISHER—Have you asked to be?

Mr Morgan-No.

Senator FISHER—Maybe you should.

Mr Morgan—I should. I know McKinsey's work. I worked on projects with them a long way back. I have enormous respect for them. I know that what they have done within this brief would be extraordinarily thorough, but I do not think, in the way they have been allowed to present it, that it takes us very far.

CHAIR—You probably could have delivered the private briefing we had from McKinsey this morning. As it turned out, the private briefing was principally everything we could have read in the report. I asked them that and they said, 'Yes, that's true, and you can tell anyone that.'

Mr Morgan—There was a great quote in the *Financial Times* about McKinsey. After McKinsey were called in to offer advice on re-jigging the cabinet office, a very senior Whitehall mandarin said, 'All they do is come in and tell you the bleeding obvious with PowerPoint.' That is a bit unkind perhaps.

CHAIR—That was not the case with McKinsey this morning. Thank you, Mr Morgan.

Mr Morgan—Thank you.

[3.44 pm]

CULLEN, Mrs Marianne, First Assistant Secretary, Department of Broadband, Communications and the Digital Economy

HEAZLETT, Mr Mark, Assistant Secretary, Department of Broadband, Communications and the Digital Economy

QUINLIVAN, Mr Daryl, Deputy Secretary, Department of Broadband, Communications and the Digital Economy

SPENCE, Ms Pip, First Assistant Secretary, Department of Broadband, Communications and the Digital Economy

CHAIR—We welcome the department back. They, by now, are regulars, so I am not going through the spiel—they know about all this. We welcome Mrs Cullen back for the second time today—that is how keen she is to appear before this committee—and Mr Quinlivan, Mr Heazlett and Ms Spence. You will know from our confidential discussions with Mrs Cullen and McKinsey that there are some things that we have indicated we want to repeat on the record here. With that in mind, do you want to make any opening statement or address some of those issues before we ask you?

Mr Quinlivan—I was just going to make a couple of introductory comments about where we are in the process with this report. As you know, the report was provided to the government in early March and released on 6 May. We are now engaged in a public process on that report. We are seeking submissions from the public by 27 May. We have a couple already and we are anticipating a lot more next week. We are also hosting an online wiki, which is a novel experiment.

Senator FISHER—How exciting. It sounds rude. It might be exciting.

Mr Quinlivan—We can talk a little bit more about how that is happening, if you like.

CHAIR—No.

Mr Quinlivan—It is an interesting experiment in public administration.

Senator LUNDY—I would be interested.

CHAIR—For your five minutes, you can talk about wiki.

Senator LUNDY—Okay, thank you.

Mr Quinlivan—The minister has indicated that the government response to the report will be delivered in the coming months. The main point I wanted to make was—

CHAIR—Is that before the election or after the election?

Mr Quinlivan—In the coming months. The purpose of the study was to advise the government on how to implement its stated policy—how to translate that policy into specific commercial and regulatory measures. The study proceeds from that assumption that the government's stated policy will proceed. It is not examining some of the questions that you might have if you were contemplating this policy, and that has been the subject of some debate as you were just having before with the previous witness. For that reason, and because we are currently engaged in the usual internal government process of developing a government response, there are some limits on the things we can talk about today, but we will do our best within that constraint.

CHAIR—I appreciate all that.

Senator LUNDY—Can I ask a question?

CHAIR—No, you cannot.

Senator LUNDY—I will be very quick.

CHAIR—No, we will find out about wiki later. I want to put on the record the committee's concern about the briefing. We very much appreciate the briefing but, having had it, we wonder why it was a confidential briefing and why it was necessary to have a departmental person with McKinsey at the private briefing. We have been through all this but it was off the record. I wanted to ask the questions here to see if there was a response on the record.

Mrs Cullen—McKinsey and Company and KPMG were engaged by the department to conduct the implementation study. As I understand it, McKinsey and Company has a company policy that generally prohibits them from making public statements or speaking publicly about the work that they have done. I understand that the committee was interested in speaking to them and, on that basis, it was arranged that they would speak to you on a confidential or private basis so that they could not be reported publicly in terms of the comments that they have made, consistent with their company policy. Under the contractual arrangements that we have in place with McKinsey—we put in place protocols to govern how the implementation study and the time that they are under contract with us would operate—one of the protocols was that any meetings they attended would be attended by a departmental representative as well. Part of the reason we do that—it is fairly standard practice with the consultants that we engage to do work on our behalf—is so that we can discharge our accountability arrangements given that ultimately the department is responsible and accountable to the public and the parliament.

CHAIR—I accept that it is part of the protocols. What I was really after was the rationale on why those protocols are in place. Why is not the general public as entitled as we privileged are to hear an explanation of a \$25 million report by having that sort of evidence given publicly?

Mrs Cullen—As I indicated, I think it is mostly to do with the policy that McKinsey and Company have in relation to making public statements. They obviously were comfortable with us releasing the report and having it attributed to them, but it is very unusual for them to then go around and do the kind of briefing that this committee requested.

CHAIR—We are not just people in Australia, we represent the parliament of Australia.

Mr Morgan—Absolutely. And in recognition of that, everyone—ourselves and the company—was happy to facilitate that, but it was on the basis that it is done in private.

CHAIR—But anything we learn from that we cannot use, cannot talk about publicly, unless it happens to be in the written implementation study, with respect—and hopefully I am not breaching any of the confidentiality—which is really just an explanation of the implementation study.

Mrs Cullen—I think, ultimately, it is because the lead adviser and the company—and I cannot speak for the company's policy—stand by their report. They have put a whole range of effort in to ensure that the things they say in that are true and accurate. As I understand it, they do not generally go on the record being quoted outside of the written material that they are contracted to do. Given the level of interest and the level of public expenditure, we have made arrangements for them to brief and explain what they have done—as we did this morning with yourselves and as we have done with other parties—as has been requested and approved. But, ultimately, the report is the report and in their view they stand by that report. They are happy for anything to be attributed or quoted from the report but, as I understand it, their company policy is that they do not want their employees being quoted.

CHAIR—So this was a company policy, not a departmental government one?

Mrs Cullen—Absolutely.

CHAIR—So as far as the government is concerned, the government would be quite happy for them to give—

Mrs Cullen—And that is why we agreed for them to meet with you and it was the company policy that they preferred to do that in private.

CHAIR—It was in the contract, was it?

Mrs Cullen—Sorry?

CHAIR—Those arrangements were in the contract?

Mrs Cullen—We understood that when we contracted them.

Senator FISHER—Do you regret not having negotiated it out of the contract?

Mr Quinlivan—Not at all. I was not present at the time, but business consultants and business advisers are normally very reticent about this and so I would not be surprised if we had to have it inserted into the contract. It is not something they would have offered. Their disposition would have been not to have this accountability.

Senator FISHER—You or the government was offering 25 million of taxpayer dollars. It is not a standard—

Mr Quinlivan—There were other parties present in the tender who would not agree to any kind of public exposure of their work, so even just releasing the report was something that we had to have McKinsey concede.

Senator FISHER—So there is not a price on everything and anything, even the NBN?

Mr Quinlivan—It is an unusual practice for business advisers.

CHAIR—You would concede though that taxpayers forking out for any \$25 million bill are entitled to have some transparency about what they are buying.

Mr Quinlivan—That is why we insisted on the report being available for public release.

CHAIR—Why has it taken so long to publicly release it?

Mr Quinlivan—It is a very substantial report and the government has been considering it and departments have been considering it, and I think the period I mentioned was from early March to early May—that is not a long period for a report of this significance to be considered before it is publicly released.

CHAIR—What is the rationale? It is a public document. It is about our broadband network. The government's taking three months to look at it almost suggests to me that if the report did not come up to what the government required it would not have been released. If that is not the case, why was it not released to the public in early March?

Mr Quinlivan—It was provided to the government in early March and the government spent two months considering it before it was released. That is not an unreasonable period of time for a report of this significance.

CHAIR—But give me the rationale, Mr Quinlivan.

Mr Quinlivan—It is a complicated report. It has wide-ranging policy implications.

CHAIR—What does it the matter if the government did not understand it on day one? If it was released to the public, the public would not understand it on day one. The only reasonable assumption that can be made—by its not being released closer than this—is that it would be doctored if it did not quite meet the government's requirements of it. Otherwise, why did the government have to go through it?

Mrs Cullen—Senator Macdonald, I think that before the report was received the minister had been asked questions, including at estimates hearings, about whether or not the government intended to release the report.

CHAIR—That was the standard answer: 'It's all in the implementation study.'

Mrs Cullen—In those answers he indicated that once the government had received the report they would consider whether or not to release it. The government did that: they received the report, they considered among other things whether they were going to release it, they decided to release the report and they released it on 6 May.

CHAIR—What, because it supported their argument and therefore it was to be released?

Senator LUNDY—That is very cynical of you, Senator.

CHAIR—There can be no other reasonable explanation for what you have just told us.

Mrs Cullen—I think that is speculation. I cannot comment on that. All I can say is that the government received it, they considered it, they decided to release it and they did release the report.

Senator LUNDY—No doubt under the political pressure of the opposition.

CHAIR—I cannot really expect you to answer the questions because they are really questions for the minister, not for the public servants, but one would wonder what would have been in the report which would have encouraged the government not to release it publicly and so, of course, pick a fight with the Senate—which would never have dealt with any of this legislation until the \$25 million report was released. It is a no-brainer almost.

Mr Quinlivan—We cannot respond to that hypothetical question, obviously. The key point is that McKinsey was asked to analyse and advise on the best way of implementing the government's policy. On receipt of the report it was immediately evident that it does propose viable means of implementing that policy. The government was immediately aware, of course, that it had a report that supported the policy, that said it was a viable policy that could be implemented in practice.

CHAIR—That suggests that if it did not do that it would never have been released.

Mr Quinlivan—No, not at all.

CHAIR—There is one other thing I raised earlier but will put on the record out of fairness to the government and McKinsey. I will then ask other senators if they have questions on this particular aspect before we move on to the substantive part.

Senator FISHER—I do.

CHAIR—There were newspaper reports that McKinsey had delivered the report and that the government returned it for more favourable editing and had paid an additional fee for it. That is a summary of the newspaper report. I am not vouching for its accuracy but I put it to you for an on-the-record response.

Mrs Cullen—That is not true. McKinsey-KPMG was contracted following a competitive tender process last year. At the time that the department entered into a contract with McKinsey the contract was to run to 30 June 2010, with the company to deliver a report in early 2010. The value of the contract as gazetted was \$22,799,700, excluding GST. To date, until 30 April, we have paid McKinsey, the lead adviser, \$21,760,898.

CHAIR—So someone made a killing somewhere.

Mrs Cullen—It is absolutely untrue that we have paid them money in addition to the amount that was contracted. In fact, we have not paid them the full amount. It is also not true that we requested the report to be rewritten. The report is as submitted, with one addition, and that is exhibit 440 on pages 251 and 252 of the report. After McKinsey and KPMG submitted the report on 5 March, the following week they requested permission from the department to insert that additional figure as additional explanation for how they had modelled the take-up rates. Given that only a small number of reports had been printed by that stage, we agreed to that request and the second version of the report was printed with that new figure added. Just for completeness, they also added a scale to one of the tables and they made consequential amendments to the figure numbers arising from the insertion of a new figure.

CHAIR—And, again for completeness, the figure paid was the contracted figure, and that has not altered since the beginning of the contract?

Mrs Cullen—That is right.

CHAIR—The study was tendered was it not?

Mrs Cullen—Yes it was.

CHAIR—Have the other tenderers' prices or conditions been made public in the past, or will they be in the future?

Mrs Cullen—That is not usual under the Commonwealth's procurement guidelines. The McKinsey-KPMG tender was assessed by an evaluation committee as offering the best value for money, and that is the basis on which they were awarded the tender.

Senator FISHER—When will the government deliver its substantive response to the implementation study?

Mr Quinlivan—I think the minister has indicated, as I said earlier, that the government's response will be released in the coming months.

Senator FISHER—I think somewhere he has said mid-May.

Mr Quinlivan—I am not aware of that. The only thing I am aware of him having said, and I have heard him say it several times, is that the government's response will be released in the coming months.

Senator FISHER—We could have an election in the coming months. That is not a question. Thank you.

Senator LUDLAM—We have the implementation study, we have three broadband bills that I am aware of parked at varying stages of the parliamentary process and we have got substantive NBN bills on the horizon as well. What happens, from your point of view as regulators and as people trying to administer these markets and these systems, if that legislation does not pass the

Senate? What happens if the substantive NBN bills, the bills that will govern the regulation and the operation of NBN Co. itself rather than the Telstra bill and so on, do not pass the parliament?

Ms Spence—If you are talking about the access bills and the company bills that were released as exposure drafts, there are obviously existing regulatory obligations that apply to licensed carriers, so work can continue on with the NBN in the absence of those bills but obviously the government's strong commitment has been to have a regulatory framework in place for the company. The rollout of the network is not dependent on those bills being in place straight away.

Senator LUDLAM—I would acknowledge that the tabling of exposure drafts to bills is a really good practice, and I think everybody appreciates being given the opportunity to evaluate legislation before we are in the heat of parliament. But can the NBN be rolled out, as stated in here, and can we go the whole way down the track without those bills? It seems we are in a rather odd position—trenches are being dug, cables are being laid; legislation is being held up in the process and might never emerge. How much of this thing can be built in the absence of that legislation?

Ms Spence—The strong preference is for parliament to pass legislation and, as I said, there are existing mechanisms in place in terms of existing powers and immunities that will apply to the NBN Co. to assist with its rollout. Regarding matters such as network information, you can negotiate commercially with carriers and utilities to get access to that infrastructure. In terms of the access regime, there is the existing part XIC in the Trade Practices Act, which would govern the company as well. What has been put in front of the parliament is measures to improve and assist.

Mr Quinlivan—Also, it may be that there are matters in the government's response to the implementation study that will require legislation in due course. It is likely that, after the government's response is released, we would have to review the bills, look at our overall legislative situation and plan for that. That would be a matter for the minister, obviously. After the government's response has been released, it is likely there will be need for some further legislation.

Senator LUDLAM—There is not going to be some point that you can see in your timelines when contractors are going to need to put their tools down because parliament has not passed some of these bills?

Mr Quinlivan—Not that I am aware—no. In some cases there are regulatory alternatives to legislation. In any case, they are less than ideal. There are conditions that can be placed on carrier licences and things like that, and that can achieve, in a suboptimal way, the same outcome. You would not want to rely on that indefinitely, but there are some stopgaps that could be used. Obviously it is not a situation we would want to be for in anything other than the short term.

CHAIR—On that, is there any time line you can give us when the exposure drafts will turn into prospective bills?

Ms Spence—I just make the point that Mr Quinlivan made, that there are matters relevant to the final bills that are addressed in the implementation study the government will be taking into

account. You would expect that the government will need to take a decision on the implementation study before it can finalise—

CHAIR—There was a lot of work in our committee before its last report, which commented on the exposure draft. There were some suggestions that we would hope the government might take up. For example—and this follows Senator Ludlam's point—as I recall the exposure draft, NBN Co. is not a public utility, or whatever the terminology is, which means that in going into, as I understand it, a high-rise building, not only will it have to get the consent of the body corporate but it will also have to get the consent of every owner of every unit plus every tenant of every unit. Again, bearing in mind that it is no secret that we are fairly close to an election, the Senate has two weeks of estimates and then there are two weeks left of this financial year. A lot of people expect that it may not come back until after the election. I am not asking you to comment on this, but, as a hypothetical, perhaps parliament will not be in a position to deal with any legislation until October or November. Is that going to impact on the rollout of the trenches, the cabling et cetera.

Ms Spence—I do not think I am in a position to respond to a hypothetical question.

CHAIR—No. Let me put this to you: is a four-month or a five-month delay in any legislative arrangement going to impact upon NBN Tasmania, for which I understand the entry provisions have sunsetted? Is that not something the department is concerned about?

Mr Quinlivan—Our understanding is that NBN Co. has contingency plans for handling problems with authorities, powers, immunities and so on because the bills have not passed. As to the particular implications, that is probably a good question that you could ask the company at estimates next week. It is really a practical matter for them. If it is a significant one, obviously they will be well-briefed on it.

Mrs Cullen—I can add that the rollout is underway in Tasmania. NBN Tasmania is already addressing those challenges without the benefits of legislation. I think that the rollout is proceeding well.

Ms Spence—And similarly with the first release sites, the company is working very closely with the relevant councils to address these issues in the absence of legislation.

CHAIR—Anything else on the process?

Senator FISHER—Yes, Chair. Why wasn't McKinsey asked to provide a cost-benefit analysis?

Mr Quinlivan—Because the government had made a policy decision already. The purpose of the cost-benefit analysis is to determine whether there is a case for doing something or not.

Senator FISHER—Indeed.

Mr Quinlivan—But the government had made that decision. It was an election commitment. So the practical issue was to work out how best to implement it, and that was the subject of the implementation study. By its very nature it is an implementation study.

Senator FISHER—That is a very refreshing and direct answer, Mr Quinlivan. Has the minister ever given that?

Mr Quinlivan—I think the minister would have acknowledged the status of this commitment as an election commitment many times.

Senator FISHER—That was not your answer to me when I asked you: why not a cost-benefit analysis? You did not simply say it is a policy commitment.

Mr Quinlivan—It was.

Senator FISHER—You gave a far more rounded and, I would say, frank answer which is that if there ever were a time for a cost-benefit analysis we are past that point.

Mr Quinlivan—Perhaps. No, I was simply saying that a commitment had been made in an election to implement this policy and then for the government to implement the policy on its election so the task was to work out how best to do it. That was the purpose of the implementation study. Cost-benefit analyses have a different role.

Senator FISHER—All right, so it is back to build it and they will come.

Mr Quinlivan—No. The implementation study was to look at the best way of implementing the policy and it has done that. As you have seen, we believe it is a viable project.

Senator FISHER—So, irrespective of whether it is a good policy—because you cannot tell me that because you do not have a cost-benefit analysis—

Senator LUNDY—They are political questions.

Senator FISHER—Yes, and Mr Quinlivan is answering them very well, Senator Lundy.

Mr Quinlivan—I think the minister would say that was determined at the election.

Senator FISHER—Sorry, I did not hear that view, Mr Quinlivan, because Senator Lundy was spluttering. The coffee is probably cold. Sorry.

Senator LUNDY—The room is cold.

Senator FISHER—It is.

Mr Quinlivan—I would just say that I think that that matter was settled at the election. That was an election commitment.

CHAIR—Again on these general things, the committee's second recommendation was that the government require the Department of Finance and Deregulation to calculate the net present value of the NBN using data and assumptions contained in the implementation study and based upon other things which we have mentioned in the recommendation. I am sure you have been

reading our report with as much enthusiasm and care as you did the implementation study—dare I mention both in the same breath and dare I mention the cost of both in the same breath. Is that happening? Do you know?

Mr Quinlivan—That would be a policy matter for the government.

CHAIR—It is not something that the department, as the government's adviser on broadband matters and knowing what DoFD rules generally are on these sorts of issues, would be doing as a matter of course even without a recommendation from this august committee? It is not something that would happen as a matter of course as a departmental decision?

Mr Quinlivan—Not unless we were asked to do it. It is a policy issue.

CHAIR—But don't you usually do that? I am not terribly familiar with this department but in other departments isn't that sort of thing done as a matter of course?

Mr Quinlivan—If a decision has been made to implement a project or construct something or do something then these questions are interesting and not really pertinent to how to do it. Our task is to work out how to do it.

CHAIR—So again it is the same answer as previously. It was an election commitment or it was a policy thing so regardless of the—

Senator FISHER—'It doesn't matter whether it is good to do it. We're going to do it.'

Mrs Cullen—I think, Senator, the implementation study in fact undertook a detailed financial analysis including detailed revenue and cost modelling. The analysis indicates that under a range of scenarios NBN Co. will have a strong and viable business case and that the government can expect to generate a rate of return on its equity investments sufficient to fully cover the cost of its funds. The Department of Finance was certainly involved and has been well briefed on the modelling work that the lead adviser has done including seconding two officers from the Department of Finance to my team that worked on the implementation study. So in our view I think that the implementation study provides the kind of financial analysis and advice that you would expect.

CHAIR—Certainly not that calculation on net present value, which seems to be essential in the usual principles applied by the Department of Finance in relation to public capital expenditure. You could not suggest that the implementation study anywhere near touches upon that.

Mrs Cullen—I think that the implementation study and the financial analysis undertaken by the lead adviser suggest that NBN Co. will have a strong and viable business case. As I understand it, it is the kind of modelling that the Department of Finance would usually look towards.

CHAIR—I think that is verballing the implementation study to say that it has a strong and viable business case, I would have thought.

Mrs Cullen—I do not think so. I think that you will find that kind of analysis and those findings in the executive summary.

CHAIR—Finally from me, the *Daily Mercury* in Tasmania reported on 27 April that an apprentice was shocked while working on the NBN project. Have you investigated that? Is it true and accurate, or inaccurate?

Mrs Cullen—There have been six occupational health and safety incidents in the Tasmanian rollout. After two of those incidents work sites were shut down so that crews could be given safety refresher training. I think that it is fair to say that safety is absolutely paramount in the NBN rollout and that the company is committed to safety not being compromised in order to meet deadlines. As a personal aside, I visited the Tasmanian rollout myself this week and I can attest to the level of safety briefing that we were given in touring those sites, as well as being taken through the kind of safety briefing that, each day, all of the workers on that project are given.

All of the incidents that have occurred were identified as part of regular safety audits conducted, and since that time no further safety incidents have been reported. NBN Co. in demonstration of its commitment to safety has appointed a chief safety officer to work with its head of construction to ensure that safety is given the priority it deserves.

CHAIR—We can get this from NBN Co.

Mrs Cullen—Sure.

Senator LUDLAM—Changing the subject little bit, we have not talked much about greenfield rollout at the moment. Again, there is another bill that is hung up in the process. Given that it is difficult to say how long that is going to be held up, what is happening at the moment and what would you like to see happen with new subdivisions? So we are thinking less about regional areas and more about peri-urban subdivisions and so on, where it is reported that Telstra have even withdrawn copper services into those places. To what degree are we rolling out subdivisions that are going to need to be retrofitted, where NBN Co. are going to have to come back in 12 months time? What can be done to address that?

Ms Spence—We are obviously very keen to see fibre rolled out in those new developments. We have been working very closely with representative groups from the developers and the housing industries to make sure that there is a level of awareness and understanding of what they can do. Obviously we want to minimise as much retrofitting as is possible given the cost of that. So while our obvious preference is to have the legislative framework in place to provide the certainty that people are asking for in the shorter term, in the absence of that framework we will obviously just need to continue to work very closely with those representative groups to try and make sure that they are continuing with practices which we are already starting to see in the housing industry with the provision of fibre in these new developments.

Senator LUDLAM—The fibre or the ducts to install it down the track?

Ms Spence—To install so as to minimise the cost of retrofitting down the track.

Senator LUDLAM—Can you give us an idea now—or take it on notice for next week—of some of the orders of magnitude of what is being installed at the moment with or without fibre or fibre capability?

Ms Spence—I will take it on notice. I cannot guarantee that we can get that kind of detail for you but we will certainly see what we can find.

Senator FISHER—Please do not say it is hypothetical—which it is, but do not make that your answer. It is hypothetical if I accept your earlier answer, Mr Quinlivan, about why McKinsey was not asked to do a cost-benefit analysis. If a cost-benefit analysis was to be attempted could one be done?

Mr Quinlivan—I think probably the real question is 'Could one of sufficient quality be done?' I have heard people say it would be quite difficult because of the lack of suitable international comparisons. But there is also a growing international literature from the OECD and others about the broader economic benefits of fast broadband access. There is some literature around and we would be happy to make available to you the literature we are aware of. I know there was a recent OECD study on this.

Senator FISHER—No, I think your efforts are better spent in other directions but thank you for that offer. So it would be challenging at best, would it, to do a cost-benefit analysis?

Mr Quinlivan—I am giving you a layperson's answer to your question and that is what I have been told—it would be quite a difficult thing to do for that reason. In any case, as we have discussed earlier, it is a hypothetical and academic question.

Senator FISHER—So a cost-benefit analysis would be quite difficult in part because there is a lack of—'sufficient' was your word—international comparators?

Mr Quinlivan—Suitable international—

Senator FISHER—Suitable, okay.

Mr Quinlivan—But as I said earlier, it is a purely academic question in any case.

Senator FISHER—It is not unreasonable to speculate that it was rendered academic by a government that realised that even if they were to attempt to do one it was not doable. They decided 'We are going to make this policy promise' and then 'Puff! Here's to the wind'.

Mr Quinlivan—We do our best to implement election commitments, as governments do. That is the critical fact.

Senator FISHER—Of course.

Senator LUNDY—I note equally that the opposition has chosen to abandon the NBN in the absence of such a cost-benefit analysis as well. So they are guilty of the same thing.

Senator FISHER—Indeed, in the absence of the government's cost-benefit analysis.

Senator LUNDY—How do you know that it would not bring benefit now that you have walked away?

CHAIR—Order! That was a recommendation from a committee's report.

Senator FISHER—It is for the government to prove its case.

Senator LUNDY—Tell me more about the wiki, where it can be found and what its purpose is? I would like to congratulate you on taking such an important Gov 2.0 initiative.

Senator FISHER—Is that 'whoopee for the wiki'?

Senator LUNDY—It is a serious question. If you want to make a joke about it that is fine. You have already made one about it. I am asking my questions now and I have been very patient.

Mrs Cullen—As you point out, the department decided to do a wiki partly in response to the findings of Gov 2.0 that indicated that government needed to be more open and transparent. The purpose of the wiki is to seek comments that will inform the government's response. I have to say that I think we are all still learning how to use the technology. The wiki site is divided up by each of the recommendations and people have the opportunity to provide comments as to why the government should accept a particular recommendation or why it should not accept a particular recommendation, and also provide—

Senator LUNDY—With respect to the implementation?

Mrs Cullen—With respect to the implementation study.

CHAIR—We all know what a wiki is but the millions of people who will be reading the *Hansard* of this perhaps do not know. Perhaps you could just briefly explain what a wiki is?

Mrs Cullen—A wiki is an online tool that allows people basically to make comments. I understand the technology comes from Wikipedia, which is an online encyclopedia that allows people to make contributions and develop a body of work. What we are seeking to do is get a body of work around the recommendations of the implementation study as to why citizens, interested parties and interested stakeholders think the government should agree with a particular recommendation. And there is also an opportunity for them to write how they think the suggested government response should be. It is an additional tool.

CHAIR—It is the implementation study's very own Facebook?

Mrs Cullen—It is not dissimilar. It is a tool similar to that. We have structured it in a way that makes it clear to everyone who participates that those comments that they make will be taken into account or considered to inform the government's response to the implementation study. The way we have structured it is that each recommendation has its own page and from each page you can access the relevant part of the report that explains that recommendation.

Senator LUDLAM—You can find how many 'friends' the implementation study has.

Mrs Cullen—Yes.

Senator LUNDY—What is the address? Do you have that handy?

Mrs Cullen—I am not sure that I do.

Mr Heazlett—If you go to the www.dbcde.gov.au site there is an NBN implementation study page. On the right-hand side of that page there is a link to the wiki.

Mrs Cullen—I do actually have it. It is http://wiki.dbcde.gov.au. In addition to the wiki, because we recognise it is a new kind of approach to government, we are also running a more traditional public consultation process for interested stakeholders and the general public.

Senator LUNDY—So you do not have to know how a wiki functions to participate in the consultation?

Mrs Cullen—That is right. You can still email us comments or send us a traditional submission that you would expect to see in a process like this.

Senator LUNDY—Congratulations. Thank you.

Senator LUDLAM—How is that being promoted? I agree it is a great idea and it would be good to see it a bit more widespread. How are you letting people in the online community know that it is there?

Mrs Cullen—As I understand it, the Government 2.0 Taskforce runs a Twitter.

Senator LUNDY—I am 'tweeting' about it now.

Mrs Cullen—You might get that I am not entirely familiar with all the new technology.

Senator LUNDY—We will get it out there.

Mrs Cullen—The minister included the address in his media release when releasing the implementation study. I understand there have been some articles in the press around the wiki. Certainly one of the things we will have learnt from this process is that we probably need to do some more active promotion. It probably has not had the widespread visitation that you might otherwise expect. Again, it is not the sort of thing that has been done very often, if at all, before by government and so it was something that we were keen to try, consistent with the Government 2.0 Taskforce's recommendations, and we certainly will learn some lessons from it.

Senator LUDLAM—Kate is taking it viral right now.

Senator LUNDY—We will do our best to give it a plug.

Mrs Cullen—Excellent.

CHAIR—As I mentioned in our private briefing, we have six pages of excerpts from the media and expert commentary on the implementation study relating to the assumptions and recommendations made by the lead adviser. Rather than getting you to respond to each of these one-paragraph comments verbally, we will give them to you in writing and ask you to give us a response from the department or McKinsey or whatever is appropriate to the questions raised by these experts, who include Mr Morgan, Mr Lynch, Optus, Professor Ergas and Mr Kerin. Thank you very much for your attendance today and for your responses, which, as always, were frank.

Committee adjourned at 4.31 pm