CORRECTED VERSION

RURAL AND REGIONAL COMMITTEE

Inquiry into the opportunities for people to use telecommuting and e-business to work remotely in rural and regional Victoria

Ballarat — 17 July 2013

Members

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Witnesses

Mr G. Fong, executive director, Lateral Plains, University of Ballarat; and

Mr S. Benjamin, chairperson, Grampians Regional Development Australia Committee.

The CHAIR — Welcome to the public hearing. I extend a warm welcome to George Fong, the executive director of Lateral Plains, University of Ballarat, and vice-president of the Internet Society of Australia. I also welcome Stuart Benjamin, who is the chairperson of the Grampians Regional Development Australia Committee. This committee is an all-party parliamentary committee and is hearing evidence today in relation to the inquiry into the opportunities for people to use telecommuting and e-business to work remotely in rural and regional Victoria. I hereby advise that all evidence taken at this hearing is protected by parliamentary privilege as provided under relevant Australian law. I also advise that any comments made outside the hearing may not be afforded such privilege. I ask both George and Stuart to introduce themselves, giving their names and addresses for the benefit of Hansard.

Mr FONG — My name is George Fong. I am the executive director of Lateral Plains, and my residential address is.

Mr BENJAMIN — I am Stuart Benjamin. My residential address is. I am here in various capacities, including as chair of the RDA Grampians.

The CHAIR — Good. Would you like to give your presentations and we will ask questions as we go, or would you prefer questions at the end of your presentations?

Mr BENJAMIN — We were not necessarily doing a joint presentation. Some of the things I am going to say will be completely contrary to what George believes, and vice versa — so we may need security here later — but if I could, I just want to make one clarification in terms of who I am representing. I am here as chair of RDA Grampians, but I also sit on the regional policy advisory committee of RPAC, with the state government. I am also here in my business capacity. We run a number of businesses across mainly regional Victoria and southern New South Wales in both residential construction and property development, and we also have an involvement with George in a data centre construction company.

Also I have an involvement in another business which does automation and a number of particularly NBN-based or internet-based automation projects around the state. I am also a director of auDA, which is the regulator of domain space for Australia under the federal Communications Act for.com.au. I am also chair of Ballarat Regional Tourism. So if I can wrap all of that together to give a holistic response, I would like to do so today.

Thank you for the opportunity to speak with you and thank you for coming out into the boondocks of regional Victoria. We often feel a bit unloved in regional Victoria, and we are very pleased to see this particular initiative and this committee look at the impact particularly of telecommuting and the impact of things such as the NBN on regional communities. One of the fears that many of us have — and I know the Grattan Institute supports this — is that the NBN could have a negative impact on regional communities because it actually makes everybody the same. So we may lose some of the points of difference that we may have had in regional Victoria. For example, in Ballarat we have had NBN speed here for six or seven years. I have had 100-megabyte-a-second internet at my home and all of my businesses for five years now through what was Neighbourhood Cable TransACT, now iiNet. Where you are sitting today is an example of what you can do by leveraging off those advantages. We are now seeing that 90 per cent of Australia is going to have that advantage, so to us that is a little bit of a concern, but it is good for the country as a whole.

One other issue we have seen from an NBN policy perspective is particularly with some of the funding that has happened. The focus is on bringing existing businesses up to where we think they should be now, not where they could be, using the NBN. So a lot of government support, particularly federal government support that sits around business improvement programs and so on, has focused on getting businesses that are not already internationally savvy up to where we are now, not necessarily leveraging off the NBN.

One of the problems with high-speed internet and working e-business is that you cannot do it until you have the connection, so a lot of work that is being done around NBN is saying, 'Get ready for the NBN, get your business ready and do your training', but you cannot really do that until you can actually plug into

the thing in the street. So our focus, certainly from an RDA perspective, has just been to get the damn thing rolled out as fast as we can and then we will leverage it to the absolute maximum.

We have situations in regional Victoria where Warrnambool, for example, will not be connected until 2020 on the current scheduling. You have a university there and a number of very big businesses such as the abattoir, which employs nearly 800 people. It has doubled in the last three years and it could double in the next three years, and it is running off an ADSL connection. So I guess our preference is to get the thing rolled out and then we will leverage off it once we have the ability to connect to it.

On behalf of George and myself we would also like to make an apology because in 2002 George wrote a policy for the City of Ballarat on broadband which concerned running it into new estates and doing undergrounding and putting in an actual pipe. That was done in 2002. It was extremely controversial, and I played a small role in that. In fact that strategy then helped form part of the NBN when they actually developed their policy. To some extent we had a small role in the rollout of that and the way it is. I know that is very topical, particularly in this area at the moment, because as you would be aware the rollout has stopped due to some contracting conflicts that are occurring. Do you want to pipe in on that, or do you want me to hand over to you?

   Mr FONG — I concur with Stuart on everything, except the fact that we did not invent the internet, Stuart. The concerns we have had for some years now collectively, and Geoff will be well aware of the history of the concerns that we have had, are that we have known for a very long time, since the mid to late 1980s, that the technologies we are currently taking for granted in the metropolitan areas have had a vital and important role to play in terms of the development of regional areas. I have firsthand experience of that. After I left the university in 1996 we started what is arguably regional Australia's first internet service provider from here, and while we had very modest assumptions about what the market uptake would be, what we did find was that the incredible and very articulate demand from regional and rural Victoria, and western Victoria in particular, was to say the least stunning. The targets we had for the growth of that very small company, which was basically an amateur company that said, 'We would like to have internet in people's homes in 1994–95', started with, 'Maybe we can get maybe 200 to 300 clients'. We had exceeded that five times by the end of the year.

What we found in regional and rural areas was a demand that we found difficult to meet for a period of at least two to three years between 1994 and 1997, and we had to find very different ways of getting bandwidth in there to satisfy the demand. At one point in time when we managed to get services into Ararat the *Age* reported that it had the highest domestic uptake of internet connectivity in the Southern Hemisphere. Whether the *Age* got its facts right or not, we did know that there were a lot of people who were demanding services that we simply could not provide at that particular time.

Over time I think that process has changed in the sense that we have understood how to deliver internet services into regional and rural areas but it has been difficult, and it has been a very long and difficult battle in terms of providing the types of services that would satisfy the regional and rural populations. You will anticipate that we are great supporters of the NBN as a concept, or an NBN as a concept, and certainly in terms of its ability to deliver the types of bandwidth in regional and rural areas that we think are adequate to keep up with the rest of the world, and that is now starting to come to fruition.

The history of that also indicates to us that there is an articulate response to how the technology will help in regional and rural areas. There has also been a response to say that, 'We need to deal with what we have got, because we are very used to dealing with second-rate technologies'. So what we have had — and I would concur with Stuart in the sense that Ballarat does have a little bit of an advantage — are large numbers of people in the area who have managed to deal with what they have got and make the best out of it. Sometimes that has resulted in a situation where it has been difficult to move certain sectors of the population forward, not because they are not articulate or do not need the technologies but because they are circumspect about what is to be offered next.

There was a period there between the time NetConnect Communications sold the company to a public company in South Australia and between 2005 and 2006 where there was a sense of resignation that this

was all we were going to get. I think a lot of businesses and organisations simply attuned themselves to the fact that that was all there was and we would need to build our expectations to the point.

With the prospect of greater bandwidth what we found was that there was a release of the constraints of thinking, especially in the health areas, and there were projects that were put together that said, 'We cannot wait for something to come along. We have to build it ourselves'. One of the examples of that is the Grampians Rural Health Alliance network, which was a project that was conceived by the then CIO of Ballarat Health Services, Paul Mannix. I had the good fortune to be involved with him in the planning for that particular project. That project brought together a high-speed network that connected all of the health alliances and the hospitals between here and the South Australian border in a way that allowed them to have unified communications. What it set was a precedent that said, 'This can work if in fact the bandwidth is available'. It was an expensive project. It was a very difficult project. That project today sustains the health alliances across the western Victorian area, and it is now a mainstay of how those hospitals work.

Out of that there was a leak over. The prospect of drawing out that connectivity across western Victoria required a partner and at that particular time Telstra was chosen as that partner. What we found was that the beneficial effect of that project was that exchanges that would not otherwise have been upgraded were upgraded to meet the project, and the knock-on effect was that the areas in places like Ballan and others got upgraded broadband connectivity to the communities that those particular exchanges served.

Mr TREZISE — What year was that?

Mr FONG — A lot has been going on, but from memory I think we started in around 2006 or 2007. I will need to confirm that, but it has been around for a fair while.

It proved the truth in the fact that the market was not going to fix the problems of connectivity. What we also knew from our own experiences firsthand on the ground was that that connectivity was needed. Businesses and non-profit organisations right across the regional and rural areas that we served as NetConnect then as Chariot Internet and then as consultants were crying out for some way in which this bandwidth could reach them. The proof of the need for those sorts of things were the daily conversations that we had with businesses. Again there was a sense of resignation that, 'This is all we are going to get, so we have to work with it, and we need to attune our expectations to what we can do with this technology', and it was a constraint on thinking.

One of the psychological effects of the announcement of the NBN and then NBN II in 2009 was that a whole bunch of people, including councils, and most importantly councils in the western area, started to free up their thinking, saying, 'What could we do if we had this sort of bandwidth?'. That leaked over into the business community, and we were engaged with the Centre for eCommerce and Communications to write ICT-type strategies for councils such as Moorabool shire and then the councils in western Victoria. As Stuart has mentioned, in Warrnambool we also wrote the ICT strategy for the south-west and also for the Yarra Ranges. What we found in terms of the case studies were businesses that said, 'If this happened, then we could do this'.

There was very clearly an indicator that if sufficient bandwidth were available, then there were models that would change in terms of how businesses do things. Examples of that included, in Moorabool shire, businesses that came up to us and said, 'We would move to this area if we had the bandwidth'. In Horsham there was one particular organisation that we discovered, and I think it is in the case studies, where they decided that they wanted to move into another new industrial estate — this was some years ago, in 2008–09 — and they did turn around and say, 'We cannot move into that industrial zone because the bandwidth is not there. We are going to have to move within 2 kilometres of the post office in Horsham'.

Mr BENJAMIN — George, we had a direct personal experience of that with NBN Co, where the initial rollout was to focus on business parks, business areas, CBDs and so on, and then the policy changed a little bit and then the preference was to go to residential areas, because taking it 100 metres along the road you hit 10 houses as opposed to hitting 1 business, and that actually stopped us building a data centre

at the time, because all of a sudden the industrial park was not going to be serviced. That access to the broadband impacts all of the decisions. I guess the other part of that for us is it is about how you take existing industries or existing structural technology and leverage off it by some of the technology. The great example of that is the train. We have had tremendous success with the regional rail initiative. We have seen a doubling of commuters, particularly out of Ballarat, in the last couple of years. We still do not have an adequate way of connecting, either by 3G, 4G or by wi-fi. It is quite staggering. I take the train twice a week to Melbourne, and for half the journey I cannot operate.

One of the things we have seen in the last two years as most of the technology has gone to being cloud-based technologies is that you require a constant internet connection. There is nothing that is offline; you must have a live feed. We all know how frustrating it is when we cannot get that kind of connection, even for little things. I take the train to Melbourne and my phone and iPad run out of power by the time I get there because they have been working so hard to get a connection. All of a sudden my day is ruined. I just find it staggering that in this day and age we have not come up with a policy as a community to say, 'You will have ubiquitous connection'.

I was in China recently, sitting on a 400 kilometre-an-hour train which had full wi-fi. There are lots of people who will give excuses as to why we cannot come up with this technology, but it just means we have to put our mind to it and spend some money on it.

The CHAIR — Stuart, our inquiry is about how we attract it once it is there. It is not about getting the network out there; it is about how we attract — —

Mr BENJAMIN — I am saying you cannot do it unless you make the connection.

The CHAIR — I am interested in what you said about Ballarat having had an advantage for the last six or seven years. You see other regional areas also having it as a threat. What has actually happened here in Ballarat? You have had that advantage for the last six or seven years. How have you taken advantage of it?

Mr BENJAMIN — Where we are sitting is a classic example. I have to say that when this project was mooted most people laughed at it. They just did not get that you could have a tech park that could be successful in a regional location. Everyone thought they had to be in the Melbourne CBD. We have the benefit here of being on a couple of different fibre backbones, so we have a really strong connection. Obviously the connection with the university is terrific. Attracting a major anchor tenant in IBM has also been huge. What it has also done is change the mindset of the community to think, 'Okay, we can play in this particular space'. The fact that we support individual and start-up businesses in this environment and in the city — there are a couple of other initiatives happening at the moment within the city of Ballarat that will leverage off this — I think has just changed the paradigm of how we think about business.

The CHAIR — Are there any numbers around the extra jobs that have come from this? You talked about extra businesses coming in. Are there any figures around that?

Mr BENJAMIN — There certainly would be. I could not accurately provide those — —

The CHAIR — Are there any examples of companies that have come here and set up because of it?

Mr FONG — IBM is a perfectly good example of a company that settled, firstly, because of the viability of the tech park but, secondly, because of the fact it had the connectivity it needed to get to where it needed to — —

Mr BENJAMIN — Access to human capital was important too.

Mr FONG — Yes. Mal Vallance will be presenting. He is the director of the tech park. He has the numbers for the actual revenue generated as well as employment numbers from the tech park. There are anecdotal examples of companies right across Ballarat where the viability of those particular companies in terms of locating here has been pushed by the Ballarat City Council on a number of factors. Obviously one is livability. The other is affordability in terms of the comparison between the costs of running businesses

and locating staff between here and metropolitan areas. Increasingly it is a given that there is at least a minimum level of connectivity via which those businesses can perform.

Let us not make any bones about the fact that, while Ballarat has a huge advantage, it is still more difficult for us as providers, if you like, to provide connectivity here than it is in a metropolitan area. I would say we have great advantages over every single regional area in Victoria comparatively, but the backhaul costs of bringing it here have to date still been something that we needed to factor in. I run a small data centre here where a lot of small businesses run some of their systems or we provide services to them. That comes at a small premium in terms of getting the bandwidth up here. It is getting better, but it is still taking time.

There are a number of small businesses whose people are increasingly working from Ballarat and also commuting to Melbourne to work there as well, but at the same time they are spending less time in Melbourne because of the fact that they can do a lot of things remotely from here. There are law firms here that have branch offices in Melbourne. Some have been in that position for a significant period of time because they have persevered with the model. There are consultants who live here and in Daylesford and who in the main use whatever connectivity they can get. 3G has been a great boon to that but we have always regarded that as an interim solution in terms of getting in broadband.

We know, for instance, of medical practice management companies that we work with that are based here but that also work significantly in Melbourne. We provide connectivity to medical specialists in Melbourne and they cloud their systems here. We provide the patch management systems virtually from a data centre across the road. They are all in East Melbourne. The practice management company is based in Ballarat and they serve them largely remotely but spend some time in their offices in Ballarat to organise them in conjunction with what we do. So there are a number of models that are changing, if you like, in terms of the way we do things.

My own staff telecommute. My problem is not so much the fact that we have said we have a telecommuting option for them; it is that they regard our office as a social hub. If this is any indication, we actually have to throw them out of the office to make them work remotely so they actually can practice what we preach.

Mr BENJAMIN — Telecommunication is going through an interesting phase at the moment, and a lot of this is being led by the Marissa Mayer commentary coming out of Yahoo in the United States. Yahoo has actually now torn up its telecommuting policy and has a preference of getting people into the office. Telecommuting is not just about spending the day at home and working remotely; it is also about the time getting to and from work, and that is why I mentioned the train.

One of the problems we have with train travel is that peak services are always full. The peak services are full because people have to be at the office by 9 o'clock. We think one of the great opportunities to get people onto off-peak trains, which is where we want to move travellers, is if you can get them conductivity, why cannot someone say, 'I'm at work at 9 o'clock' but be sitting on a train to Melbourne? If I am working in a government department, why cannot I be logged on, my boss can see that I am logged on and that I am working and interacting fully with my team as though I am sitting in the office but I am not filling up a peak train?

The CHAIR — Going back to what George said, why do you actually have to be on a train going into the office to work remotely?

Mr BENJAMIN — I agree. In a perfect world that would be where it would be. But the utopia of teleworking is that we never need to go anywhere. We have people in Ballarat at the moment who are commuting to Melbourne to go to work in some of these new hub-type concepts, where you rent a desk, simply because they want the social engagement. That is one of the reasons we are looking at building one in Ballarat at the moment, so they do not have to go and get it.

Mr TREZISE — Very briefly, looking not too far into the future, do you see us working remotely in hubs or do you think there will be more of an attraction to working from home?

Mr BENJAMIN — I think you have just nailed it. We literally had a group of people go on a bus to Melbourne yesterday to look at this in the city. The world is flat. Everybody works for themselves now and they can do it anywhere. They can do it in their bedroom, they can do it on a train, they can do it in Melbourne. But they still want that social engagement, and that is where that hub concept is really interesting. You can go somewhere and you can still have a talk to someone. You can still sit next to someone and have some activity. There is nothing worse than sitting in a bedroom at home and trying to operate.

Mr FONG — Can I suggest that one of the things we are battling at this point in time with a lot of corporates — and increasingly we are asked to advise on these issues — is the cultural chasm that is occurring in organisations. One of the advantages we have seen in Ballarat is that there is this preparedness to change culturally. Stuart and I were privileged to witness a gathering of somewhat younger people than us — although I would not put him in the same category as me; I am a generation older than this fellow — —

Mr BENJAMIN — I am rapidly heading there, George.

Mr FONG — What we have seen with a number of younger people is that we have a boomerang effect in Ballarat. We have a large intellectual cohort, the majority of which come out of the University of Ballarat. They go to Melbourne, they work there and they eventually look back to lifestyle. The viability of that lifestyle is very much about the connectivity they have. It is not necessarily a technical thing for them. We find that the younger generation is not technically interested in the technical stuff we know about. We have almost become the plumbers and engineers they do not want to know about; so long as it is working, they do not care.

What has happened in organisations and companies is that there is this cultural chasm that is occurring. There is this bastion network, or this bastion mentality, that you have to be there from 9 to 5. You are not allowed to use Facebook because it is unproductive, and you are not allowed to use Twitter, yet their entire lives depend on being able to connect and commute and to be ultra-social in terms of the types of things they do on mobile devices and things like that.

What we have found is that some middle management of — dare I say it — my age are finding this frustrating. They do not understand the culture. They do not understand how this fits within the workplace, so part of the blockers, if you like, is the lack of preparedness of companies, especially smaller businesses where older people have owned those businesses for a very long time. There is nothing wrong with them, they have battled hard — why should they change? They have younger people coming in with different ways of doing things and threatening the very fabric of how those companies work.

We find this on a daily basis, and an example of the paradox is companies banning people from using Facebook and getting their system administrators to block them off and then coming to us saying, 'We need a social media strategy for our company'. That change process is disruptive at this point in time. This is causing problems within corporates, especially regional corporates where, as I have said, a lot of those companies have survived because of the sheer tenacity of the owners of those businesses. Full respect needs to be given to that, but there is an educative process that needs to occur if a younger generation of people with different ways of communicating and different ways of thinking about business are coming into play, and that is less and less to do with the boundaries and more and more to do with lifestyle. One of the advantages we have in rural and regional Australia is that we can offer a different lifestyle that these people are looking for, but they still need the social connectivity and social exchanges that are needed. That is not just about lifestyle; that is how they do business too.

Mr BENJAMIN — That is just how they operate. It is a best practice scenario, and what we are seeing is that in regional Victoria we have had to be a little bit smarter because we have not been able to get staff. To get a network administrator can be hard work. It is not so bad in Ballarat, because we breed them through the university — —

Mr FONG — You can't have mine.

Mr BENJAMIN — Yes, that is right. You try doing it in Ararat; you have to work a bit harder. Everybody likes to complain about the next generation, but the reality is they just think differently.

Mr DRUM — Stuart and George, it is interesting listening to you. You nearly moved into a cultural shift that we are going to. I heard on the weekend that kids in school now are allowed to attend class with their earphones in and the music playing. I sat there shaking my head going, 'Where is this going?'. Teachers and the education system are now having so much trouble keeping iPhones and iPods away from their kids that they are giving in. It seems like a similar sort of cultural challenge — that the modern day worker does require to be connected to his social media. He needs to communicate with his friends on Facebook and have a look at what is happening on YouTube when someone tells him something is happening on YouTube — 'Have a look at this' — and then they have to switch back to work, and this sort of — —

Mr BENJAMIN — Damian, I will give you two examples, if I can, of personal experiences there. One, I have just hired a young fellow — 18-year-old — on a traineeship. He has 1600 Facebook friends. I am pretty sure he is a well-known sportsman and everybody wants to be his friend, and I am sure they are not all his best mates, but that is the culture he lives in. I cannot even comprehend that. I cannot even get my head around that, but if I said to him right now, 'I need you to get a message out into your community', he can do it, and he can hit 1600 people who then hit — we can probably get 100 000 people within half an hour. It is just a massive paradigm shift.

Harvard have just done a really interesting study on social media where you have all these businesses — and particularly government departments — that block YouTube, block Facebook and block Twitter. They actually find that the employees who have access to Facebook are more productive than the ones who do not. The reason is that the social need they have — that collective they need to interface with — they can get from Facebook instead of spending half an hour talking about football or grabbing a coffee and going desk by desk and annoying the crap out of everybody. They get it from 10 minutes of Facebook. It is a massive paradigm shift.

How does this plug in to teleworking and e-working? That is what it is all about. People can actually operate in smaller hubs in smaller businesses but still get this massive community and social interaction that they would have only been able to get previously by going and working for BHP and sitting on a floor at 500 Bourke Street that had 50 people in it. They now get that experience virtually, and we have to have a shift in our own heads to do that. Regionally I think we have been pretty good at it because we have had to.

Mr HOWARD — What I wanted to ask is that, obviously, the aim of committees going out and talking to people is to look at things that government, or state government in our case, could be or should be doing to assist regions following the rollout of the NBN, in this case, to help them see the opportunities for linkage and help them take advantage of that. What I am interested to know is: is there an opportunity, or will there be an opportunity, for the government to help in either educating industry to adapt to some of these issues you are talking about, to look at how in the technological age they might need to adapt and to look at supporting communities to attract new industry in that they can now see that they can operate just as well in the regions as they could if they operated in the metro area? What are the sorts of things a state government should target in trying to support regional communities in those circumstances?

Mr FONG — Can I first suggest that you should not be so anxious? I think if there is any state government in this country that has been able to do this sort of thing, it is the Victorian state government.

Mr BENJAMIN — Of all colours.

Mr FONG — Historically, going back to the days of the Kennett government and going through the Bracks and Brumby governments and going through now, there has never been a case where the government has taken its foot off the pedal as far as technology is concerned. In terms of engaging business, I think there is a great deal of cultural change that urgently needs to be addressed now. The change agents, the people we regarded as our children, are now becoming junior decision-makers and

becoming executives within organisations. My sons work with me, and they are making decisions that I just leave to them now. The issue is the change agency in that particular area.

The other side of things is that the leadership should be taken by the business organisations and, if you like, the stakeholder organisations that need to go back to their people and say, 'This is what needs to be changed'. We had a round table — as the Internet Society of Australia we held a round table in Ballarat, and we did not invite the businesses or the organisations. We took in people from VECCI, and we took in people from the AIG and the health organisations. We sat them around the table, and they said to us in the first half of that round table, 'What is it we need to do to prepare for the NBN? We do not understand the technologies'. We spent the first half of that period talking about the basics of technology, and we brought in some of Australia's finest minds in terms of developing the architecture.

The second half of that had nothing to do with the technology; it had all to do with the business strategy behind what we do to make sure that our businesses — our stakeholders — are getting up to speed. There is a competitive aspect in terms of what we do in regional Victoria that I think is already being addressed by the businesses there. They have been at this for a very long time; they have known about the internet and used the internet for a very long time. The issue is how we get them to the next stage. There are federal initiatives that are already out there to explain what the technology will do. I think engagement with business and stakeholder organisations is key to making sure that that occurs.

The other side of things is: if you look around the table, is there anybody here under 30? One of the things we might ask is: do we need to actually go out and speak to the very people who are going to be the change agents themselves, and are we going to include them in the debate?

Mr BENJAMIN — That is right. The people who are leading this discussion — you know, we are all too old, to a large extent.

Mr DRUM — We are, Stuart; you are not.

Mr BENJAMIN — Thank you, Damian; I appreciate that. I am not far off it.

What can you do? I think there is policy; there is regulation in particular. As regional areas we love it when a state government says, 'We're going to relocate the SRO to Ballarat' or WorkCover to Geelong or those kinds of things. Imagine if you said, 'If you work with the state government, you can work two days a week in Ballarat'. Okay, it may not be telecommuting in the sense that you are going to work from home at your kitchen table, but we have offices in all of these locations. Let us make it a policy that we want to see people relocate to the regions; let us encourage them.

We have a big fear in regional development that as Melbourne continues to grow like this and regional Victoria grows like this, in 25 years time, when we have half of the percentage of the total, we will become irrelevant in regional Victoria. We will not have a $1 billion Regional Growth Fund in 25 years time because we will almost be irrelevant. We have to get the population to grow. The only way we do that is to encourage people to move out into the regions. One of the ways you do that is with telecommuting and saying, 'You can live in the regions and you don't have to come to Melbourne'. That is a really easy thing, I would have thought, to do.

The CHAIR — You said 'policies and regulations'. What sort of regulations would you want?

Mr BENJAMIN — That is probably more for the — under one of the regulations that hold it back.

The CHAIR — We are open to suggestions.

Mr BENJAMIN — Yes, I know; I appreciate that.

The CHAIR — That is why we are here. I accept that you spoke about policies.

Mr BENJAMIN — I guess regulation is more the EBA side of things. That is what I would regard as regulations, probably not as — —

The CHAIR — Right.

Mr BENJAMIN — Allowing people to work remotely.

Mr FONG — I think we are running out of time, but I think there are some issues we will address. Again, can I commend the state government, of all colours in Victoria on the fact that — —

The CHAIR — We are all colours here.

Mr FONG — The issue has been well addressed in Ballarat. We have been very lucky. You are looking at a tech park where the incentives for business and the ability for the teams here to attract business have been actively a partnership between local councils, the business community and the state government. If that sort of model was to continue, especially in the outer areas of regional Victoria, I think we would be highly successful in making the case for businesses to look broader afield, in terms of both a change of culture but also a change of location and the viability of that location. The matter is to sell that message to businesses and organisations saying that it can be done.

We are aware of the fact that there is an articulate enough response from regional and rural communities to tap into that sort of thing. Credit must be given for that and respect must be given to those communities for those sorts of views. Also it needs to be a case — and Stuart has mentioned it before — where we do not overheat expectations. Connectivity is not the only component that we need to deal with. There is a raft of components that you will be aware of, including lifestyle, health, education and all those other things. The whole fabric of infrastructure must be there, but at the same time the pace of delivery of those things must meet market expectations.

We mentioned Warrnambool. One of the things that we were told pointedly from the councils at Warrnambool was that it is all fine to talk about NBN and the culture changes, but if we are not getting it and we are talking to businesses now, what are they going to expect? — that we are going to overheat expectations and it ain't going to happen. I think the announcement the Premier made on Friday with regard to the Warrnambool–Geelong backhaul fibre pipeline, which has been in the works for a very long time, will change some of the complexion of that. As far as the cultural issue is concerned, could I suggest to you that there is a very good article called 'Gen Y's Resignation Letter' — it was in a magazine; I forget which one, but there is a reference to it — which explains some of the cultural challenges that companies face.

In terms of workplace issues I think there is a small caution that we give, which is to make sure that as telecommuting develops we develop a consciousness about the fact of not transferring the costs of working to the workers themselves. There is a choice that younger workers make, and we know it by BYOD — bring your own device. A lot of people — all of my staff — do not want computers from us. They want to choose their own computers and want their own, and that is part of their lives. They do not want me to be saying, 'Well, that's a company asset'; they want their own little domain on there. There is a concern that we do not transfer the costs of working to the workers. It is not exactly a perfect example, but if you think about the distribution of documents these days, everybody sends out PDFs, and if they are to be printed, they are printed at the other end, so you cut down the cost of printing and transfer and distribute it to others.

I think there is a lot to be said about the fact that younger workers do not necessarily understand their rights and responsibilities in terms of things like OHS and the actual costs of working. There is a little bit of an education process, for both the employers and employees, to ensure that that is maintained and covered. It is not a trivial thing to set up a home office to work remotely, and it is not a trivial thing to say, 'Is it a safe enough place to work?'.

The CHAIR — George and Stuart, I accept your point — I think it is a good point — that you do not overheat expectations and you wait until the pipes are there or almost there. In all industries and in life there are early adopters and some people who take a more cautious approach. How do we then get the people who are going to be more cautious or who are not the earlier adopters involved?

Mr BENJAMIN — You celebrate success. I think this is one of the criticisms I have had of some of the NBN projects that have gone on — that we have spent all our focus on getting the people who were already behind up to where they should have been. To be honest, MYOB training for businesses, to get them from doing physical books to doing the work on MYOB — in a culture where in the last two years MYOB has lost 80 per cent of its market share because it has all gone to the cloud and they missed it — we have to really have the guys who are doing this, and we have to celebrate them and put them out there. This is where the state government can come in. The state government's videoconferencing is an embarrassment. It is an absolute joke to go into the RDV offices here in Ballarat and try to have a videoconference with Melbourne. I will get on a train and go down there and have a meeting because it is so goddamned bad. We should be at the absolute leading edge so we can celebrate it. All of a sudden you are bringing your community in to be part of it, and they are saying, 'Well, hang on; we can do that'.

You have a situation now across Victoria where every single school is connected — I do not know what it is called — by videoconferencing, yet they do not connect to the university here because it is a slightly different technology. Every hospital is connected. They do not connect to the schools. With the existing structural technology networks there is a massive opportunity in connecting them up. Why would you not have every school connecting to every university? It is not hard to do; it is just that somebody has to come in a bash heads and make it happen. That is a policy change; it requires dollars, I guess.

Mr FONG — And bear in mind that Victoria historically has been the most well connected, at a government level, of all the states, bar none.

Mr DRUM — Could I just ask one question before you guys leave? A lot of the trepidation with the average punter is about looking at what is going to happen with NBN, because we just do not know. We are trying to imagine what it is going to be like when this beast is alive and we get to use it. What countries can we learn from that would already have the bandwidth and speeds that we are likely to experience? If we are sitting here in two or three years time and we then have it, where could we be looking to see — or who has this capacity?

Mr FONG — Helen Thomson is here; she is also a partner in crime in terms of the ICT strategies we did across the ranges. In the Yarra Ranges report we did, which I think was about a year and a half ago, we were asked to put a whole bunch of international case studies, which we did. There were examples in Norway and in the United States in specific regional areas. In the United States, for instance, there are areas in Maryland where there are parallel towns — ones that have a council-initiated connectivity project, and ones that do not. The actuarial figures that came out of those studies were fairly graphic in terms of the improvements that occurred. I will defer to Helen. Helen will probably talk about some of the — I will not pre-empt what you are going to say, Helen — case studies. Inside all of the ICT strategies that we did — from Moorabool to the western region to the Yarra Ranges to the south-west — we included case studies of businesses that did and did not have that sort of connectivity. They are available — —

Mr BENJAMIN — To answer that, South Korea and Japan. In South Korea, purely because of the way the population exists, it is a lot easier to roll out broadband because you literally pull one optic fibre to an apartment building and you service 500 units. Obviously it is more difficult here. We are not talking about 100 megabyte a second; we are talking about a minimum of a gig. In Japan they are now talking about rolling out 10 gig in certain parts. It just blows everything else out of the water.

If you then want to go to the other side of things, everybody likes to talk about China and the growth of China. Well China have gone with a wi-fi solution, and they experience spectrum overload. There is now a situation across China where they do not have the ability or capacity to do fibre, and there is spectrum overload. It is just a disaster trying to get connectivity. It depends on what happens when the election is eventually called federally, but I think we will end up with a combination of a wi-fi strategy and a fibre strategy, which is possibly the best of both worlds.

The CHAIR — Do you want to make any final comments?

Mr BENJAMIN — Yes, Chair, if I could make a final comment regarding productivity. One of the paradigm shifts we need to make is that 9 to 5 no longer exists. I am just as likely to get an instant message from a staff member at 11.30 or 3.00 a.m. as at any time during the day. That is just a shift that we all have to accept and I guess also manage because we want our staff to switch off.

Mr DRUM — Sleep?

Mr BENJAMIN — To switch off, yes. That is a bit hard at the moment with the Tour de France; there are a few weary eyes around the table. But that is just a change we have to make. That is a massive opportunity from a productivity point of view. Five years ago we did not have smartphones or tablets; imagine what it will look like in five years time. It is extraordinary. I am very pleased and proud to be looking at this with my Victorian hat on. Thank you for the opportunity.

Mr DRUM — Well done. Thank you.

The CHAIR — Do you have any final comments, George?

Mr FONG — The only thing I would say is: please do not underestimate the articulacy and capability of the regional and rural populations of Victoria. We have worked with them since we started NetConnect in 1994. They have never ceased to amaze me in terms of the types of things they are doing. I think the best way of describing it is that many people have a corrugated iron mentality to technology. They will use it for whatever they can use it for, but they can also live within the constraints. My job has partly been to try to find a way of saying to them that those constraints will one day be lifted. They have finally been lifted, and I think you will find that the levels of imagination and articulacy in terms of how people can work in the future are best left to the people who actually live in those areas. It would be a good thing to talk to those people directly.

The CHAIR — Good. Thank you very much, George and Stuart, for your very valuable contribution. I remind you that you will receive a copy of the Hansard transcript in about a fortnight. Any corrections to obvious mistakes will be allowed but none to the substance. Any changes are subject to the committee's approval. Thank you very much again for your very valuable contribution.

Mr BENJAMIN — Thank you.

Witnesses withdrew.