TERESA CORBIN: Good morning, everyone. Day two of the conference. If we can just get settled and seated. We'll get started in a minute.

The last few people coming in... Fantastic.

OK. Now, first of all, this morning we have a really interesting session on NBN and also mobile – the mobile programs roll-out. We have our own local futurist today, actually facilitating the session. So I'd like to introduce you to Shara Evans. Thank you very much.

(APPLAUSE)

SHARA EVANS: Good morning, ladies and gentlemen, and thank you, Teresa, for your introduction. Today, we're going to talk about infrastructure roll-out. It's one of the most important infrastructure programs, I would say, in the history of Australia over the last several decades at the very least, the National Broadband Network, and we're also going to talk about another major infrastructure program – the Mobile Black Spots Program – which is aimed at mobile network coverage and, in particular, expanding coverage into regional areas and other areas where we have gaps. We have an interesting session this morning where we'll be hearing from the National Broadband Network in the form of Trent Williams. Then we'll be hearing from the Department of Communications, from Philip Smurthwaite. And then we'll have a panel with several of the carriers and the department. We'll have representatives from Telstra, Vodafone, and Phil again.

I'd like to start by introducing you to Trent Williams. There is a change from the program in that, unfortunately, Caroline, who was meant to be speaking today, had another conflicting engagement. But we're well served by having Trent assist us this morning with his talk. He's the general manager for external affairs at NBN Co, and is accountable for managing NBN's community engagement program. This morning, he was telling me that he actually spends a lot of time out there speaking with communities. Trent joined NBN in February 2010 – actually – yep, 2010. Since that time, he's worked with communities across Australia explaining what the NBN is and how it's being rolled out, and the benefits of high-speed broadband for business, government, communities and individuals. Please join me in welcoming Trent, and I look forward to hearing what he has to say.

(APPLAUSE)

Rolling It Out: The NBN Rollout and the Mobile Black Spots Program

TRENT WILLIAMS: Good morning, and thank you very much for that lovely introduction, and for ACCAN for having us here today. It's always a pleasure to get in front of a group at 9:00am on a – I don't even know what day it is now. It's one of those weeks.

(LAUGHTER)

..mornings, and to spruik the fantastic project. And I agree with you – something not undertaken before in this country, certainly. Indeed, when we look at the scope, scale, timings and everything else that goes with the roll-out of the National Broadband Network, it really is a unique project, even globally.

We are on a time line, so I'll kick in. It has been a very big year for the National Broadband Network. Some of you may be aware that we had a change in federal government. At NBN, that had significant implications. Really what it did was it allowed us to start rolling out the network faster, more affordably, and more cost-efficiently through being given the ability to use what we call a multitechnology mix. The lingo within the National Broadband Network this year, from October onwards, has been MTM. I'll go into that in a little bit more detail.

Also, we've seen a number of reviews. One of them – you can see that we've ticked off most of them. We're still working through some of them. We certainly are looking to go where people most need faster broadband and where they typically haven't had it, or haven't had access to it. We talk about regional and remote Australia, and certainly we have always been present and are still very, very much present in regional and remote Australia. But one of the very interesting things that came out of these reviews and which I've been seeing when I've been going around to communities is that it's often on the outskirts of our larger cities – Brisbane, Melbourne, Sydney, in particular, where I was in Melton when we first started rolling out there in Victoria, and they were on equivalents of 56 kilobytes dial-up speeds. So the National Broadband Network is definitely something that is for all Australians, and we are really desperately trying to get the network to as many people that need it the most as quickly and affordably as we possibly can.

There have been a lot of changes. As I mentioned, we have a new CEO, Bill Morrow, and a new executive team. We have restructured the organisation. We really are embracing what this multitechnology mix drive that we're on is all about. We have undertaken reviews internally. We've had external consultants in. There really is a vibe Wen the organisation that we are getting it right and that we are going to be able to achieve our goals and objectives.

What is MTM? Multitechnology mix – we're always a company that was going to be rolling out the NBN through a mix of technologies – satellite, fixed wireless, and fibre-optic cable. We also know that there is HFC cable in a lot of parts of Australia. We also know that we can use fibre-to-the-node technology. We have fibre-to-the-basement technology. We have all these different elements and infrastructures available across the country that we are now enabled to leverage and to get people connected sooner, faster and more cost-affordably.

Certainly with when we look at the way we're rolling out the network, the ability to use existing infrastructure is going to be critical in us meeting our timelines and coming in on budget, on time, and on quality.

This really is something that is brilliant for Australia and for the Australian population. We are still caught up in certain areas – the people are saying, "We were promised this" and "We were promised that." It is a challenge I face every day in getting Australians to realise that it's not the technology – we'll get you faster broadband. Don't worry about which technology it is. One of the key messages I'm talking in my group and the business as a whole are talking across the entire country is – what we are about is getting you better access to faster broadband sooner.

It's been a very, very busy year. Another question I get asked in many communities in which I go – some of them just say, "Who are you and what's the NBN?" Fortunately, we don't get that as much as I used to get it when I started back in February 2010. On that note, as an organisation, when I began I think there were 150 employees. In four years, we've moved to 3,000. So it really has been exponential growth in the organisation in terms of people, processes, systems – sorry, I've got a frog in my throat and it crossed its legs.

(LAUGHTER)

..and in terms of where we're rolling out network, one of the major challenges we've had is actually being able to communicate with people. We have built the network – appreciate it – in modules, and we have tried to get to as many places as quickly as we can, which means that when you look at a map of Australia, we're very well represented in very small modules across the entire country. What this means is that our marketing and our communications activities have been very personable. Literally me or my group presenting two groups such as yourselves, but also to the Wagga Wagga Rotary group or the Milton Lions club or the Melton Probus club, et cetera – it has been a real challenge for us to get our key messages

across the entire country, and that is something that is now not as much of a challenge as we roll out the network. As you can see from the statistics, we're moving towards the million mark of premises either under construction, in construction, or about to be connected or, indeed, connected.

There are 437,000-plus premises able to order an NBN service at this moment. I'll talk to you in a couple of seconds about our drive to make awareness across these different communities – the point that people don't question what technology it is, or just how do I get on it and how do I start leveraging faster broadband?

As I mentioned, moving forward into next year, we will hit the million-premises-past premises of either under construction or connected. That really is a substantial amount of the country that we are rolling out to.

This is what I to most of my days and my team and our organisation. We have an 18-month period. Once we connect in an area such as Ballarat or Armidale or Gosford, Kiama, anywhere around the country, once we have built to the network, we'll put the network in the ground or in the air, whatever it may be, there is an 18-month countdown that begins. We have an agreement with Telstra whereby, 18 months after we've turned on the network, they will decommission the copper. One of the things about Australia is telecommunications and the ability to communicate is almost religious or constitutional in people really hold onto this ability. The more you move into regional and remote Australia, the stronger that attachment takes on. We have 18 months where we really need to get our message across that you have access to the National Broadband Network, and that it's really easy to switch over and you can still make phone calls over whatever it may be – fibre-optic cable or whatever. You can still do all these types of things. I never get asked as many questions about faxes. We had an interesting thing in the office the other day – a young girl was – she said, "Does anyone know how to send a fax?" There was about three 40-year-old-pluses, including myself, who put up our hands. The rest of them had no idea. I get asked questions about fixed-line phones. I haven't had a fixed-line phone – I can't remember the last time. I wouldn't know what my phone number is. I don't even know what my mobile number is. We were talking about our kids and privacy – I know there's been a lot of discussions about all of these types of things. My little girl is 12. She got given an iPhone 4S last night from my brother, which is his old one. The first thing she said was, "Well, it's not a 6."

(LAUGHTER)

The next thing she said was, "How many gig is it?" My brother was like, "How many what?" The point being that, for the younger generation in particular, there aren't questions about whether this is a good idea or whether we should be doing it or any types of those things. This is their life. We were talking about this before – they are extremely aware of the implications – and I can speak for my daughter as a 12-year-old. She knows that her data will be captured somewhere, and if you were to say to her, "Is that a problem for you?" She would say, "How else am I going to log on?" It's fascinating, growing up with young kids and seeing their attitude, and then going out and speaking to the Australian public, and particularly my age and above, where we're still challenging a lot of these things. So there really is a difference between the generations. But what I am seeing, and I can say after five years in this job nearly that Australians are embracing it, the biggest challenge is, though, getting them off this religious belief that there is only one way to actually make a telephone call or all these types of things and, giving them a greater awareness of what the opportunities are with faster broadband and what it means to their productivity, but also to their general lives. Recently, I was fortunate enough to get a smart TV. I'm connected to the internet and I know that every TV is being sold with that. All your fridges and all these types of things.

The challenge we face is getting that message across. There is 18 months – which to me seems like a long time, it goes very, very quickly in NBN land – where we move to actually disconnecting people.

And we've already done it. We commenced with around 15 areas across the country – what we call fibre-serving modules. It encompasses around 27,000 premises. In May this year, we got to the point where the 18 months were up and we started disconnecting people. We have taken a very high-touch, handholding approach to this. We don't want to leave anyone behind. One of the learnings out of this was we have created, because there wasn't one, a medical alarm registry – something that has become very, very important and something that we, and my group in particular, when we address whether it be age groups or any disadvantaged groups or non-English-speaking background groups and those types of things – getting the message across to people that if they haven't got a medical alarm or they have other types of things like that, on their phone, we need to get those people across to the NBN with as little inconvenience as possible. To date, we've been very, very effective. The take-up rate for the National Broadband Network across our first 15 areas, and going beyond, have been fantastic. We have 70%-plus of the areas that are connected. In most of the areas, we've got more or less everyone across that we need to, and we're working very closely with our partners to ensure that this is a seamless and not an inconvenient process. We still have people that believe that there is nothing ever going to be better than their old copper phone line, and we work with those people very closely, but by and large, Australia is buying into this process where we are rolling it out. So we're very, very happy with the results to date.

And there's a lot still to come with the organisation over the next period. We have a whole range of areas where we have finished construction and this 18-month period that I'm talking about – we call it the disconnection date – is approaching. It's happening in fantastic areas. One of the states I have spent a lot of time in is Tasmania. It's a beautiful state, and very, very high awareness of what faster broadband will mean to the state. We have a lot of fantastic case studies of organisations – whether they're a movie production for Hollywood that are leveraging the NBN or oyster farmers or whatever it may be – and we have areas such as Hobart, which are now live with the National Broadband Network. So our first real sortie into a capital city, as it were, in terms of testing our marketing and our reach in terms of creating awareness of what the NBN means, what disconnection means to them, and so on and so forth. And we have another 45,000 premises across the country that have been added. So we are continually releasing areas. We are negotiating with the likes of Telstra and Optus in terms of how we are going to roll out the network on a multitechnology mix basis. Those negotiations are going well. Both sides are very keen to come up with a great solution. But in the meantime, we need to keep rolling out network so that we keep our delivery partners, the contractors, and the workforces across Australia that are mobilised, in work and rolling out network. So every month, we release new areas where we're building network, and the process repeats.

The other fantastic thing about this year is the ability for us to not only just look at other technologies, but also improve on the processes that we've been rolling out. That goes right across the organisation, whether it be our internal systems for managing faults or whatever it may be – our HR processes, for example, were set up incrementally. We've got those fixed. So there's a lot of internal stuff that enabling us to be more productive. But also, in terms of the roll-out itself, we are moving to what we call a build-drop model, which literally means that, as we're going down the street, historically what we would have done is we would have put the network in the street and then come back later and run the network from the street into the presence. That results in what we call two truck rolls, or two visits by a technician, to do something. We're moving to a model where we'll try and get as much done in the street the first time, as quickly as we can, which we are already testing, and we have seen that it is resulting in efficiencies, and certainly speeding up the roll-out of the network.

We're trailing fibre-to-the-basement. One of the real challenges of the organisation has been getting into what we call multi-dwelling units or apartment blocks or commercial buildings and these types of things. Every single one of them seems to be different. There was no standard design for apartment blocks, it would appear. One of the challenges we've had is, how do we speak with the body corporates? How do we speak with the premise owners? How do we get our network in there, minimally and with quick visits? We've been trailing fibre-to-the-basement – we literally put the network in the basement of the building and we use whatever's available. In most instances, it's good copper or HSC or fibre, or whatever it is, and we can connect these places up quicker, more affordably, and get people onto the National Broadband Network faster.

We are trailing fibre-to-the-node and have seen fantastic speeds as a result of that. We have a whole range of initiatives that, after four years, we're finally starting to see the results of all this testing – the rolling out of a brand new network like this, as we mentioned, are pretty much unique in Australia, definitely, but globally as well. So there have been a lot of learnings and, they're all going into the organisation, and we are starting to see the fruits of those things.

I know I'm about to get ticked in terms of my time is up. I've been told that I can take a couple of questions from you, so yes, sir – I'll kick straight off.

NEW SPEAKER: I'm a telecommunications planner of 40 years. I don't doubt that the NBN can actually roll out a multitechnology network for a lower capital cost. Indeed, I've done this kind of thing in the 1980s and at Telstra, we were visibly engaged in retrofitting digital control to analogue exchanges. By the end of the 1980s, of course, it was realised that was a mistake because the network couldn't be operated at an economic price. They started ripping it out and replacing it with uniform technology mix. The NBN is doing something similar, as far as I can see, in that they actually consider the operating costs of the network once it's built.

TRENT WILLIAMS: So the question is...?

NEW SPEAKER: The real question is – everybody's talking about the capital cost of building the NBN network. No-one seems to have considered the ongoing cost of actually running the network. I mean, for instance, the HFC network that Telstra and Optus have run out is reaching the ends of its economic life. Most of the connectors and aerial codes – you need a replacement.

TRENT WILLIAMS: It's all being upgraded. Have we taken in consideration the operational cost of maintaining the copper network or the HFC network – is that the question? Yes, we have. One of the things – and – and it's part of the manner in which NBN was established, is we have, from the Federal Government, what's called a statement of expectations. That statement of expectations says "Build a National Broadband Network that provides Australians with faster broadband, as quickly, as affordably, in terms of cost to the end user, and as cost-efficiently, as we possibly can." In doing so, we analyse all of the requirements of that statement of expectations, and we present that back to government. So all of those costs are taken into account. The other thing about it, with regards to. Had FC, with regards to the fibre to the node, indeed with regards to the fibre optic, our fixed wireless and satellite – we have built in that it's all upgradeable. It is a network we are building for the future. Because of the mandate we've been given by the Federal Government, it is going to be able to be delivered faster, which is what Australians want.

SHARA EVANS: I'm going to use my prerogative as the chair to ask the next question. Then we have one over here so we can get the mike. Last week, we had a decision from the

ACCC essentially allowing TPG to roll out its own version of fibre-to-the-basement and then, presumably, use the copper HFC and the risers. There has been a lot of speculation as to what the impact on NBN Co's roll-out might be, with TPG and potentially other providers taking that same route. One of the concerns that I've seen expressed is that, with potential cherry-picking of the most lucrative apartment buildings or multi-dwelling units, the business case for regional roll-out may not be there if other providers are taking the more lucrative metropolitan areas. What is NBN's response to this?

TRENT WILLIAMS: We're trailing what we call an accelerated roll-out. We work in the environment in which we're given. The ACCC, or whomever it is makes decisions, we will work within their guidelines. In terms of what TPG or other carriers are doing, we are looking at how we can compete. I think our key message is, we're offering open access. When we put our network into a building across the country, you can choose any carrier, any telephone or internet service provider. And that's going to be our key message with these things. It is a challenge for us. The business is looking at what our options are. But we're comfortable that we're going to be able to roll out and to compete.

SHARA EVANS: The problem is, actually, a technical problem when it comes to VDSL, because we get cross-talk and interference among the copper risers. Is there a plan at NBN Co to basically get there first?

TRENT WILLIAMS: We've got to go to the whole country, so I suppose what we are doing is looking at how we can expedite roll-out in certain areas to compete. It is something that we're going to have to work with. It's a pretty new decision that's been handed down, and the business is examining it.

SHARA EVANS: OK. We had a question back here, if we could have the microphone?

NEW SPEAKER: Marcus Wigan, ACCAN. I've had a lot of questions coming from people in the area I live in, which is just outside the inner district of Melbourne, where they have HFC cable. All of them have pupated 100-megabit service which can barely reach 15, because of the heavy-laden load on it. When the mixed technology came up, most of my street, who know that I'm involved in this, expressed great alarm that we might be locked out of NBN fibre. Whether this is true or not, NBN Co has not done anything to reduce this anxiety or taken any steps, that we're aware of, to do so. I would like two answers – one is what you're doing, and two is what you're doing to communicate this lockout from getting better services up to maybe ADSL2+ standard?

(LAUGHS)

TRENT WILLIAMS: Whereabouts in Melbourne are you?

NEW SPEAKER: Heidelberg, right behind the Eastern Health area.

TRENT WILLIAMS: Two things, really. One is we are currently in negotiation with Telstra with regards to the availability and the quality of the copper network. And where we are going to be able to use the copper. Similarly, for the HFC, we'll be talking with Telstra, with Optus, with iiNet and all the other groups across the country to establish what there is. So basically doing an audit of what networks are available, and then work out where the HFC, where the copper, where there are gaps and all that, to up with, I suppose, a network architecture. In lieu of having those agreements, we can't release a network architecture with regards to the entire multitechnology mix plan. As I mentioned before, we are continuing to roll out the network across the country based on where we've already begun construction, and rolling out across those areas. You are right – it is very difficult for us to say to anyone in Heidelberg, or across the country at the moment, definitively what type of technology they

will be getting, in lieu of having an agreement with the likes of Telstra. So we are aware of that as an organisation. What we are looking at, at the moment, is what kind of general messaging we can get out just to explain something like I've said today – that there is momentum within the organisation, that there have been fundamental changes. There is a high expectation across particularly those areas that haven't got fantastic broadband at the moment. As to when is the NBN coming and all those standard questions. As soon as we have answers, we will be giving them to you. At the moment, we are waiting on these negotiations, which we are doing as quickly as we can, to come up with a plan, I guess, of what the multitechnology mix network will look like. As soon as we have that, we'll be communicating.

SHARA EVANS: We have time for one last question. OK?

NEW SPEAKER: Hi, Trent. Johanna Gibson from Isolated Children's Parents' Association. Most of our families would educate their children via schools of the air, and my question is really when are the Interim Satellite Service improvements going to be seen out in the bush?

TRENT WILLIAMS: So we made an announcement recently in terms of accessing more spectrum, I believe it was. I can't remember – I was in Bali at the time when they made the announcement, but I do know that that is in the process of being rolled out as we speak. Clearly, we have two satellites scheduled for launch in 2015. That is something that I am particularly aware of in terms of the challenges faced in regional and remote Australia. There have been changes made to our satellite service, and hopefully they're rolling out as quickly as we possibly can.

One more quick one?

SHARA EVANS: 30 seconds.

TRENT WILLIAMS: Go! Yell it out.

NEW SPEAKER: Do you foresee any particular problems in facilitating migration with respect to fibre to the node roll-out? Are there any things in particular that you see with respect to a cutover at the node that raised problems for the migration process, and how is NBN Co looking to mitigate those risks?

TRENT WILLIAMS: There will be a cutover, I would have thought, of some description. I don't know the exact details of that at the moment. We're still trailing all those things. Our key challenge is, as I mentioned before, even with the existing thing, is communicating over the 18-month time frame, "What is the best way to get information to end users?" We do direct mail, I think we do 6-8 direct mails over an 18-month period. You don't have to be a rocket scientist – not everyone is going to read a direct mail from NBN. There are a whole range of channels we need to use. We are continually refining that model. When we move to an FTTN world, we will be leveraging those learnings that we've had today, and evolving with them.

SHARA EVANS: OK. Unfortunately we do need to draw this part of the session to a close. Trent, thank you so much for your presentation. We've all enjoyed hearing from you.

TRENT WILLIAMS: Ta.

SHARA EVANS: Our next speaker this morning is from the Department of Communications. Philip Smurthwaite. He is the manager of the regional telecommunications policy area and, in particular, he is looking after the Mobile Black Spot Program, which is the $100 million government commitment. I will leave it to Phil to tell you a bit more about that.

PHILIP SMURTHWAITE: Good morning, everyone. You might have heard yesterday Paul Fletcher talking about the Mobile Black Spot Program, but we have $100 million to heavily target small communities that don't have coverage and also major transport routes across the country.

What we're interested in particularly is attracting additional funding – in the first instance from the applicants, which will be the mobile carriers and also network infrastructure providers, but also we've made a serious effort over the last few months to engage with local councils and also our colleagues in state and territory governments about leveraging some additional third party investment. So one of the key principles we have been looking at from our end is that we get maximum value for the money we are prepared to put in. It is no secret that the carriers will claim around 99%, between the three of them, population coverage – as having mobile coverage. What that means in a land mass scale is something significantly different. We think that it is around about 30% of the land mass actually has mobile coverage, and that would be a mix of handheld and external coverage.

So the challenge is large in terms of improving the overall coverage footprint. It's clear that $100 million is not going to fix every black spot in this country, but we're making a serious attempt to leverage what we can to take it out as far as we can.

One of the things we're looking at in terms of the program is a slightly different way of delivering it from some of the previous programs, whether they are Commonwealth or state, that have been done before. So traditionally, the model that we've taken forward is a winner-takes-all approach, and that has certain advantages obviously for the incumbent operator, but also it does preclude the second and third operators from being able to put in really serious bids. So we think by a merit-based assessment process, we're looking to generate quite a bit more competitive tension in the application process than what we've been able to achieve through a winner-takes-all process.

So, the site-by-site assessment in fact can be on an individual base station level or, what we think is more likely to happen, is a series of clusters of base stations. So, the carriers will build potentially up to 10 or 20 in an area. We're proposing to include a cluster as a single sort of application, if that makes sense.

OK, one of the things we have been doing since December last year has been to take advice from communities – and certainly their representatives as well – about the scale of the mobile coverage problem that they face in their own community. So, we've had quite a significant response – in fact, over 10,000 individuals and representatives have come forward and either commented on how the design of the program could look, or to nominate black spots. So, from those comments, we've actually come up with about 6,000 unique mobile black spot locations across the country and they've been added to our database. Now, these concerns that have been raised reflect a broad range of community issues, ranging from completely no coverage at all to potentially having some concerns with the carrier that they're with – and that's not necessarily to say there is a problem with another carrier in that area.

We'll be providing that database to the applicants and they will be able to use that to assist them in preparing their bids for the program.

So that's 6,000 in one hand – the capability from our side we think to build around 250 to 300 base stations. I would urge you not a make a simplistic comparison between the two, because the reality is, with the database that we've got and our analysis of it so far, you could actually cover multiple black spot locations with the one tower and I think we've got a range between 1 and 16, and a number of those in excess of 10. So it is not as simple as

saying, "You are only going to fix 5% of the problem". I think the response to that is that, potentially, we could cover well over 1,000 of those black spot locations and maybe more. So I would urge you not to think that it's only going to fix 5% of the coverage problems that have been reported to us.

So if I can just touch on co-contributions. This is actually one of the most exciting parts of the program for us. Certainly we will be looking for matching funding from the applicants and our expectation is we'll get something of that order. What we have also managed to achieve, and there has been a couple of State Governments who have publicly committed to funds, and we're certainly working with a couple of other ones who are not in a positions to make public announcements yet, but ranging from a small investment from the Tasmanian government to some quite significant, in principle, contributions from Western Australia and Victoria. We're looking there at about potentially in excess of $30 million or $40 million. Now, that has got to line up with our own policy objectives but that is the sort of scale of the funding we're talking about from State Governments. That, on top of another really important part, has been the work we have been doing with local councils. So we effective wrote to every local council in this country and we got responses back from around 130 so far and we are still counting from councils prepared to offer either cash or an in-kind contribution. Clearly most councils are not in a position to make a financial cash investment in the program, but what was really exciting was the amount who have come forward and made the observation that they have some existing infrastructure, for example, that might be use, or they are prepared to assist with civil works or they would offer a peppercorn concessional lease for a site. So those type of things will reduce the capital costs, slightly, of the towers but also really importantly, in areas where the business case is quite marginal, it will help reduce the operating costs as well for the carriers as they go forward.

So that is quite exciting. The other really important thing there, I think, is that prioritising planning approvals – this is something that can be a big headache for carriers and the commitment to still obviously follow process – and we're not looking for that to change – but a commitment to take it far in a timely manner is another commitment that we have been quite welcoming of. As I said before, there's still an opportunity for local councils or even other third parties – and we have had a couple of small bites from some mining companies to come forward and offer co-contributions – so we'll take those right through the application process. I mean, the net result is, we want to get out to as many communities as we can. If we can get 250 with our money, what can we get if we add some state money and what else can we get if we add some in-kind contributions there? So I'm not in a position to put a number on what that will look like but I'm quite confident that we are going to exceed our demand targets.

So just briefly on the role of NBN Co in the program. So, there are opportunities there. I'm not going to say it is a silver bullet in every location. So in the program you are going to need NBN Co to have an interest in going to the site and a carrier that has an interest going to the site and it has got to have a cover that we're interested in supporting as well. What I have been impressed with in the past months is the engagements between carriers and NBN Co. We think there will be some good outcomes there particularly in relation to the fact that NBN Co is talking about building around about another 1,000 fixed wireless sites that the planning is still not settled for. So there is an opportunity there to really leverage the government's investment in the NBN Co, but also help us out with the mobile coverage program. There is, I think, another side to the role of NBN Co in terms of improving mobile coverage and that is probably more in the says where, potentially separate to the program, but if there is an opportunity there for carriers, there may be an opportunity to improve the competitive outcomes in that area as well.

So, we've touched on what we're trying to achieve with coverage. The other really important aspect that we're trying to deal with is encouraging competition in the market a little bit. So,

obviously it's quite competitive out there between the three carriers and where you can get more than one carrier in a location, we think that there's value in that for consumers. So what we've agreed and what we've proposed in our guidelines is that, when we know where all the base stations are that we're proposing to support financially, it's going to be a minimum requirement that the other carriers are offered an opportunity to co-locate on their site. So the principle is that the second or third operator would pre-commit to that site. The really important thing is to get in before the detailed design phase of that base station is done, and the reason for that is that that's where you generate most of your costs savings. So if we get an early commitment from the other carriers, then we can build the site to suit those carriers and the cost savings are significant. Trying to retro-fit a base station and coming along three or four years after the event can be almost as expensive as building a brand new site. So our view is that the pre-commitment is an important principle and the opportunity for the other carriers to get on board, I think, is quite important. I would say, though, we will be enabling the co-locater, or the applicant, to build the tower as they see fit. So we're not interested in over-capitalising towers where there is no interest from a second or third party in being on that site. So indicative timing – and I would stress indicative – is I want to get to market next month. So we have had a bit of time now to talk to our third parties, we've talked to the carriers, we've talked to the states, and I think we are in a position now where we're quite close to being able to go to market. You will see that we're actually proposing to have quite an extended application period, out to February next year. So the reason for that is that, when you do bring third parties into, you know, a deal like this, the reality is, there are commercial agreements that have to be negotiated. There has to be a decision, certainly, from the applicant whether the offer from a third party is, in fact, attractive to them. So there's quite a bit of leg work to do over that intervening four-month period and also the states are going to undertake – the ones proposing to put funds in are going to have to undertake their own process as well. So it seems extended, but I believe that's the minimum amount the time the carriers will need to pull this complex deal together, with the end game always being of maximising everyone's investment, getting out to as many places as we can, and we need to recognise that that will take a little bit of time. We think that, if we close in February, we should be well in a position by April to make those decisions.

So, look, that is a broad overview of the program. I've got quite a few minutes now, if anyone has particular questions.

SHARA EVANS: I'm sure that there are lots of questions. Can we have the mic up here, please?

NEW SPEAKER: Hi, Josh Taylor from (?). When you are choosing locations, obviously there is a lot of demand for fixing black spots but one of the things telcos run into is this "Not in my backyard" effect of people not wanting towers built near them. How is the government deal with this part of the project?

PHILIP SMURTHWAITE: We totally accept that is part of the program and we think there will be more sites that we have applications for than we have the ability to fund. So we accept the planning processes in place. In the end there can't be a sensible outcome achieved with a particular site, really the option for us is to move to the next site on the list, frankly. That will happen, Josh, I think. There's no doubt in the course of 300 sites, you can't reasonably expect every single one of them will go through unscathed.

SHARA EVANS: There was a question right back there.

NEW SPEAKER: Julian Ogrin from the University of Sydney and an ACCAN member. I suppose I had a question for yourself and maybe others as well, and it was maybe reflecting on, it seems to me, the origins of this program go back 15 years or so to the then-Coalition

government, if I recall correctly, trying to put bits of money to address market failure around digital technology access, and I just wonder, is that good enough? We have NBN, we have a black spots program, we have public wi-fi rollout going on, but it seems to me we've never addressed the question, what is the relationship between the dynamic mobiles area and the NBN? And I think there's various reasons from a public policy perspective why that is the case. It seems to me, in what you have outlined today, you know, you are doing important work down in the details of how you would knit things together through co-location, open access, and so on and so forth, but it is a very market-based approach, which is fine, it is a dynamic market. But it just seems to me, you know, there is still an elephant in the room in public policy – what is the relationship between mobiles, NBN and particularly an area like public wi-fi, which I think has languished? I would be interested in your comment.

PHILIP SMURTHWAITE: Sure. So obviously NBN's predominant focus must be on delivering the National Broadband Network. There's no question of that. What we're looking for is to harness every opportunity we can to also do mobile coverage. We know that the mobile market is essentially quite competitive in the areas where it is viable for the carriers to go. So it's not necessarily a market failure – the market has worked as effectively as it can in terms of delivering coverage and competition to 99% – somewhere between 94% and 99% of the population. So for the market on its own devices to be able to achieve that is no bad thing. What we do know is the coverage footprint just simply isn't growing from what it has been. So Telstra I think put in $1 billion last year to self-fund its network. So that is a significant amount of money. Where it's mostly going, obviously, is in rolling out the 4G network and also infill, trying to deal with congestion problems and those types of things. So we know that they're not without some incentive prepared to get out further than really where they are now. So $100 million is a good first step as has been put to me but some great regional people who have high expectations about what happens next. In the first instance, I want to focus on delivering $100 million project, I want to focus on seeing how this merit-based assessment process works in comparison to, you know, the winner-takes-all sorts of approaches we've taken before. I think the proof of the effectiveness of the program will be in the results we achieve and where it goes after that is a matter for government. So, look, there is a budget and we have to work within the budget. You know, is mobile – do they need more funds? You know, I've got 10,000 people who have rung me in the last 12 months to say, yes, that is probably the case. But we have to balance that, as do all governments, to live within our means. So we will do what we can and see where that takes us after that.

SHARA EVANS: We have a question over here, please.

NEW SPEAKER: Thanks, Brendon Cody. I just had a question about the competition aspect, and you've talked about co-location, which is obviously potentially an important source of competition, but given there's public funding going into the rollout of this program, has thought been given to requirements on the successful carriers to either allow roaming of other carriers on to sites which are funded in this way, or to allow – to enforce a requirement to allow mobile virtual network operators on to those elements of the network?

PHILIP SMURTHWAITE: Yes, so, look, as a first principle, roaming has a certain attractiveness as a public policy principle. If you are putting in money, you want the most people to benefit, that you are prepared to put in money. There is, of course, not a mandatory roaming system in this country – and it has been looked at a couple of times by the ACCC and they've decided it is not something that they are of a mind to regulate. So we're in the commercial realm when it comes to roaming. So I think, commercially, there are some serious challenges about getting all three network operators to agree to a roaming agreement. There are certainly instances, at the moment, where two of the three are already – already have commercial arrangements in place for roaming. So we're interested in roaming. It can't be a mandatory part of the program. We think there is a risk there that the

carriers would not participate and that would sort of undermine the whole purpose of the program, frankly. So we're interested in roaming, it won't be mandatory, we'll see what the carriers come up with, and it is a potential in the program. But, in a practical commercial sense, I'm not confident that all three operators would agree to it.

SHARA EVANS: Phil, in the discussion paper, there were three options that were put forward in terms of potential ways of looking at the funding. The first was a single mobile operator, and I think you've pretty much eliminated that from your discussion today. The second one was merit-based and you have mentioned that in your speech today. But the third option was a network infrastructure provider to coordinate the implementation. Has there been some sort of decision reached within the department as to which option is improving to be explored and could you comment a bit, perhaps, on some of the responses to the discussion paper on the different options?

PHILIP SMURTHWAITE: So having a network infrastructure structure provider doing this has been done in other places such as the United Kingdom. It was not an option that had a lot of attraction in the discussions we have had. On balance I would have to say that this model is not one that really anyone was particularly attracted to on the basis of the discussion paper submission that is we received. So the concept of that would be that you would just build towers, you know, as many as Broadcast Australia or Crown or one of those guys could afford to build with the $100 million and then you would seek to get mobile network operators on those sites. We're not in the business of building towers that don't have a guarantee from a carrier to come on now. So I guess at its most basic that's what we're interested in. So certainly network infrastructure providers can have a role in this program, and it will be wonderful if they to, but they need to bring at least one carrier with them in the event they are proposing to be in that program. So the options that you talked about, this wholesale network, if you like, has not proved to be a model that we think we could implement in this country.

SHARA EVANS: So, to summarise, it would be option number two which is the order of merit from base stations proposed by multiple mobile network operators which would be the...

PHILIP SMURTHWAITE: Yes and I think I flagged that pretty closely in the discussion that we think the merit one will achieve the best competitive outcomes.

SHARA EVANS: Thank you for that. There is a question back here, please.

NEW SPEAKER: Hi, can I ask, I was really interested in the $30 million figure first. Was it South Australia and Western Australia combined? Or was it separately from the State Governments?

PHILIP SMURTHWAITE: So South Australia have not made any commitments to us at the moment. Certainly the two public – the most significant ones are from Western Australia and Victoria. Now, in terms of what the actual dollar amount will look like, that is interesting because they're trying to achieve a couple of different outcomes, as well as improved mobile coverage. So Victoria has committed to improving wi-fi as part of their overall package, on the passenger routes from, say, Ballarat to Melbourne and things like that. So they are a bit out of the scope of the program for us, but there's enough money – if they have $40 million, they won't need $40 million to do the wi-fi and the rest is proposed to go to assist with the black spot. So I'm hesitant to put an exact number on it, but it's not insignificant. And certainly Western Australia has publicly committed in the order of $40 million as well. Some of the sites they are interested in for reasons that the State Government has an interest in may be less attractive to the Commonwealth. So we may not be able to partner on to the tune of $40 million. But they will do some sites on their own, as I understand it, and we'll partner with some to the extent they are successful through the program. So I think it's a

pretty exciting opportunity, but, yeah, the quantum, I think, is – we'll find that out as we go through the process.

NEW SPEAKER: With over 100 local councils or so looking to in-kind funding and funding directly, could we see the funding double over $100 million, do you think, in terms of public donations?

PHILIP SMURTHWAITE: You are very optimistic! No, I don't think it will double, I don't think it will. But it will be significant in my mind.

SHARA EVANS: One last question and then we will go to a panel session where there will be an opportunity to ask further questions. So, is there any other last questions at this point? Yes, Josh? Can we get the mic over here?

NEW SPEAKER: Sorry, just in lieu of anyone else asking questions. In the submissions, I remember Telstra talking a lot about it didn't want the rollout program to essentially be a subsidy for Vodafone and Optus to supplement the networks to compete against Telstra. How do you manage that sort of dynamic between the competitive tensions between the two carriers on network coverage?

PHILIP SMURTHWAITE: Yes, so look, we are about new coverage, Josh, and that is a really important principle. That's what we will be rewarding, the new sort of premises that get coverage and the new highways that get coverage. So the competition elements are important and certainly the co-location aspect is a minimum requirement. There are other opportunities, potentially, for operators two and three, if they are of a mind to jointly do it, they could do that and that would get you a new coverage outcome and a competition outcome. So we are trying to finely balance them. But I do want to make it clear that we are about new coverage.

SHARA EVANS: Please join me in thanking Phil for his presentation.

We have John Chambers, and Dan Lloyd, corporate affairs director at Vodafone. I'll be friendly and sit with the panel here, but I'd like to welcome everybody.

(APPLAUSE)

I have a couple of pre-prepared questions that came from a number of ACCAN members, as well as myself, and we will also be taking some questions from the floor. The first thing that I'd like to turn to – Dan, I'm going to put you on the spot with this one first. Vodafone has very strongly supported using the NBN fixed wireless bill to expand mobile coverage. The NBN and fixed wireless and satellite review, however, found that there was a high degree of overlap between the projected NBN fixed wireless footprint and the existing mobile network footprint of the three mobile operators. In fact, it's been told to me that they found only one site that they found suitable for infrastructure-sharing out of that review. In this context, what difference will using the NBN infrastructure make as far as expanding non-urban mobile coverage?

DAN LLOYD: Thank you, Shara. If I just take this question in two parts, I'll come back to the question that you asked. Our first question that we ask is, since NBN is being deployed as a ubiquitous national network, the time is perfect to ask what more could be leveraged off the NBN. The NBN started as a question of a fixed substitution and how to enhance competition and services in fixed broadband. But now that the vision for that network is laid out and now that that network is being built, the potential of that network to enable broadband, both fixed and mobile, is enormous. And if we don't start to think very quickly about how to leverage that potential, then it becomes much more difficult after the network is built to do that. There

are really two things that we've been advocating. I think the first and most important is actually the potential of NBN to provide back-haul transmission services for mobile networks. Australia is undeniably one of the most geographically challenging places to roll out any sort of network, any sort of communications network, certainly any sort of mobile network. The land area and the low population density is truly exceptional. That means there is a very significant barrier to any one network rolling out, and the figure of around 30% of the total geography was raised before, but an even bigger barrier to a second or third network rolling out anywhere we think beyond about 80% population coverage to roll out a really competitive network that is actually a compelling proposition.

So the potential of NBN, with very little incremental investment to connect, say, 5,000 base stations in addition to the 8 million premises it's connecting, to run a small piece of fibre a small distance in order to suddenly bring an exponential enhance. To competition in mobile is an enormous potential. That, I think, is a much easier question than the one that you raised, and one that we're pleased to see through the multiple reviews has been highlighted as one of the huge opportunities both to enhance competition in mobile, but also to lower NBN's cost, to lower everyone's costs, and bring additional revenue streams into NBN. The second one was always going to be a more challenging question, which is NBN is rolling out an LTE fixed wireless network. We are also rolling out an LTE wireless network. Telstra and Optus are rolling out LTE wireless networks. Overall, I've spent 10 years working with Vodafone Group in India, UK, South Africa and a dozen other countries. I'm really surprised that, given the geographic challenges and the clearly problematic market structure where there's very little competition in regional Australia, that there isn't much more discussion and much more prevalence of infrastructure-sharing, co-building, co-location, national roaming, in Australia. Our challenges are much bigger. Our market structure is much more problematic. But there's a lot less discussion and a lot less actual co-building and national roaming than you see in most other markets. The idea that we put forward was, while NBN is building its fixed wireless network, wouldn't it make sense to look at whether there are synergies with a mobile network, and whether there's a co-build that's possible? It's true, and we always knew there would be significant overlap of the footprints, but the issue is that once we get beyond about 80% of population coverage, our mobile network is necessarily very thin. It's very few base stations very far apart, transmission costs so high that capacity is quite limited. We always looked at this as an opportunity to bring a serious competitive mobile service rather than a question of whether it could provide coverage in areas where we had no coverage at all. We're still very keen to continue that discussion. We think there's a very serious debate about how to bring together the debates around NBN and competition in mobile so that both of them work together to enhance benefit for consumers overall.

SHARA EVANS: To put it in a nutshell, it's about competition rather than expanded coverage where there is no other mobile network?

DAN LLOYD: It's about both. The back-haul component is about additional coverage and competition. The fixed wireless question is about a little bit of coverage but mostly about competition, exactly.

SHARA EVANS: OK. John, I'm going to allow you to comment as well. I'd be remiss in not doing so.

JOHN CHAMBERS: Telstra aren't opposed to the NBN roll-out being used in other ways to support other network infrastructure. However, we do have a different perspective on a number of the points that Philip raised that are more in line with some of the comments made earlier. Certainly, at a coverage level, Telstra's already invested many, many billions – in fact, Phil mentioned $1 billion. We've spent over $2 billion in the last year alone on transmission and also our spectrum assets and many, many billions in the last 10 years that we've invested heavily in to roll out to 99% coverage of Australians. We're now investing in

4G deeply, and our 700 megahertz spectrum, and rolling that out rapidly over the next 12 months, where we'll take that to 90% of Australians, with our world-leading 4G network with much greater depth and penetration than we've seen so far with 4G. When we looked at the NBN coverage, it's between 93% and 97% coverage, and we do see significant overlap. We don't see great coverage benefit by using NBN towers to roll out more mobile coverage. Certainly, in many cases, the NBN towers, the fixed wireless towers, aren't in the right spots, necessarily, for mobile coverage as well. We don't see a great coverage advantage there. But we're not closed to it. If there was one, we'd be keen to be involved in using that infrastructure to create greater coverage for Australians. We are very passionate about a 37ing competitive environment in Australia. And we do see a thriving competitive environment. I look at products across all of our sectors, and my days are consumed with competition and thinking about our customers, doing more for our customers, and competing very, very actively in a very, very competitive environment. So we do see that there are currently regulatory settings that encourage, in our mobile network, Telstra, to invest in the way we have, and to invest heavily in great, differentiated coverage for Australians. We want to continue to see that happen. We would hate to move into an environment where there wasn't an incentive for us to continue to invest, to create great differentiated coverage for as many Australians as possible. That's our concern with mandated roaming, and that's our concern with other mechanisms that would disincentivise our investment.

SHARA EVANS: To ask you a very pointed question with respect to NBN fibre being put as backhaul to mobile base stations, would Telstra oppose the use of NBN fibre to base stations?

JOHN CHAMBERS: We wouldn't actively oppose. It wouldn't be our preference, certainly. It's NBN's business, really, to do what they do with their network. It's a question for NBN. But it's not our preference – we don't see a great benefit in it. We make available transmission for the other carriers, at this stage, to use. It's their choice whether to invest in Australia or not with the funds they've got globally. That's their choice, whether to invest in how they manage coverage. Obviously co-location already exists on all of our towers, so options to invest in those ways is already there.

SHARA EVANS: OK. Phil, from your perspective, how important is it to your program – the black spots program – that NBN roll out backhaul to mobile towers?

PHILIP SMURTHWAITE: Well, in the first instance, they don't have a commercial product. Let's be clear about that. There's certainly a trial going on at the moment. In the event that works and that adds more competition in the backhaul market, certainly in the context of the program I'm delivering, then anything that reduces cost and gets us more sites is no bad thing.

SHARA EVANS: OK. We have a question that's on voice file. Is that teed up and ready to go? It's been pre-recorded from an ACCAN member. I'd like to play that now, and that particular question has to do with Mobile Black Spots. We'll play that, and follow on from there.

NEW SPEAKER: My name is Duncan Taylor. I'm president of the Isolated Children's Parents' Association of NSW. My question relates to the Federal Mobile Black Spots Program. We all understand that telecommunication companies have shareholders wanting profits to be maximised. We also understand that these companies have community-service obligations and policies that we hope are more than just rhetoric, and that we trust do influence their decisions. What type of methodology-in-waiting will telecommunications companies adopt to assess non-profitable factors, such as enhancements to community education, health and safety, which are extremely valuable to rural and remote communities,

in calculating their bidding for extending coverage under the Federal Mobile Black Spots Program?

SHARA EVANS: What I'd like to do is address this to the carriers first, and then to Phil. John, I'll ask you to go first. What sort of waiting, if any, would Telstra give to issues such as enhancing community education, health and safety, as opposed to pure ROY on number of subscribers in an area?

JOHN CHAMBERS: In terms of the black spots program, we agree with Phil that the most important thing is getting more coverage to people who don't have coverage today. That's absolutely our focus, what we think the program should be focused on. That said, we believe Telstra does more for Australian communities than any other carrier. We invest heavily in that. We have invested heavily in our Access for Everyone program. We really do spend a lot of time, money and effort in getting services to people in need throughout Australia, through a variety of means. We are absolutely committed to the community. We spend a lot of time working with the local communities. I, myself, have only been back in the regional areas for six months, but spent seven years living in a regional area in Australia. Working for Telstra, I was very lucky to do that. But being able to work and live amongst regional areas and understand their needs – we're very committed to the needs of regional people. Put as far as the black spots program, we're certainly committed to getting coverage to more people. That's our core driver.

SHARA EVANS: Dan n, what about from Vodafone's perspective? There are a lot of areas that your network doesn't cover. How will you pick and choose which ones might be attractive to you?

DAN LLOYD: To pick up a couple of themes here – the first one is, clearly the limits of our mobile network are less than others'. There seems to be some sense that this might be driven by an unwillingness to invest and that there's simply an easy business case and a choice could be made to invest. I think if that were the case, then we wouldn't need an NBN, we wouldn't need a Mobile Black Spots Program, we wouldn't need any discussion around co-location, infrastructure-sharing or roaming. Clearly in a market you reach an economic feasible where it's not feasible for even one operator to invest, which is why Mobile Black Spots and NBN are so critical. Again, in making these policy decisions, we can make a policy decision not just about incremental coverage, but in how to introduce incremental competition at the same time that doesn't fundamentally interfere with investment incentives, as long as those policies are clear in advance. For example, co-location is part of the policy for Mobile Black Spots. We don't believe that disincentivises investment. It potentially lowers costs for everyone. What you can do, returning to your question, is that these sort of broader benefits that we're talking about, particularly in terms of Vodafone's global programs around e-health, telemedicine, machine-to-machine services for medical monitoring, all these sorts of things – at the moment, we reach a limit as to where we can take those into account, because we simply don't have an ability to access, to build our own network, or to access a network that allows us to deliver those. In terms of this program, we're looking at this as a huge opportunity to enhance the number of areas in which we can deliver those benefits. But it's an area where there's a very fundamental problem, and a need for a connected policy environment that brings all these pieces together to enable coverage and competition.

SHARA EVANS: Phil, you had intimated in your talk that the actual tender documents will be out very shortly. Is there anything, in terms of a decision criteria, that has been decided at this point that will give weight to issues like coverage of community education, health and safety requirements?

PHILIP SMURTHWAITE: Certainly I made the observation earlier that our main interest will be in small communities, and also major transport route. Of course, many other black spot

base stations that do get funded will cover both. One of the challenges I think that Duncan has alluded to is, how do you make a subjective decision about who's more valuable than someone else? Look, this is a really tricky space. Every community I've been to has approached me and said, "I have a really special case here and I should get special treatment." The challenge is, 6,000 people have mead the same case. It's actually quite challenging. I think we will remain focused on premises and coverage, but I do make the point that councils and state governments that are serious about improving mobile coverage in their area are coming forward in significant numbers to say, "We've got skin in the game. We're prepared. This is how much we care about this. We're prepared to do it." That's a strong measure as well, in my mind.

SHARA EVANS: That leads very nicely to my next question, Phil, which is – there are somewhere in the neighbourhood of 4,000 or 6,000 sites that have been identified that are in need of improved coverage, or at least people say require better coverage. But not enough funding to go around. How will the Commonwealth, and the carriers, when I ask the question to you gentlemen – how will you determine the most deserving 10%? Will it be based on co-contributions as an important weighting factor? If a state kicks in, let's say, $30 million or $40 million, and they identify a list of prioritised, let's say, 50 or 100 sites, will those site be given higher priority than some other, perhaps equally deserving, sites? What sort of things is the department thing thinking of, at this stage, on how to figure out where to give that money?

PHILIP SMURTHWAITE: OK. The first point I'd make, which I alluded to in my speech, is that I'd encourage you not to draw a straight percentage between the number of locations that we've had reported to us, and make a direct relationship with the number of sites that we (inaudible). As we've said before, 16 within a 5km radius – an average base station may well be two or three times that, easily. Our expectation is that we will get multiple locations with just about all the base stations that we will be funding. It's not 10%. I don't know what the number will be. But I'm quite optimistic it will be significantly north of that.

SHARA EVANS: It won't be 100%, for sure?

PHILIP SMURTHWAITE: It clearly won't be 100%. That's just impossible. The three points which I touched on in my speech remain our three main principles – the amount of new coverage, the amount of competition that we can generate, and the amount of co-contributions that others are prepared to put into. That's generally the principles that we'll be adopting.

SHARA EVANS: That's very helpful. Let's say from Telstra's perspective, John, how will you determine or your team determine which sites to get to?

JOHN CHAMBERS: It's about getting coverage to people who aren't connected today, as we said earlier. We did an assessment of the 4,000 sites we were aware of. Half to two-thirds of those within existing coverage boundaries. There's obviously plenty of reasons why a black spot might be put afford. We'd like to think that there are a lot of those that already have coverage that could be augmented, use of smart antennas, use of a whole variety of means, to really improve the coverage in those areas and, really narrowed down to the areas where there'll be a great benefit. That's obviously where our bid will come from – we'll help the areas where we see a huge benefit in connecting thousands of new Australians. Beyond that, obviously the contribution, working with the state governments as well, we do see a nice, synergistic effect that can create from the 100 million a much greater outcome, which we'll very actively be part of.

SHARA EVANS: OK, and Dan from Vodafone's perspective – what criteria will you use?

DAN LLOYD: We think there's a huge opportunity here. Clearly there's a basic question of whether we can make any sort of economic case to invest, and you mentioned the question of the state funding. The state funding is enormously helpful, both because it significantly improves the investment case, but also because it gives us confidence that there's an alignment between state and federal policies so that we're not going to do something under a federal scheme which is the in fundamentally disrupted or something happens in a different direction under a state scheme. That's going to be hugely significant in our thinking. Clearly we're talking about a network here, which is why we need integrated policy, integrated thinking. None of the carriers are going to be bidding for areas which are not contiguous to their existing coverage. Clearly, anything that's an incremental expansion to provide coverage is going to make a lot of difference to all of us. But we think, particularly for us, there's a huge opportunity here, because there's a lot of areas of regional Australia where our coverage in the regional centres – let's take Bathurst, for example – is actually pretty good. But people know, once they get out of town, they start to lose Vodafone coverage, then they lose Optus coverage, then they lose Telstra coverage. If we can use the Mobile Black Spots Program cleverly, then we can not only bring incremental coverage, but we can suddenly bring competition to probably 20% of the Australian population, which hasn't really faced effective competition in mobile to date.

SHARA EVANS: Thank you. ACCAN members report that people are increasingly using mobile data in the bush where they can. I think all of us would agree, anecdotally, that that's true. I'm wondering whether Telstra or Vodafone have any evidence of increased demand for mobile data in regional areas. Are you able to comment on that? I'll let you go first.

JOHN CHAMBERS: Sure. I don't think it's a surprise to anyone – 72% smartphone penetration in Australia, highest mobile broadband penetration in the world in this country. We're a very active mobile population. We've adopted the tools that access mobile data very, very rapidly. It's exciting. I think it's empowering the nation. It's a great step forward for Australians. In that, obviously data is increasing. We see 50% annual increases in data on the networks, and there's not a lot of differentiation of where you see that, metro versus regional. Certainly it is increasing, hence the need to continually invest in the network. It's a very capital-intensive exercise to keep networks running at the level that they need to to meet the expectations of consumers. Absolutely, is the answer, and absolutely will we need to continue to invest, to support that growth.

SHARA EVANS: Dan, are you seeing the same?

DAN LLOYD: Absolutely. I've seen the same not only in what we're seeing in Australia at the moment, but in every other market that Vodafone operates. Particularly once you get into regional Australia, where the fixed network is not currently performing anywhere near where it should be – we heard speeds of 56k or 128k earlier – there is only really one outlet for the extraordinary demand for data, and that is on the mobile networks. That's why we've been investing to expand the coverage. We've invested about $3 billion since 2011. We've brought about a 40% expansion of our coverage. All of the new areas that we're going into with that coverage, we're seeing very, very significant uptake of mobile data services. I think it's undeniable there's enormous held-up demand in those sort of areas that's just waiting to be unleashed. I think both of you would agree, and Phil as well, that the data tsunami is not going to stop any time soon. Certainly if we look at the internet of things and all the gadgets and wearable devices that we'll soon be carrying in our pockets and purses or inside of our bodies, it's going to keep growing. One of the things that's happening around the world is this whole concept of wi-fi hand-off from the mobile networks. We talk about public wi-fi, but this is actually a little bit different – it's carrier wi-fi 2.0. I'll ask you first, John – is there any work within Telstra to start looking at wi-fi 2.0 hand-off from the mobile network?

JOHN CHAMBERS: I think you might have heard about our recent announcement about wi-fi nation – rolling out thousands of public wi-fi hot spots and millions of community wi-fi hot spots piggybacking off people's individual broadband services. We think absolutely yes. It's really about connecting more Australians in more places with more network choice. And more network options. Really, best connection wherever you are. We do believe in carrier wi-fi. We think it's a good solution. Interestingly, at the moment, you see 80% of tablets that are being bought in Australia are wi-fi. They're not cellular connected. We we'd like to see more cellular connected, absolutely, but we'd also like to give more options to connect wi-fi tablets in more places.

SHARA EVANS: Do you see this as a cell hand-off, a complimentary service, or both?

JOHN CHAMBERS: We see it as complimentary. Our business case for wi-fi nation is based on differentiation and more services for customers in more places, for Telstra. Certainly being able to take their fixed-broadband experience with Telstra to more places around the nation – that's very much how we see it.

SHARA EVANS: Dan, what's your perspective?

DAN LLOYD: I've seen wi-fi roll-outs play out in many different markets. I think here, we're going to see a similar phenomenon, but probably even more pronounced – it's likely to really provide an additional choice where there are already other existing network options, it's likely to be quite prevalent in urban areas. Once you get to regional Australia – again, this is a networked industry – it's not just the costs of providing a tower, it's the costs of all of the other elements that go into providing the service, particularly backhaul and transmission. If there isn't a solution for backhaul and transmission, it doesn't really make an enormous difference whether it's a single mobile tower providing a large area coverage or wi-fi networks providing smaller cells. Again, unless we can find some integrated policy solutions, I fear that's going to give another option for urban Australians who are already well-served and leave regional Australia without the coverage and without the competition that it deserves.

SHARA EVANS: Phil, I'm curious – in the submissions that the Department received, did people talk about the Nexus of wi-fi and cellular networks and, perhaps putting in something with wi-fi at the same time as putting in, you know, new mobile towers?

PHILIP SMURTHWAITE: No, look, it didn't come up, frankly, in the context of the discussion papers. Certainly, we've run programs before in quite remote Indigenous communities around providing wi-fi. The genesis of that – and in fact, Keith Besgrove, one of the masterminds of that program, is here today. We put in some community phones into some very remote Indigenous communities over the last couple of years. They are satellite-based. It was well under wherever there are any universal service obligations in terms of providing payphones. These community phones, because they are satellite based, what they enabled us to do in remote communities was slight modification, not at great cost, was to begin to offer a wi-fi service there. What it showed really very clearly in those communities is that Indigenous people have Mobil phones and, if you provide the opportunity for them to use them, they will. The data rates were quite high. The number of people who used the wi-fi on that was quite exciting. We think that wi-fi is a genuine solution. Certainly for remote communities where the only real chance is to service them with satellite backhaul, that was an opportunity we took at low cost, and I think has proved quite fundamentally successful in those small communities.

SHARA EVANS: One of the other issues we talked about earlier today was roaming, and the fact that we have such a large geography in Australia and not every carrier is in every place. Phil, you had mentioned that roaming will not be a requirement as part of the Mobile Black

Spots Program. Putting that to the side for the moment, I'd like to ask our two carrier representatives whether there's any consideration to a roaming service, in particular to cover areas with black spots. Dan, I'll let you go first.

DAN LLOYD: I think you'll get two slightly different answers here!

(LAUGHTER)

Probably. I have a suspicion – see how this plays out. If we separate two questions – the first question is, should there be a regulatory mandate around national roaming? I think that's a very different question from the question as to whether there should be a policy framework that encourages collaboration and commercial negotiation not only on national roaming, but infrastructure-sharing as well. Again, I'm quite fundamentally surprised that, given Australia's geographic scale, given its low population density, given that there is clearly a limit to the areas where even one carrier can provide service, let alone two or three carriers who are inevitably going to have lower market shares and find it very, very difficult to justify any rational investment in those sort of areas, I do find it extraordinary that it isn't a vibrant debate as to why there isn't more infrastructure-sharing, why there isn't more national roaming in Australia. Because clearly, this provides the opportunity not only for increased coverage, but also for increased competition. There was a suggestion earlier that any sort of national roaming agreement would reduce incentives for investment. I simply don't believe that that's true. I've done national roaming agreements either as an access provider – providing roaming to other operator – or as an access seeker in seven different countries. In the end, it's simply a question of price. There is a point at which it is an extremely valuable commercial agreement both for the access provider, because they essentially are subsidising the cost of their roll-out through the wholesale national roaming payments, and also valuable for the access seekers, because they are prepared to pay for the incremental coverage and competition that they can bring. So I think it's a fallacy to say yes or no. Clearly the answer for Australia is more infrastructure-sharing, more national roaming than any other country, given our geographic scale and challenges. The question is simply what is the right model to bring that about, rather than a question as to whether you should have it or not.

SHARA EVANS: John, I suspect your answer will be quite different.

DAN LLOYD: Furious agreement, I'm sure.

JOHN CHAMBERS: We have covered our perspective a little already. We see Australia as having a world-class mobile network that's covering 99% of Australians. That's come about, in our footprint, through the right settings to incent Telstra to invest in a very broad footprint to differentiate. We've got 1 million kilometres more coverage than our coverage. It's important to us to be able to use that to differentiate our service, and to provide great services to Australia, and to continue the very, very strong investment profile that we have, which we're going to need to continue. These networks don't stand still. You don't invest once and it's all good – it's an annual profile we need to be able to work with our board and our shareholders to really drive. We see the current roaming settings as very positive towards driving that investment. We will continue to do so. There is, as we've said before, options for co-location. There are options for backhaul that the other carriers do have access to, should they choose to invest. We also have a national – when Telstra prices, we price on a national basis, in a very competitive way. Those prices flow through the whole country. Someone in the most far-flung reaches of our network is absolutely getting the same pricing that someone in a hotly competitive metro area is getting. We see those benefits flowing through to all Australians. We come with the current settings around roaming, and we think they incent great coverage for Australians.

DAN LLOYD: Therefore, would Telstra be interested in a discussion around national roaming?

JOHN CHAMBERS: I won't, ah...

(LAUGHTER)

It's not my place, actually, Dan, to respond to that particular question. But Telstra are a very open company.

(LAUGHTER)

SHARA EVANS: Does that mean you'll take it on notice to someone who's able to do that?

JOHN CHAMBERS: We'll talk to Dan offline on that one.

SHARA EVANS: Is that a pending offer, Dan?

DAN LLOYD: I don't think it was quite an offer. I was listening fairly carefully. It's an important question. Our position is that the last resort overall should be any regulatory intervention to mandate national roaming. But if there is a commercial discussion to be had, then that commercial discussion should be had. We believe that there is an outcome whereby all carriers can lower their costs, and we can bring true competition to 20% of Australians who really haven't had competition in mobile to date. So we look forward to a very healthy and transparent discussion around the commercial opportunities that are available, because if those opportunities aren't available, then it is a very different question around the policy and regulatory settings.

SHARA EVANS: Watch this space. We have time for, I believe, one or two questions from the floor. Is there anyone who has a question? If we could have the mike over here, please?

NEW SPEAKER: Thanks. Brendan Cody from Maddox Lawyers. John, you mentioned that Telstra is very pro-competition, and that's obviously good to hear. We've also heard that Telstra's geographic coverage of Telstra's network is substantially more extensive than that of the other networks. Effectively, that means that people who are living in the areas that are reached pie Telstra coverage but not by coverage of other networks don't really have access to effective competition. I understand that Telstra also doesn't provide access to those regions to NVNOs who are reselling its network. I was just wondering if you could comment on how that fits with Telstra's pro-competition approach.

JOHN CHAMBERS: A question about wholesale access to our network is that we provide access to our network in different ways. Certainly 4G isn't one that we currently are providing full access to, and there are some limitations around 3G as well. As I said before, I think we see a thriving competitive environment in Australia. We certainly spend all our time thinking about how to compete and compete even more effectively. Again, as I've said, the pricing regime that we have nationally is the same. We see the effect of that strong competition being available to avenue Australian where Telstra has a footprint. What's important to us is that we can continue to invest not just today, but tomorrow and in the years ahead, to create high-quality networks that provide great value, and value is an outcome of competition, but also being able to invest in quality. Value is a trade-off between price and quality. We think Telstra has got that trade-off right at the moment. Certainly our customers are positive towards that value at the moment. We think competition is very active.

SHARA EVANS: And we have one last question, and then we'll be closing the session.

NEW SPEAKER: Hi. Sorry, I'm going to be very sneaky and ask two very short questions.

SHARA EVANS: Limited to one, please.

NEW SPEAKER: Hmm.

(LAUGHTER)

Alright. If I can ask Dan, um, you talked about wi-fi – have you guys considered deploying wi-fi yourself, or in the past? Or are you looking at it for the future?

DAN LLOYD: The answer is yes, and Vodafone has deployed leading-edge wi-fi deployments in numerous markets.

(INAUDIBLE QUESTION)

Again, we've look at the case in Australia and so far have chosen not to deploy wi-fi. We do partner with some public wi-fi providers, but overall, we don't think the case stacks up in Australia.

SHARA EVANS: That's an interesting comment. We'll have to take that one offline. Please join me in thanking our panel. Some really excellent discussion today. Dan, John, Phil, give them a round of applause, please.

(APPLAUSE)

It's now time for our coffee break directly outside. Please enjoy.