
This is an electronic version of the transcript of a live event.

All reasonable endeavours were taken to assure the accuracy of the content.

However, due to the nature of capturing a live speaker's words, it is possible that it may contain errors and mistranslations.

Ericsson Broadcast and Media Services accepts no liability for any event or action resulting from this transcript.

The transcript must not be published without Ericsson Broadcast and Media Services' written permission, which may be withheld at its absolute discretion.

Day 2, Thursday 15th September

9:30-10:30am: Ask the Telcos – Practical Options to get everyone Connected

TERESA CORBIN: Yesterday – I'm going to move so you guys can see me. You can all see me now. Alright, good. Yesterday, the TCP Code got mentioned a lot – the Telecommunications Consumer Protection Code. One of my staff pointed out to me that I should highlight that we actually have a guide for all the rights that consumers get in the TCP Code, and it's actually available out the front. It's called Making The Right Call. It's just interesting to see, um, what is contained in that code and how it relates directly to you and your usage. I'll just put that down... Before we go into the panel discussion, because we've never had Activ8me come and present before joining panels, I've can asked Ian to give us a very short run-down of what Activ8me does. It's also very topical, because they're running services over Sky Muster. So, Ian, maybe you want to do that from the podium there, and then we'll get straight into it. He's going to talk for a couple of minutes.

IAN ROBERTS: Thanks, Teresa. Thanks for the invitation to be able to come up and present at the ACCAN conference. Before I start, I'd just like to acknowledge the traditional owners of the land on which we are upon, and pay my respects to their elders past and present.

Have we got the slides?

(PAUSE)

Have we got a slide pack ready to go? There we go...

Just before I start, a lot of people wouldn't know Activ8me, unlike the other big telcos here, because we really specialise in services for the bush. Just before I start, I just wanted to point out on that slide there one of our Indigenous community phones. So, these are ruggedised phones that have a solar panel for power and a satellite dish for communications. They were originally set up for voice services, but they are now all wi-fi-enabled. I'll talk about those a little bit as we go through. Just about Activ8me – the company was actually formed in 2002. It was formed to provide services to underserved areas in rural and remote Australia. We've been taking part in the Government Indigenous Community Phones Program for a number of years now, which is now the Remote Community Telecommunications Program. There are 301 of those sites in Indigenous communities all over Australia, except NSW. So, for some reason, NSW didn't want to take part in the original program, so there are none of those remote community telecommunications services in NSW. In 2011, we became a provider in the nbn. Prior to that, we had been in the satellite schemes in the HighView scheme had and the AGB, and since becoming an nbn RSP, we've obviously moved into fixed wireless and also into fibre services as well. But predominantly, the company is still focused in regional areas, and we are the largest in Sky Muster – we now have 10,000 active services with Sky Muster already up and running at this point in time, and we're still working through a backlog of orders. We're also a partner of NSW Farmers as well.

One of the things that Activ8me pride ourselves on is just going that extra mile for people in regional and remote Australia. In situations where people are on the outskirts of a fixed wireless area and they may have a failed wireless install, we will always approach that by actually putting a ticket and seeing if we can get that person connected with a higher pole. It's much better for them to be on fixed wireless than on Sky Muster because of

the data download limits. We've also, in southern NSW, around the Albury and Wagga area, been trialling on a number of sites where we actually extend fixed wireless by doing a point-to-point connection from one property out to properties outside the fixed wireless area. We've successfully implemented around about 18 of these sites where we're using the other ports on the nbn NTD for neighbouring properties. That service works particularly well. Again, it stops people having to rely on the Sky Muster service.

We also have an islands program. There are two sides of the islands program – there are ones where we're talking about private householders – so, a situation like Lord Howe Island, where we organised for nbn to have all the equipment delivered out to the island and install this, go and live on the island for a period of three months and connect all of the properties that had ordered Sky Muster on the island. The other side of the island's program is some of the remote Indigenous communities. So, Groote is a great example. At the company's own cost, we actually got equipment transferred across to Groote, and we installed one of our wi-fi community networks there, which is a wireless network which works off one of those Indigenous community telephones. So what this does, basically, is off the satellite service is it provides a wi-fi connectivity for anybody who has a wi-fi-enabled device. They just connect to that wi-fi service and then it will direct them to a website where they can buy a pre-paid PIN and that gives them a limit with the amount of data that they can actually download. It's been used by local communities – some of the Indigenous communities, visitors, staff who were out there working for government services – it gives them access to emergency services. VoIP services do work particularly well over it – so anybody using a Lync phone app or WhatsApp or Skype, they work particularly well over this service. There are a number of sites that the Indigenous community can actually access without having to actually pay. For example, some of the government sites are all free sites that they can go to any time they like.

I hope that gives you a bit of an understanding of where Activ8me is currently at, and where we actually provide services out into some of those remote and regional communities. Thanks for the opportunity today.

(APPLAUSE)

TERESA CORBIN: Thanks, Ian. OK. We've asked each of these guys to come up with one or two things that each of their organisations does to equip consumers to get and stay connected. So we might just go down the line to warm you up. The mikes are on the floor, so if you just pick them up – there's one on either end. Maybe, Ged, you could start?

GED MANSOUR: Sure, no worries. Thanks for having me back again, Teresa. It's always good to be here. I find every year we learn so much from talking to everyone in the room. I'll keep it pretty short and sweet because, for those of us that don't know amaysim, we're Australia's fourth-largest telco mobile service provider. Actually run on the Optus network. David's sitting here next to me. Our whole approach in the last six years has just been simple in terms of – we keep it simple. The way we help people stay connected once they are connected is – the pricing is simple, the plans are simple. Whether it's pre-paid or post-paid, you pay the same price. There's no lock-in contract. So if you want to leave us, you don't pay any cancellation fees. Our financial hardship is quite simple and reasonable as well. Because we find, at the moment, what can sometimes impact people staying connected is lack of understanding around data use. Even though complaints have fallen quite rapidly, which is a great endorsement of the industry, data is still something people are grappling with and learning to understand. You'll see a lot of people using what's called a casual usage, where you're paying per megabyte, which will lead to higher bills. With financial hardship, we try to take the reasonable approach of rerating, where people basically go into higher casual usage and we'll help them out when we look at things and understand that it's a mistake – we'll rerate things to data packs for them and help educate them on what they should be doing, and we use our social media assets quite heavily to educate people on data usage and what are, say, roughly my son's spending an hour on YouTube with a mobile network – what that's going to mean. It's not going to mean a few hundred megabytes, it will mean a lot more than that. A lot of people still don't have that understanding. For us, staying connected is about education as well as affordability. That's where we really focus our efforts at the moment.

TERESA CORBIN: OK. I might pass along to David from Optus.

DAVID EPSTEIN: Thanks very much. Look, as one of the larger telcos, the biggest challenge we often face in enabling people to be connected is complexity. Because we're large organisations offering multiple product

suites and we quite often carry legacy product suites. In the past few years, we've focused a lot on trying to reduce some of that complexity and, more to the point, train our own front-line staff to help people cut through it. And one of the first initiatives that we did was we've actually brought a lot of our customer service back in-house, as it were, moving away from what was our original franchise model. And we find that it improves outcomes and it improves the effectiveness of communication between us, and not just our customers, but aspirational customers too – people who are just interested in our products. In addition to, obviously, offering various tiers of plans from low-access plans up to the more complex ones.

TERESA CORBIN: Thanks, David. Dan, from Vodafone?

DAN LLOYD: Thank you. Thank you very much for having me. I just want to talk about two things in the introductory remarks. The first is really the incredible mission that we've been on to simplify our products and services and to solve the things that were annoying and frustrating our customers, and the number of things we've done are truly phenomenal. We were the first to introduce the network guarantee – try our service for 30 days. If you don't like it, you can walk away, no penalties, no questions. I might add, very few people are exercising that option these days. Data overage was a key problem – we introduced a \$10 1-gigabyte overage, which we've managed to most of our customers to. Rather than paying a high rate per megabyte, you clock over for a whole gig for \$10. IDD rates were annoying people – high rates for international calls. We introduced a couple of years ago 300 included minutes on many of our plans to any international destination. And of course the \$5 a day roaming – take your home plan with you, \$5 a day over 50 countries, use it as if you were at home for just a flat rate of \$5 a day. So we've just worked through these one by one by one and as quickly as possible solved them. You can see the results in our customer complaints – the TIO complaints we used to be the highest in the industry, by nearly double – about 19 per 10,000 customers every quarter. We are now the best telco in the industry by a long measure, down below 4 complaints per 10,000 customers. I think our customers are telling us, and telling the TIO, that we've really managed to simplify and cut through all of that. The topic, though, for the session, I think, is very appropriate. How do we get everyone connected? The real issue that we've been focusing on is quite a fundamental one. If you live in a major city in Australia, you have access to competitive mobile services that are some of the best in the world. You can choose to take all of those things that I just outlined that you can get from competition, from Vodafone. But if you live outside the major cities, it becomes very clear we live in a very extreme geography, one of the largest land areas in the world, one of the lowest population densities, and therefore the ability to actually build and duplicate mobile infrastructure across Australia is simply not there. It's very, very limited. The ACCC announced, about 10 days ago, that it's opening an inquiry into inter-carrier roaming, so the ability for one operator to use another operator's network in regional Australia, likely Telstra's. This has been characterised by some as an extreme, risky, unusual move that will fundamentally undermine incentives for investment. We like to focus on the facts and the international comparisons. Australia's one of the largest geographies but, every other Western economy with a large geography and areas of low population density has regulated that same service. The USA mandated it in 1981. And extended it from voice to data services in 2010. New Zealand mandated it in 2001. Canada mandated it in 2008. France mandated it in 2010. Those are 5 of the 6 largest Western economies in the world, and we have the most extreme geography of any of them. Some people have said that it must undermine incentives for investment. Unfortunately, that's simply not true. In all of those countries, you can track capital intensity, so the amount people are investing relative to their revenue, before and after those decisions. In the US, in the three years before they extended it from voice to data, the industry was spending about 13% of revenue on capital. After that decision, it went up to 16%. AT&T, the biggest operator, was spending about 14%. After that decision, it went up to 17%. If you look across all of those countries that have regulated it, there is no evidence that it undermines incentives for investment. In fact, in some, it's significantly increased incentives for investment. We think this is really the only way that we're going to get competition and choice for everyone to get everyone connected to a mobile service, so we look forward to a robust and rational debate on that.

TERESA CORBIN: I'm going to skip over Ian, because Ian kind of already did do this in his introduction. I'm going to go straight to Tim, which is actually probably quite timely, because I'm sure that Tim, as well as the question, will probably give a response to Dan which might well spark off the panel. For people that aren't totally up on telecommunications policy – which would be completely understandable! – this is the hottest debate in telco over the last few weeks, since the ACCC announced it was doing an inquiry into mobile roaming. Tim, what are you doing to equip consumers before you respond to that discussion?

TIM O'LEARY: Sure. Thank you very much. I suppose, over the years, there would have been a number of Telstra people presenting at this forum, particularly focused on our Access for Everyone program. That really is a flagship program for Telstra particularly focusing on the vulnerable customers, the needs of those who are disadvantaged – for customers in financial hardship, we had the Bill Assistance Program, the In-Contact Service, and the specialised work of our Hardship Team. For low-income customers and people with a disability, we have the pensioner discount. For community organisations, offering specialised accommodation, we had the Sponsored Access Service. There's a broad range of services there. In a previous life, I used to work in a bank. I was heavily involved in the access of affordable credit. One of the things we used to say was that – particularly we got heavily involved in microfinance. People looking for specialised credit, access to microfinance, didn't form a neat line out the front of our branches. And so one of the challenges, I think, for telcos is to – with our complexity, with our size – is truly to understand the needs of vulnerable customers. I think that, for the past 40 years now, we've really been engaged in very purposeful discussions with consumer organisations around framing that portfolio of specialised products and services. In the last 12 months, we've done a very significant program for women at risk or experiencing domestic violence. Working, again, in partnership with the domestic violence agencies to build out our program here. The second area I want to touch on is the importance of being really thoughtful and strategic around digital inclusion or insights into digital exclusion. I think, hopefully, you would have seen in your packs, and I think maybe Gillian from Swinburne provided an update.

TERESA CORBIN: He did. He did a great presentation yesterday.

TIM O'LEARY: We're really proud of that. That is a real landmark piece of research, looking at, you know, the characteristics of inclusion and exclusion. You know, affordability, access, and digital ability. A couple of thoughts on the roaming question. The first is – and the most obvious – is to say there's nothing stopping Vodafone investing in rural and regional Australia. Vodafone are not some sort of recent sort of, you know, start-up from NSW. They are, in fact, a very large, multinational telco with \$70 billion of revenue. Telstra has long been investing in rural and regional Australia. The amount of investment in rural and regional Australia at the moment from telcos is probably unprecedented, and you would have seen a further announcement recently that Telstra will spend a further \$3 billion each year over the next three years. There's nothing stopping Vodafone having access to our towers. There's regulated access. There's regulated access to backhaul. I think what we object to is that sense of Vodafone being able to have a free ride. I suppose that sense of – if you had a Holden dealership in a rural location and you invest in that and you invest in servicing the needs of that community with cars, and then the regulatory environment changes, and then you have to put half of your showroom and provide access to Ford cars, that is not going to be an incentive for people to invest in Holden dealerships. So there's nothing stopping Vodafone investing in the bush. There's more that we can do in terms of the rural and regional network. There's a range of complexities on the international scene and, in fact, France is moving back from roaming. We think that what is really important is the incentive for telcos to invest. And we have a different view to Dan on that matter.

TERESA CORBIN: OK. Now, obviously I want to cover some other things, but I know that David's itching to say something. He's been just jump in his seat.

(LAUGHTER)

DAVID EPSTEIN: Absolutely. I've known Dan for a bit of a while. In fact, we worked together for a while. I was going to say, he was very cheeky and very compelling, but quite wrong, and I wouldn't have tolerated it when we used to work together quite closely. I'm sure you've all heard of the phrase "There's lies, damn lies and statistics." Well, Dan, come on down, mate!

(LAUGHTER)

Um, look, you know, I think the general points that have been made about Vodafone's position on this are quite true, and I'll let people make judgement about this. I think you've also got to look at their own record. Their global CEO is on record as opposing the form of roaming that Dan's now arguing for – and in fact opposed it very vociferously in the UK. Yes, it is true – it's being wound back in France, something that Dan cited. It's also true that there is mandated roaming in the USA, and there is mandated roaming in Canada. And there is mandated roaming in New Zealand. However, you've got to ask why and talk about the circumstances of the market. In both the USA and Canada, they have had to deal with the legacy of regional spectrum markets. I've

got a very good friend in the Democratic Party in Virginia, and he's a great friend to have because he's worth several hundred million dollars. The reason why he's worth several hundred million dollars is his family had the regional spectrum licence for Virginia, and therefore the southern suburbs of Washington. Only problem with that was, people riding on his spectrum couldn't actually make a telephone call in Maryland, which was on the other side of Washington, from the northern suburbs to southern suburbs of Washington DC. That's the reason why you have mandated roaming in the United States. We have national spectrum licences. Same thing applies in Canada. Then we can deal with New Zealand. The reason it came about in New Zealand was they were looking to introduce third- and fourth mobile carriers. It was actually opposed by Vodafone in New Zealand and, I believe until quite recently, it continued to be. But there was a condition on that – that the new entrant would have access to mobile roaming but, in return, they would have to fulfil mandated market share and mandated investment targets. So they're quite different and misleading arguments. Then we can deal with the issue of the level of capital intensity. Well, Dan's quite right to talk about capital intensity, but there's many drivers of capital intensity. I think we all realise that there's a thing of 4G having come in over the top of 3G and 3G having come in over the top of 2G, and then of course there is the greater capital intensity that is driven by increased use of mobile spectrum for data and carriage, which requires more equipment, more density of towers, et cetera, et cetera. So you need to be very careful about some of these things being plucked out of the air. But I think that's probably enough said, and we should get back to the wider topic.

TERESA CORBIN: Sure. I'm keen to get as much information about all of this out in the open in the near future before, obviously, submissions close. It would be nice if you guys would, um, publish some of your positions and some of the statistics and information you have access to before the close of submissions, because I know there's a lot of people here in the audience that are very interested in this topic as well. I don't know if Ian or Ged wanted to say anything on that topic before I moved on.

GED MANSOUR: No, we'll let the carriers argue that one out. That's one of the beauties of running a third-tier network.

(LAUGHTER)

TERESA CORBIN: You'll dodge the bullet? OK. We had a few other questions prepared, but I'm sure some of those might come up when we throw to the audience. Before we throw to the audience, I did want to talk a little bit about complaints trends. Vodafone's already mentioned that, and congratulations, Vodafone – great work in regards to that. What we know overall is that complaints are coming down, and massively so, over the last few years. Now they're starting to plateau a little bit, and then poor Ian emailed me the other day to highlight, in fact, they are experiencing the opposite trend, and the BIRRR group highlighted this yesterday because of the issues on Sky Muster. So maybe if each of you could make a quick observation in relation to, perhaps, complaints coming down if that relates to you, but also perhaps the areas where complaints are not coming down that we still need to focus on?

DAVID EPSTEIN: Look, I might start off. Look, in essence, it's a function of the industry maturing and understanding that it's no longer in an environment where there might be two or three customers waiting in behind if you lose one. It's about retention, it's about service, and people just won't cop it. The other thing is, it's probably an industry – because it grew up with a TIO almost from the very start of the mobile era, that to some degree, informally, outsourced its complaint processes rather than taking accountability for its own actions. So that's basically what people are doing, and I think, as a result of that, some people may disagree, but overall, customer service is getting better, it's getting more consistent. Telcos are getting more approachable, and working out ways to reach out to their customers. There are, however, some wrinkles in areas. I don't think, as an industry, we've quite worked out how to solve the issue of the interface with the nbn just yet. There's a lot of manual processes. There's a lot of feeling the way through. That's going to generate the odd problem, I think, in the next 2-3 years.

TERESA CORBIN: Yep, OK. We might – Dan, did you have a further comment to make about complaints?

DAN LLOYD: Just two comments. I won't complain about the radical misrepresentation around roaming before...

TERESA CORBIN: Noted. Noted.

DAN LLOYD: We did a mindset shift. I think, historically, the company viewed complaints as something that you needed to manage rather than signals that there's something that you really need to think about and probably need to change. We've now set up a very systemic process where our front-line teams have a route direct to the top of the company to tell us dynamically what is it customers are complaining about, and then we have a forum that doesn't simply ask "How can we make those annoying customers go away?" But asks, "What is it we can fundamentally change?" It's out of that process we made big changes to our products and services, made big changes to our credit policies, made big changes to our whole complaints management system. It's only when you make that fundamental mindset shift that you can drive the amazing reductions that we've driven over the last few years.

TERESA CORBIN: OK, good. Pass the mike to Ian. Before you speak, Ian, if I could highlight – we'll go to the audience in a minute, so get your questions ready. Also, ACCAN staff on mikes, grab the mikes so we can do that nice and seamlessly. Ian?

IAN ROBERTS: Thanks, Teresa. We are currently experiencing an enormous lift in the number of complaints, and they're all around Sky Muster, so as we said, we've got about 24,000 applications for Sky Muster, and 10,000 are installed. There are all sorts of teething problems associated with Sky Muster and the installation process is an absolute bugbear. We've tripled the size of our call centre and they're all located in Melbourne. We've got rid of all of the offshore ones so that we can actually deal with the issues better. But it's still a 3– or 4-hour wait. The issues are so far removed from things that we can control as an RSP, because the nbn do all of the installs and they subcontract that to Ericsson, who then subcontract that to Skybridge and Hills, and that communication about the installation process is done by those third parties, and the first point of call for the customer when the install fails or the installer doesn't turn up or things don't work is to come back to us, and they might be things that we can't resolve. Having said that, we're looking at better ways to actually communicate to our customers. It's all about communication. These people are out in the bush, they're used to having to struggle to get services. It's not like sitting in Melbourne and Sydney in the suburbs. They're used to actually having to deal with the problems of the turning of distance. So, one of the things that we can do is everybody's got one of these, and so social media is a great way to actually keep customers informed. They want to actually be kept informed. So, utilising social media in a much better way will actually help reduce some of those calls into the call centre and keep those customers actually informed. It enables us, through that social media channel, to actually communicate with customers much more effectively than we can by making them wait in the call centre queue. The nbn are doing a fabulous job in terms of rolling out 9,000 satellite installs a month, which is enormous in a country the size of Australia, and the teething problems are just there, and it's going to take six months to actually get over all of those teething problems.

TERESA CORBIN: OK, thanks for that, Ian. I'm sure there'll be more questions from the floor relating to that. Tim?

TIM O'LEARY: A couple of brief points on that. The trajectory on complaints is going in the right direction but, make no mistake – they're still too high. We do have much more work to do. I think the nbn interface remains a challenge, but getting better. One of the things that remains a challenge is complexity. A little bit of analysis of some complexity in the area is how we deal with people with disability. We've had a few of those complaints go through to the TIO. That's a particular challenge. We're in the midst of reviewing our Disability Action Plan at the moment – that's a focus for us. But, you know, complexity is a challenge.

TERESA CORBIN: Yep. Just pass the mike down to Ged. Tim, there's a mike on the floor near your foot, so maybe pick that up so it will be a bit easier to... Ged, what would you like to add to that?

GED MANSOUR: We talk a lot about complexity and one thing we've seen – and as I mentioned amaysim is 6 years old and I will give you a case study of a company of a provider we purchased called Vaya. They had a huge level of complaints so it's about instilling a culture of simplicity and a culture of dealing with complaints across the board and we dove in straightaway and while we see Vaya as a price fighter, there were things we could do straightaway like remove unnecessary fees, make plans easy to understand, make plans accessible for customers that are wallet conscious and we saw complaints through the TIO drop 80% or 90% when we look at the year-on-year comparison and at the same time we haven't lost focus in amaysim of making things more simple and our complaint level is less than 1 per 10,000 customers, which is the lowest in the industry but still not low enough because I think what we need to do is keep on making it easy for customers that do have the

ability to do things themselves and are able to do things themselves. We used to get a lot of contacts wanting to swap a SIM card from one phone to another if a phone got stolen or they broke their SIM card, and usually that means waiting on the phone for half an hour, whereas you could make it easier for people who had it the ability to do it online and you give the power back and make it simply. And that is one of the things we're doing. We have something called contact therapy once a week where groups across the business get together and figure out what customers are contacting us. Every point of contact is a failure for us, we haven't enabled a customer to do something themselves, so the more we focus on those as an industry the more we get the industry level down. We are commercial organisations at the end of the day, so lowering churn is part of what we do, especially when you don't have contracts you live and die by your churn so that's also part of the reason for us having such a strong focus on basically making it simple and empowering customers.

TERESA CORBIN: OK, anyone in the audience with a question? Oh, wow! A record number of questions! Did you put your hand up, Robin.

>> Hi, Robin Eckerman. A question for the panel regarding roaming. The demonstrable reality of remote communications is there's not the population density to generate revenues to attract investment – it's very demonstrable. And roaming is one way to improve the efficiency. What we're seeing with things like the mobile black spot program is increasing public contribution and so it sort of makes sense that all Australians should benefit from taxpayer contributions. Roaming is one way. Another way which I'd welcome a comment on from the panel, see how many go into conniptions, would be to invite nbn co, authorise or empower them, to offer wholesale only mobile coverage in conjunction with its fixed wireless – that gives an immediate fourfold boost of investment efficiency because you'll pick up the traffic of all three mobile operators, plus the fixed wireless and you will create an avenue to offload customers from satellite as that gets saturated in due course. So welcome your comment.

TERESA CORBIN: Let's try and make them quick because we've obviously got a lot of demand for questions. Dan?

DAVID EPSTEIN: I might go before Dan!

TERESA CORBIN: Maybe we should have one for yes and one more no!

DAVID EPSTEIN: You get a bit of truth serum here! Look, you are quite right to raise the possibility of alternatives and that's why we, for one, argue quite strongly for a colocation arrangement. In the black spots program, and, you know, with colocation allied to some of the other mandated access arrangements, people can have the benefit of the public funds, the – you know, the primary initiator of whatever the black spot infrastructure is, but they've got to make access available net of the cost of the public funds. That way, the butter is being spread more broadly across the bread. As for the question of running generally, I think the point has been made about what it potentially does to incentives for investment. You spoke about the nbn, I think the nbn is hard-pressed enough to do what its current core mandate is without getting into an area of the market which is attracting record levels of capital investment. You know, Telstra spoke of their amount and last year we spent \$1.8 billion essentially on infrastructure and we will do the same again this coming year and a large proportion of that is in regional and under-served areas. These are the new areas of competition, ironically being driven by the nbn because people want to be in the same place where the nbn is potentially opening up competition with mobile competition. There have been other alternatives tried – protection, for example, in Scandinavia, spectrum sharing was encouraged at the very auction process. But in return, and carriers were allowed to share spectrum, share infrastructure, et cetera, et cetera, but the quid pro quo was that everyone who participated also had to do their own investment and offer their remote area services. And I would be interested to see what Vodafone's response to that would be. Trieste and Dan is jumping in his seat!

DAN LLOYD: Am I allowed to speak now! I think there was a point raised earlier, which was there's nothing stopping other people investing in regional Australia. The only thing stopping it is the fundamental laws of economics. We have a country that is 7.6 million square kilometres with a population density of three. It is the most extreme geography to try and roll out mobile networks. You inevitably get to a point where there simply isn't the return, there simply isn't any case to invest. There's then a variety of models for infrastructure sharing and roaming that you can use – colocation is one of them, active sharing is another, spectrum sharing is another, roaming is another. All that those do is give different ways of shifting that boundary as to where you

have to stop investing, and where you can't invest any further. They simply shift it a bit further. Colocation is the crudest and most inefficient way of doing it, because you duplicate the radio network equipment, you duplicate the transmission, you duplicate a lot of the cost of providing the service.

DAVID EPSTEIN: And provide competition.

DAN LLOYD: But all you do is you shift the point at which you can provide competition from A to B. You simply cannot, in a geography such as Australia, shift it so that you can connect all Australians, so that in regional Australia people have a service and have a choice. You need to look at more efficient forms of infrastructure sharing. Which inevitably bring you down to one infrastructure – nbn is one option that is worth considering, although I do agree nbn is trying to do a lot at the moment, so whether they can take it on is another question, or you look at roaming in order to access the single infrastructure that is there. It is so clear in Australia – you need to look at efficient forms of sharing, roaming is one of them, otherwise we're simply not going to solve the problem for regional Australia.

TERESA CORBIN: Thank God the ACCC is looking at this! Tim?

TIM O'LEARY: I will just encourage Dan to be a bit more imaginative. There are other alternatives. One of the things Telstra is doing is we have a co-investment program with the Northern Territory government to roll out infrastructure in remote communities. Now, we think that is a good thing – consistent with where we want to be in terms of our engagement with Indigenous Australia, it has enormous value for the Northern Territory government in terms of health facilities now being online, education facilities being online, the opportunity for industry and enterprise in those locations. There are other options.

TERESA CORBIN: OK, we're going to go the back there to – is it Liam? Yeah.

LIAM CAMPBELL: Liam Campbell from remote Indigenous communications. I would like to comment Activ8me for some of the things you are trying out in remote communities and obviously Telstra is the only mobile provider for the majority of remote Indigenous communities, so I guess something that I wanted to raise was what would make a big difference to people in remote communities, I think, is better tools for managing data. And what I mean by that is, I know that the Telstra app is great, but it could be a lot better – I think it's text-based. Something as simple as putting a visual marker for your data use, as opposed to having to look at the text, which splits it into night data and day data and, of course, you've got to renew when one of them runs out and this sort of thing. I guess the only thing which might sound really counter-intuitive is actually the ability to limit your data, or some way to control it. For example, when you are hooking your 4G network, it is very fast and you get served high-quality video and all of those sorts of things and if you don't know how to change the settings for that are – but for somehow the user being able to select that in a Telstra app and say, how do I do this – just better tools for managing data would make a huge difference to people. And obviously there is a whole education campaign and different things about turning background refreshing and this sort of – so I'm just wondering, are Telstra looking at these things?

TERESA CORBIN: Probably a quick response, Tim, because I think that's probably more a comment and a suggestion for the future.

TIM O'LEARY: It is a really good comment and I'm happy to look at that in a bit more detail. One of the things we are finding – and this is an important finding from the Digital Inclusion Index, you know, in broad terms access is going in the right way. In broad terms, affordability of telecommunications services is coming down. Now, people are using more of it and that has its own challenges, as well, but one of the big insights, I think, from the Index is the importance of digital ability. You know that, those skills, capabilities, to be an effective digital citizen. And one of the things we're specifically doing in the NT, associated with the rollout to the 13 remote communities, is trialling this idea of an Indigenous digital mentor. So training up someone in the community who can work around those competencies, those skills, those behaviours, to really embed that capability to be effective digital citizens. So that's something that we're really trying and going to be very interested in. But happy to catch up afterwards.

TERESA CORBIN: Great, and that is an exciting initiative, I've heard quite a lot about it. Jeremy, you have a question over there. We're just swapping over interpreters, so give us a second. OK.

>> It's Jonathan Brown from Consumer Action Law Centre. I'm interested in particularly all this conversation about data usage, but particularly people who are on low incomes. The way things used to be, pre-internet, was that we would have access to free-to-air broadcast and if you managed to cover the cost of the television set, you would have guaranteed access to a certain level of democratic content, of entertainment, and Australian culture. Of course, the internet has changed that and that model is changing. At the moment, if I go to each of your telcos, you have a certain level of unmetered content, so with Telstra I can get an AFL pass and get unmetered streaming of that. With Optus, I can get my Stan or Netflix subscription and get unmetered access to that. Which is great as a middle class person. It means I can bring down my data usage and save money. It's great for me personally – I love getting access to unmetered stuff on your networks. But for a person on a low income, my question is, well, why isn't there a focus on providing more unmetered content to democratic content, even down to things like health services – why isn't Headspace's services unmetered so a young person on their mobile phone can chat with Headspace and not have to worry about the data use, or Lifeline, their services – why is the focus on unmetered content inequitably helping the middle and upper classes to save money, but there seems to be no focus on unmetered content for people on lower incomes to access democratic information and access content that's important to our culture? And the other point I'll make is the less access people have to democratic information in our society, that's how we get Pauline Hanson re-elected 20 years later, again!

TERESA CORBIN: OK, now just a comment on that quickly before we throw to the panel. Last year, unmetered access came up as one of the main suggestions for affordability going forward and one thing that has changed since then is that we actually have seen some movement in relation to isolated children and their families accessing education, so that we now have unmetered – we have education separated from the usage of the plan generally. So you have an education connection and you have a general connection. Which is still a struggle, as far as managing your data, but it's a lot better than it was, and each stage is slightly different in that regards. So we are seeing some changes, but there needs to be a lot more. So anybody want to comment on that from the panel.

DAN LLOYD: Just one comment – that was a great question, by the way, I quite enjoyed all the thoughts it provoked. But I think there are basically two ways that you can address it. One is that there's some problem with the amount of data that people are able to get and then you having to and solve it by picking and choosing what is it that you unmeter? I'm not convinced, certainly on Vodafone, that actually there is a problem anymore. The number of complaints that we get now about data overage are virtually minuscule, because we have exponentially increased the amount of data that we include in our plans, we move to give unlimited talk and text – unlimited calls and texts domestically – we move to put in these big buckets of international calls, and so the number of complaints that we get of people who have run into an issue who have exhausted their allowance...

TERESA CORBIN: So is that a function of usage alerts, too?

DAN LLOYD: I think that is a factor.

TERESA CORBIN: People pegging back their usage a bit when they get the alert.

DAN LLOYD: You can talk now if you like!

DAVID EPSTEIN: Thanks, mate! I think, you know, the market has moved into direction. Optus and Vodafone were probably first there but the whole market is there in terms of the mobile market, but there is now greater certainty of pricing and transparency of data pricing. There is lower pricing and if you look in the fixed line market, increasingly unmetered effectively, unlimited plans, are becoming the norm.

IAN ROBERTS: With the exception of satellite!

TERESA CORBIN: I was going to say, we still have our hashtag going on!

DAVID EPSTEIN: That is going to have its challenges and it's something we all need to think about because not just the industry but government and a range of opinion leaders have probably generated unreal expectations about satellite and we are going to have to solve it. But these things do exist. But once more, just to show that,

you know, I do have some affection for Dan, I think he's quite right in terms of what do you do about determining the worth of content? And this is a real challenge and it's particularly a challenge with usage patterns on broadband, you know. We're now getting peak hours. Well, we're now starting to get calls – do we have traffic management? How do we determine what is the worthy traffic and what is not the worthy traffic? And that is a tough call.

TERESA CORBIN: And of course there's issues in relation to privacy there as well and what your usage actually is. So Ged?

GED MANSOUR: I feel like I'm having a bit of a flashback to last year, actually, when I was sitting on this panel and I'm not disagreeing with what anyone has just said but if I'm hearing what some of what you said correctly, Jonathan, a lot of what you are talking about, especially when it comes to access to essential services – and I class things like Headspace as an essential service – are for people who don't often have a home broadband service and if you notice a lot of people that are on very low incomes, a lot of their main source of access to security or safety or information is a mobile phone. But then it's how do you pay for that service for that mobile phone? How do you ration that service, essentially? It's something that a myself and a colleague of my, Natasha, sitting in the audience, have been grappling with since last year and try to think about what we can do in terms of unmetering access to those apps or facilitate access to mobile and online driven services and we haven't cracked the code yet but it's something I would like to catch up with you afterwards about because it's something where we see people, when their lifeline is really their mobile phone, but the juice for that lifeline is more than they've got in their pocket, you kind of hit a brick wall and we're really thinking, how do we try and overcome the brick wall? And you put the fear of God into me with your last comment so I will have to go and have a snack pack to get over that!

TIM O'LEARY: One of the areas where this had had some focus within Telstra is around crisis times – with crisis lines and Lifeline and a whole range of those where we have unmetered those services so that...

TERESA CORBIN: Very good point.

TIM O'LEARY: And we have some criteria around that. But, you know, where it relates to people in crisis, you know, and they need that – their phone, that unmetered access is there.

TERESA CORBIN: Do you want to say significant, Ian? Different circumstances, clearly?

IAN ROBERTS: I was just going to say that in the fixed line space, all of the relationships are formalised relationships and there's no ability for us to actually do an informal relationship where someone might be able to have a fixed line service, internet service, into their property, but, you know, turn it on and off as they actually need it. Because we actually have to pay the wholesaler, the nbn, and all of those relationships are formalised. So if there was some sort of informal relationship where people could turn it on and off when they actually need it and really require it, that flexibility would address some of these issues, certainly from the fixed line area.

TERESA CORBIN: We'll go to this question in the middle here. It's Claire, isn't it?

>> It's Claire from the Isolated Children's Parents' Association of NSW. You touched on incentives to further the mobile footprint into remote Australia, Tim. In NSW, under the mobile black spot program, in round one, there was only one remote area out of 144 successful base stations – there was only one remote area that was successful. So we're hoping that round two will bring about the extra criteria of \$10 million being spent in a remote area. Do you think that Telstra and the other telcos, do you think that we're moving in the right direction on this? Or do we need to be doing more?

TIM O'LEARY: Well, I certainly don't think roaming is going to help in those circumstances. I think we've got Black spot 2, we've got black spot 3. There may be further things – I gave the example, you know, of what we're doing in the Northern Territory to remote communities, communities with, you know, in the order of 200 to 250 people. So I think, you know, clearly that last piece remains a challenge, you know, but roaming is certainly not the answer.

TERESA CORBIN: I've actually – I don't know if you've seen it, Claire, but there has been a report released by the Australian National Auditing Office that looked into the mobile black spots program and it made some suggestions – some of them have been taken on board already for the mobile black spots round two and hopefully there is a suggestion that the rest of their work will be considered in the third round, which we're not sure when that will start yet but round two is well and truly underway and hopefully we will get an announcement soon. We have a question from Charlie.

>> Charlie from NSW Farmers. The ANO was not very complimentary about the coverage that was achieved in round one of black spots and about that, all three of the infrastructure providers have talked about the investment that's going on at the moment. I'd be interested in your comments on how quickly we hit that boundary, in terms of mobile coverage. If that's the real issue – how much further can we push it? Everyone is plunging so much money in. And then what does that mean for the future of the black spot scheme?

TERESA CORBIN: Do you want that to a particular person?

>> I would be interested in comments from all three.

TERESA CORBIN: We might go to Ged and Ian first.

GED MANSOUR: Excellent, thanks for that, I will pass it straight on!

(LAUGHTER)

Yeah, no, it's kind of...

TERESA CORBIN: A bit of favouritism there!

GED MANSOUR: It is a tough one and it is a tough one for us to have a really strong opinion on but what I've actually seen – and I will not just show favouritism to the network that we're on because we know the network race is hotly contested, we've actually seen the level of complaints related to the network, especially since we moved over to 4G a bit over a year or so ago, plummet. But when we've seen our spread of customers into rural areas start to increase – but we still know there is a fair way to go there across the board. But it's something we know there is a lot of investment happening in.

TERESA CORBIN: See, you do have something to say about rural and remote!

IAN ROBERTS: From our point of view, what we're seeing is the black spot infrastructure actually going into the more populated areas, so for example in NSW north coast – if you go up in the hills behind Taree, somewhere like Maree, you see the black spot program has put an investment in there. So there might have been 500 premises in that area that were designated Sky Muster satellite because of the hilly terrain but now there might only be 500 left. So the black spot scheme to me seems to be in the more highly populated areas so that's why you are not seeing it reach out into the really remote areas.

TERESA CORBIN: Optus?

DAVID EPSTEIN: Can I pick up a little bit of a point on that. One of the things about the black spots program, you know, particularly its later iterations, is it is very often driven by community sentiment and community involvement. Unfortunately, one of the indirect effects of that, which people often don't realise is that perpetuates some of the geography questions about network economics because naturally the government and, indeed, probably the Audit Office would agree, if push came to shove, notwithstanding some of its recent comments, they will follow areas where there are numbers of people wanting to communicate in under-served areas and of course that is a challenge where you've got less people. But what I would say is there are increasingly technological solutions being rolled out. We, for example, roll out satellite-powered microcells now. We trialled it first up on Oodnadatta Track and the interesting thing is when we put it in, we couldn't get it back out because the demand was so high. We've just rolled out another twelve in the Northern Territory and I suspect you will see more of that sort of thing in the coming rounds of programs. There are also other initiatives that you can do with co-investment.. recently we had our executive our in Orange and we went out to some of

the regional areas in Orange and a group of farmers had got together with one of our local dealers, we had just put in 4G, 700, and that boosted the coverage and they worked out a way of putting in a booster antenna and they go out on the back of a four-wheel drive with this thing stuck on a miniature pole, they work out where our tower is and they can extend the coverage by many, many kilometres and they're using it for geo-spatial information for farming practices.

TERESA CORBIN: That's something we get asked a lot, "What are the other solutions" in so not just focusing on getting another tower up but what are the other solutions, what are the options and the other businesses that people can approach? And this is something that ACCAN gets asked consistently.

DAN LLOYD: So just a couple of comments from us. We're huge supporters of the black spots program. We won 70 sites in the first round and we're rolling those out. You are going to see diminishing returns because, again, that model is to subsidise the least efficient form of infrastructure sharing. You still duplicate the radio access network, you duplicate the transmission, so you are going to hit a point where that model is no longer able to deliver increased coverage for less and less population-dense areas and it's there that you need to consider a range of other alternatives, but we think, fundamentally, that's going to be a single infrastructure because it has to be the most efficient form of infrastructure and infrastructure sharing. You then have a choice, do you want competition or not? And we think the answer to that has to be yes. Otherwise you simply don't get the benefits of competition.

TERESA CORBIN: Circled right round back to the beginning of your comments! So, Ian, or Tim, did you want to add anything to your earlier comments about black spots?

TIM O'LEARY: Not greatly but I think the technology advancement is a really important area and the whole development in that agri-tech space is something that we are particularly focused on and, you know, we are seeing 3G to 4G to 5G and the internet of things, you know – I think we should be net positive around some of the technological solution that is we'll see in the coming years to address some of the challenges of geography.

TERESA CORBIN: OK, now we're going to take one last question and it is from Jonathan.

>> Hi, Jonathan from Physical Disability Australia. I'm just wondering, with the rollout of the NDIS, what is the responsibility of telcos to reach the interface with consumers to drive service innovation?

TERESA CORBIN: OK, so this is Jonathan, he is from the Physical Disabilities Council, and his question is, is about the rollout of the NDIS and what roll the telcos might be going to play as an interface with service providers and, in a way, how you are going to drive innovation in that space? So I might actually start with Telstra, because I know Telstra has had a long history of delivering services for people with disabilities, and I'm sure you've thought about this question and that will give the rest of you some time to think about that question.

TIM O'LEARY: This is an area of extraordinary sort of innovation and a couple of examples – and we're really doing a lot of work with organisations like Cerebral palsy alliance, Independent Living Centres and what does the connected home of the future look like for someone with a disability? And one of the big challenges here – and we don't really have a clear answer – is information. You know, how do we provide information to people with a disability around the technological options? The best apps, you know, and this is a real challenge for the sector, because it's not a homogenous group. I have a child with Down's Syndrome and he has particular needs. There will be children with autism, with particular needs. So this is something that I think the whole area of digital communications, digital technology, is transforming the lived experience for people with disabilities.

TERESA CORBIN: Yeah, absolutely.

TIM O'LEARY: The NDIS is an extraordinary investment and social policy reform. We want to be in the forefront here. We're doing that particularly through the Connected Homes, that's our first foray there and then trying to be an incubator of innovation with many so of the innovative disability organisations.

TERESA CORBIN: That's great. Does anybody else want to add a comment to innovation and disability and the NDIS?

DAN LLOYD: So I would completely agree. The potential of communications technology and particularly the move to machine-to-machine and internet of things, the potential to have a flexible platform that can provide a whole series of – fill a whole series of gaps and needs amongst different segments of the community is huge and I think we just need to figure out as an industry how we get that moving as fast as possible in Australia.

TERESA CORBIN: OK, and David, probably the last comment, because we are actually going to go to morning tea.

DAVID EPSTEIN: I agree with both of the former speakers. The role of telcos is going to be absolutely core. You know, this is about communication, the internet of things, machine-to-machine, all that sort of stuff. We're doing it particularly up in Singapore. It is an interesting case. It is a developed country like us but it has come from a long way behind and unlike Australia it hasn't developed a social infrastructure, a health infrastructure. As much as we might criticise our own infrastructure, it hasn't developed that at the same pace that it has developed its overall economic strength. So they're finding that they're getting a great demand for services. They've got an ageing population there and they're having to retro fit things and retrofitting doesn't work. So they're turning to the telcos and IT companies to do the very sorts of things that we're trying to do with the NDIS here in Australia. So it's going to play a very big role and it also is a way of delivering those sorts of services while preserving and strengthening people's personal autonomy. Which is something that largescale traditional infrastructure can't do.

TERESA CORBIN: Yep, great final answer. Now, we're going to move to morning tea. But if we can put our hands together to thank these guys for a great panel discussion.

(APPLAUSE)

And I'm sure that they'll hang around for a little bit, so if you want to follow up another question with them, please go ahead and have some morning tea and have a chat with them. Thanks, guys.

(MORNING TEA BREAK)