



**Australian Government**  
**Productivity Commission**

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**PRODUCTIVITY COMMISSION**

**INQUIRY INTO THE TELECOMMUNICATIONS  
UNIVERSAL SERVICE OBLIGATION**

**MR P LINDWALL, Presiding Commissioner**

**TRANSCRIPT OF PROCEEDINGS**

**AT SYDNEY  
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**MR LINDWALL:** I've got a bit of an introductory thing I say each time, and then we'll get - we may as well get started.

So good morning. Welcome to the public hearings for the Productivity Commission inquiry into the Telecommunications Universal Service Obligation. My name is Paul Lindwall and I am the commissioner on the inquiry.

I'd like to start off with a few housekeeping matters. In the event of an emergency, SMC Conference and Function Centre staff will direct and assist everyone in evacuating and moving to the assembly point.

We will be breaking for morning tea around 10.30 am, and we look like we will be concluding the hearings at around 12.30 pm. If you have any particular questions, or wish to present at this hearing, please see Luke at the back if you aren't already registered.

The inquiry started with a reference from the Australian Government in April last year that has asked us to examine "to what extent are government policies required to support universal access to a minimum level of retail telecommunications services?" This includes recommendations on the objectives for a Universal Service Obligation or equivalent, the scope of services to achieve objectives, specific user needs, and funding and transitional arrangements.

We released an issues paper in June and have received about 60 submissions since its release. We have talked to a range of organisations and individuals with an interest in the issues. We then released a draft report in December, and further submissions have been received, including - and they are still flowing in.

We are grateful to all of the organisations and individuals who have taken the time to meet with us, prepare submissions and appear at these hearings.

The purpose of this round of hearings is to facilitate public scrutiny of the Commission's work and to get comment and feedback on the draft report. Following these hearings in Sydney, hearings will also be held in Cairns, Launceston, Melbourne and Port Augusta. We will then be working towards completing a final report to be provided to the Australian Government in April. Participants, and those who have registered their interest in the inquiry, will automatically be advised of the final report's release by government, which may be up to 25 parliamentary sitting days after completion.

We like to conduct all hearings in a reasonably informal manner, but I remind participants that a full transcript is being taken. For this reason comments from the floor cannot be taken, but at the end of the proceedings of the day I will provide an opportunity for any persons wishing to do so to make a brief presentation.

Participants are not required to take an oath, but should be truthful in their remarks. They are welcome to comment on the issues raised in other submissions or by other participants.

The transcript will be made available to participants and on our website following the hearings. Submissions are also available on the website.

And participants are invited to make some opening remarks, preferably around five minutes or so. Keeping the remarks brief will allow the opportunity to discuss matters in greater detail.

So now I'd like to welcome David Epstein and Andrew Sheridan from Optus. Good morning, and if you could just state your names for the record and give a presentation as you see fit?

**MR EPSTEIN:** Does this red light mean we're on or off?

**MONITOR:** On.

**MR EPSTEIN:** On. Okay, excellent.

**MR LINDWALL:** It doesn't amplify, it just records.

**MR EPSTEIN:** Okay, as long as we're recording. David Epstein, Vice President, Corporate and Regulatory Affairs for Optus. And I'm accompanied by Andrew Sheridan.

**MR SHERIDAN:** Who's the General Manager for Interconnect and Economic Regulation for Optus.

**MR EPSTEIN:** Right. Well, look, thank you very much for the opportunity to appear today, and also for considering our initial submission. Optus would like to commend the Commission on its draft report. And given the analysis and evidence put forward, we would agree that there is - it's difficult to reach any other conclusion other than that the current USO policy is not fit for purpose, and that reform is required urgently.

We strongly support the proposed model for reform outlined in the draft report, and as we see it, it has four significant components that need to be addressed in prosecuting such a reform.

Firstly, there is a need to phase out the existing USO which is, to our mind, an expensive anachronism, and to establish a new baseline Universal Service Obligation for basic voice and data services. As far as possible, we believe that any new baseline service should be designed to ensure that it is both technologically and vendor neutral.

The existing standard was established in a different era, when there was only one supplier, and communications pretty much meant the plain old telephone service, or POTS, as it's commonly known in the industry, delivered over twisted copper pairs.

The plain old telephone service, POTS, is no longer the primary means of communication, and to the extent it remains a significant form of communications its utility is declining rapidly. So therefore, it should no longer set the standard for communications services across the nation. A new minimum safety net is required, and this should reflect today's technology, the capacity to upgrade technology, and the widespread consumer adoption of modern voice services delivered over platforms such as VOIP, VOLTE, and increasingly through over the top services. The standard should also recognise that in an NBN environment, consumers will have a greater choice of provider.

The second major point we think needs to be drawn out is that policy reform should aim as much as possible to leverage existing NBN and mobile infrastructure to the maximum extent possible to deliver broadband and voice services consistent with the proposed new baseline standard.

There is now little justification for maintaining the legacy Telstra copper network for a great period of time as the NBN is rolled out in a mature state, since a mature state NBN will enable customers to guarantee access to both voice and data services over the NBN, and in addition they'll have access to increasingly high quality voice and data services from mobile operators.

The third point to be made is that we must continue to recognise that it's possible for a small cohort of consumers in the most remote locations to be in a position where existing and indeed immediately planned infrastructure may not deliver services that are sufficient to meet the proposed new baseline standard. However, we do believe that once the size and scope of this cohort can be established, and the extent to which a gap exists, it can be met through specifically targeted services.

Potential options include considering further extensions to the Mobile Black Spot Programme, and we would also draw the Commission's attention to the capabilities and benefits of small-scale mobile satellite technology, which Optus is now deploying both commercially and under the Mobile Black Spot Programme to certain remote locations. We've provided further details of this in our submission to the draft report.

Fourth and finally, a critical precursor to reform of the USO is for existing USO agreements with Telstra to be cancelled or renegotiated, and on this point I note with some optimism that there's reports from senior Telstra regulatory managers this morning that Telstra is open to this renegotiation of the agreement.

As they stand, these arrangements would cost the industry in excess of \$3 billion over the next 15 years or so if reform cannot proceed while they remain afoot. Since Telstra has long claimed that the costs of the USO to it exceed the levies it receives, then we would believe that it also should benefit from a removal of the current arrangements.

A further point I'd make is that it's, as I said at the outset, important that we have technologically and vendor-neutral arrangements, and that we ensure that any future arrangements are future-proofed. Another element that needs to be future-proofed is to

put in place checks and balances that constrain the potential for scope creep and capital intensity of revised obligations to increase over time.

There is always a temptation when such interventions are put in place for the scope of services to be expanded or the costs of delivery to be inflated. For example, there will be a temptation for NBN Co to seek to increase its access charges as a consequence of taking on USO obligations.

This is something that should be guarded against, because it shouldn't happen, as a standard service should fall within the existing service delivery model and public policy obligations of NBN Co.

That's the conclusion of our opening statement, and we're happy to take questions.

**MR LINDWALL:** Thank you very much, and I much appreciate that. On your last point, do you see any cost implications for NBN in the - if TUSO didn't exist, the Telecommunications Universal Service Obligation agreement with Telstra?

**MR EPSTEIN:** Well, I mean, I think those sorts of things need to be worked out in terms of where residual contractual and service obligations fall obviously in the first instance, but also in determining what would be the baseline of the gap that I referred to earlier.

In saying that, you know, we think, you know, a large proportion of these obligations could sensibly fall to NBN Co, you know, as the public sector baseline network provider, we're not ruling out the possibility of others contributing to it or other arrangements, and indeed when you're dealing with some of - you know, what we would see as some of the niche issues, I think there's a high potential to put things out to contract and to contest, if only to enable a broader array of services and service providers to come forward.

So those sorts of things should be able to impose some form of cost tension on NBN Co. But I think at this stage, until you define the elements of what you would describe as the gap and the most, you know, rapid means in the first instance of dealing with it, it's very difficult to, you know, put precise figures or pinpoint precisely what it would do to the NBN Co's cost structures.

**MR LINDWALL:** Although I suppose you could say that in the case of customers who of course have voice only landline, who - under the POTS, as you mentioned, who then moved over under an alternative universe without the TUSO to using NBN for just that purpose, the amount of bandwidth they'd use would be still fairly limited.

**MR EPSTEIN:** Well, it should be fairly limited. I just would say, as a bit of a corollary of that, and it was borne out to me on Monday night where, along with representatives of some other companies, I attended a regional forum out at Dalby, there is some concern, some of it misplaced, I believe, among, you know, potential customers of such residual services in regional areas, that by losing access to copper they'll be highly dependent on satellite, and some of them, you know, have memories very fresh in their mind of, you

know, some current issues with Sky Muster where weather conditions over Geraldton have ended up affecting the whole nation, and there is very much an expectation - you know, the degree to which it's realistic may be debatable by some people - that services should be on all the time and restored, you know, within minutes.

Now, that clearly doesn't occur with the copper lines. But you know - you know, there are instances where satellite services of all types, just because of logistics, can be out for weeks, et cetera et cetera, where weather conditions can affect availability. So I think there needs to be a bit of a working through of, you know, what all the alternatives are, and a bit of an education program, and then once that's occurred and, you know, the potential baseline services have been defined, what they do need to be accompanied by, I think, is some form of, you know, service or maintenance level guarantees, because that's clearly a concern these days, and, you know, anecdotal evidence suggests, you know, quite interestingly in certain rural and regional areas the technological intensity of evolving business may, in fact, on the average be greater than it is in urban areas just because of the nature of businesses and things like telemetry et cetera et cetera in addition to baseline voice services and, you know, increasingly people are saying, you know, we can't divorce the basic voice from the basic digital.

**MR LINDWALL:** So getting - staying on the satellite area - well, actually, looking at legislation that has been out for draft comment of the statutory infrastructure provider legislation, does that address some of those concerns, do you think? Does Optus have any comments on the SIP legislation?

**MR EPSTEIN:** Do you want to comment in detail on that?

**MR SHERIDAN:** Well, I think - firstly I think the SIP legislation is quite relevant, because it really provides that sort of baseline guarantee that NBN infrastructure will provide the basic connectivity, which is one of the key elements of the current policy.

So with that legislated, that obviously gives a further impetus to the policy reforms that you've outlined. So I think that's probably the first - probably the most important point in terms of that legislation. The opportunity for other parties to become a statutory infrastructure provider, that's opened up, but there are clear obligations there again in terms of how that - what they would have to do in terms of gaining that status, so again, that's I think an important element.

In terms of service delivery over the infrastructure, I don't think the legislation particularly goes to that, so I think the issue's really irrelevant, and I think you've identified in terms of satellite is to - if there are issues with the satellite service, what are those issues, and how do they compare with what the experience is on today's services? Recognising that there is also some quite considerable additional utility from the satellite services being provided out into the remote areas today.

**MR LINDWALL:** Yes, well, exactly, but - so could I, just for the record, that if you were to consider fixed line and fixed wireless services through the NBN, you're getting a very good voice service without doubt, is that - that's true?

**MR SHERIDAN:** Yes, that's correct. And that is our position, yes. And we're offering services across those two platforms.

**MR LINDWALL:** Yes. And so for the part that is covered by the NBN satellite, the Sky Muster, there has been debate about the satisfactoriness of the voice service, due to latency and, as you mentioned, weather conditions. Yes?

**MR SHERIDAN:** Yes. I think another important point there as well, which we've made in our submission, is that within that satellite footprint I think it's important to recognise that the vast majority of customers who are on the NBN satellite have access to mobile services, both on street and within their home.

So we are probably talking about a fairly small cohort of customers who are reliant solely on satellite and don't have mobile coverage today, and I think in your report you've identified that might be around 100 or 90,000.

**MR LINDWALL:** Up to 90,000.

**MR SHERIDAN:** Yes, I understand. Which is consistent with our view. And over time, that number may come down with programs such as the Mobile Black Spot Programme and again the ability that we've noted in our submission to roll out small-cell satellite technology.

**MR LINDWALL:** Yes, and - - -

**MR EPSTEIN:** Which is not necessarily dependent on NBN Co, and you know, obviously we would talk to our own brief a bit there, because you know, we are a supplier. But you know, what it does illustrate is there are an array of solutions that can be used to address that, you know, that small rump that you are faced with.

The other thing that I'd point out is, I mean, you know, there is a question of latency. You will always have latency with satellites, but there are ways and means of, you know, reducing that to the bare minimum. You know, for example it is possible, you know, depending on how you configure your satellite transmission and its connection with broader networks, to create hamlet-to-hamlet communications directly off the satellite, so that adjacent communities at least have the benefit of, you know, slightly less delay, not having to transmit back to major network hubs and then go back up again. So you can do those sorts of things too.

**MR LINDWALL:** And hamlet-to-hamlet would be a major form of communication, and of course a lot would also be fixed line, where there's latency, where with single-hop satellite services latency is fairly low anyway.

**MR EPSTEIN:** Yes, yes, correct, correct.



**MR LINDWALL:** So the philosophy that we argued in our draft report, which was to phase out the TUSO - and we've got some options, we can talk about that in a second - and target inventions based upon availability, accessibility and affordability, you agree generally with that?

**MR EPSTEIN:** Absolutely. And you know, it has the other benefit in that, you know, presumably if it's held to, you know, well-defined contractual periods that you can refresh technology and the mix of technology as things develop.

**MR LINDWALL:** Now, one of the things that came out yesterday when we were talking about broadband was that broadband retailers, retail service providers, often do not communicate well with their customers about problems or who's responsible for the problem or resolution of it or, for example, if they take up a 50 megabits a second download service and they might be only getting 20 or something, are there - should we have regulatory solutions to that, or are there market solutions that would be better?

**MR EPSTEIN:** Well, I think there's - you know, there's the opportunity for solutions coming from three directions. Regulatory. To some degree, the ACCC is already looking at this, you know, whether it's through explicit regulation or through encouraging, you know, cultural change in practice.

There's an educational task, and there's also a market task. And, you know, while it's difficult to pinpoint express examples, there's a multitude of anecdotal examples, I don't think any of us can ignore the fact that we are currently in, you know, a transition period with NBN Co. Its initial rollout has been delayed, and it's now increasing rapidly across a multi-technology model, which means, (1), you know, it's potentially - you know, it's clearly got the potential to service more customers, interacting with more customers, as indeed are retail service providers.

More and more retail service providers are having experience with, you know, retailing the NBN. And to some degree we are feeling our way, and that is reflected in TIO trends at the moment, particularly in the satellite area. That's a very fraught area of customer relationships.

You know, and we would acknowledge that there is scope for improvement on behalf of the industry as a whole and, you know, systems have got to get better, they've got to be simplified, they've got to be more effective, they've got to be more consistent. But equally we've got to come to more common understanding of what expectations, and we also have to come to a more common understanding - and this goes into the whole debate about NBN pricing, et cetera, and the NBN business model, a better understanding as to actually how the internet and data works, number one, and how usage patterns are now evolving.

You know, we're no longer in a world where, you know, load sharing can be managed, as it were, in a manner analogous to pricing of airline seats. There are, you know, too many consistent patterns of full loads and customer demands now as people are using over-the-top services.

**MR LINDWALL:** But do you have any comment, which Telstra raised at yesterday's hearings, about the CVC pricing model used by the NBN - - -

**MR EPSTEIN:** Sure.

**MR LINDWALL:** - - - which, of course, to paraphrase Telstra, just for your information in case you didn't see what they said, was that they would be disproportionately affected, because many of their customers are voice only customers who would have low bandwidth.

**MR EPSTEIN:** Yes. Look, I'm familiar with the Telstra arguments, and I was asked to make some comment, you know, after they spoke yesterday. Look, at the outset we think, you know, obviously people will always talk to their own brief, otherwise we wouldn't be here, but I think the concerns raised yesterday were significantly overstated, and it's a little difficult to unpick, you know, some of the grounds for them and find the empirical evidence to suggest that they would actually be borne out as Telstra suggests.

They also appear to ignore some of the significant subsidies that Telstra receives from other directions to service that customer base. What we would say is, you know, as indeed I said in my opening remarks, you know, there is always a danger where you have a monopoly service provider emerging, such as NBN Co, that costs can get out of control, and without the, you know, large market disciplines on such a service provider you have to rely on regulatory intervention, and that carries its costs, and it's by no means a perfect or precise instrument.

You know, so that would be the first point to make. That said, we think the reforms proposed by NBN Co are heading in the right direction. They recognise some of the issues that are arising. We are heartened by the fact that they will be backed by an enforceable undertaking with the ACCC.

However, if we had our druthers we do think that they should ultimately be supplanted by a more fundamental rebalancing between the NBN's AVC charges and CVC charges. The CVC is an artificial rationing device. There's not a lot to really rationalise. This sort of mechanism is not used widely internationally, and to our mind it very much reflects NBN Co's need under, you know, companies regulation, and also to meet its regulated rates of return, to bring forward cash flow early in the life of its business model while it's still acquiring customers.

So you know, we recognise the dilemma that NBN management and the NBN board faces to meet their fiduciary duties, particularly in the face of, as I've referred to earlier, changing usage patterns, and indeed, usage patterns that have changed very significantly since the NBN's original business models and business strategy was first developed, and which pose a threat to the sustainability of that business model.

So our view is that NBN Co and its shareholders should pay greater attention to moving faster towards a more sustainable charging and business model that reflects

reality. The other challenge for NBN Co is, you know, under, you know, its current charging regime, notwithstanding the reforms proposed, if customers were to be given a guarantee of the sorts of throughputs that the advertised NBN speeds might encourage them to believe, it would require a massive increase in provisioning.

Now, some would say, well, why don't retail service providers go out and provisions? Well, the thing is, under the current regime, it would in some instances potentially result in a doubling, tripling or even quadrupling of monthly charges for certain plan levels to provide guaranteed levels of speed 24 hours a day, seven days a week, right through a charging month.

Now, you may well be able to do it, but we don't think the market will bear it, and more to the point, the market's hardly likely to bear it when it's coming from a background of alternate commercial services and legacy services which have set prevailing expectations of price at the retail level, and those sorts of services are not going to disappear entirely.

So were we to shift to another world under the current regime and the cost of providing NBN services was to rise commensurately, you might find that there would be a significant drop in the demand for NBN, to the point where both the economics of the NBN are undermined, and more to the point, the potential of its benefits to the wider Australian economy are dramatically undermined because we have an inhibitor to Australia following international trends in technological development and technological utilisation.

**MR LINDWALL:** I don't know of any retail providers at this stage who have packages which offer the standard types of services plus a guaranteed rate of download and upload, so I guess that shows that retailers in general don't believe that there's a market at this stage for that.

**MR EPSTEIN:** Well, you know, I think a better way of putting it is retailers would be highly sceptical that selling NBN services at double or triple the current monthly cost is sustainable. I just don't think the market would bear it. We also need to bear in mind, and I know it's not the primary subject of this inquiry, but I think it is relevant, that there have been expectations created, particularly by the promoters of the NBN, you know, not just the NBN itself, that the headline maximum speeds are in fact, you know, the average or the baseline speeds.

Now, I think that the market is rapidly recognising that that is not the case, that these are maximum speeds, but what we've all got to come to terms with a bit more often is a common understanding of how you actually benchmark not just NBN services but any commercially available services.

Now, the ACCC has done some work on that. Carriers are doing some work in terms of education. And indeed, people are learning through experience. But the more fundamental point is, you know, how can we achieve a charging regime which satisfied the NBN's cash flow needs, enables NBN to meet its obligations in terms of its rates of

return and return on invested capital just in the commercial sense, but is also in tune with the elasticities of the retail market? And at the moment there's a major tension emerging.

**MR LINDWALL:** Yes, yes. Now, if we return, if you don't mind, to the satellite service, one of the issues that's come up in both hearings and submissions and meetings are concerns by people in regional and remote Australia of their bandwidth limits in terms of volume per month, if you like - - -

**MR EPSTEIN:** Yes.

**MR LINDWALL:** - - - and off-peak and on-peak. Obviously there are limits to what a satellite can provide, and it has to be rationed that way. Have you got any comments that might address some of those concerns?

**MR EPSTEIN:** Well, look, you know, there's obviously limits. You know, there's the law of physics and there's, you know, the amount of infrastructure that you're going to put up in the skies. So we understand that. What we would say, you know, very strongly is we need to - notwithstanding some of the challenges for the NBN in attracting early revenue, we need to be very careful that NBN Co and more to the point NBN management are not diverted from their primary public policy obligations, which is to roll out a high quality relatively ubiquitous national broadband network that provides relatively ubiquitous levels of service, within the bounds of practicality in favour - we don't want them diverted from that task in favour of ambitions to receive a supplementary commercial income.

Because the problem with, you know, NBN Co pursuing supplementary commercial income or trying to widen its public policy obligations into other areas, you know, like for example trying to provide backhaul to mobile network providers who may not be prepared to provide their own backhaul or buy it on commercial terms, as indeed there is one major mobile operator in Australia who seems to argue that, is that in doing so you potentially use up resources that could be devoted to increasing the data limits for customers.

So for example, you know, potentially reserving services for commercial airline internet and, you know, has the potential to impinge on provision of NBN to the ordinary householder or to hospitals or schools, et cetera.

**MR LINDWALL:** Yes.

**MR EPSTEIN:** So you do need to be mindful of that sort of thing. I'm not going to step into the shoes of, you know, NBN's satellite management and second-guess how they're currently load management. All I just make a comment on is the broader commercial and public policy strategies that the NBN has to pursue.

**MR LINDWALL:** In our draft report, of course, we talked about a transition from a phase out of the telecommunications agreement with Telstra, and we laid out some options, one of which was to wait till NBN has been fully deployed and they've moved

now into a different phase of their existence, and another one was to accelerate it a bit and target areas which it has been already rolled out to, and to a satisfactory degree.

Obviously people need to be satisfied that the NBN is bedded down in that region. Do you have a preference one or the other?

**MR EPSTEIN:** Our preference would be to the latter. I think it's better to be prepared sooner rather than later. Also doing the two things in parallel might assist two other tasks: one, ensuring that the regime is more nimble and flexible going forward, and two, keeping NBN Co focused on what I'd call public service / public policy objectives as opposed to commercial ambitions.

**MR LINDWALL:** That's a good point, yes. Now, on the Mobile Black Spot Programme, what's been the additionality that you would have expected in the latest round of it, and what do you see the prospects going forward for future rounds in terms of additionality?

**MR EPSTEIN:** Sure. Look, in terms of the current round, I mean, I think the - well, the crude additionality is literally, you know, more base stations and more coverage.

**MR LINDWALL:** Yes.

**MR EPSTEIN:** I think it's also - certainly we learned a lot of lessons about community and collaboration from our - you know, our bid for round 1 as opposed to our bid for round 2, and that's I think reflected in the results.

It, you know, enabled everyone to take better account of three factors: one, opportunities for collaboration and cooperation; two, opportunities for using different types of technologies, horses for courses as it were, you know, hence our emphasis on using smaller cell satellite technology; and also there were some other lessons I think learned in terms of the alignment of state government participation and to some degree, you know, state government policies there, although I think there's still a little bit of a way to go, because there is the potential for state governments, if they're not mindful of the broader impacts of the program on competition, and indeed other aspects of the wider telecommunications sector, to undermine some of the objectives of the federal program.

You know, the federal program for example included arrangements for co-locations et cetera et cetera, but some, you know, state governments certainly in round 1 tried to aggregate their participation in such a way that it was a winner take all arrangements, so, you know, therefore removed some of the incentives for, you know, carriers to - particularly if they were competing against Telstra, to pursue bids.

So there's a - you know, there's a few sort of lessons that were learned on the way through. I think they had a positive effect in terms of additionality. There's always a bit of a tension between, you know, dealing with what you would call pure black spot areas and areas that are dark grey, you know, where, you know, depending on which side of the

fence you're on there's differing views as to the effectiveness of the program and whether it's actually solving coverage issues.

And then of course there's the dimension of are people in regional areas entitled to the benefits of competition and the benefits of varied delivery mechanisms? You know, we think there should be a bit of a balance of both. That may be a challenge in round 3, and indeed one carrier believes it's a fundamental challenge. We're not so convinced of that. I don't know, Andrew, whether you have any other remarks to make?

**MR SHERIDAN:** No, I'm good.

**MR LINDWALL:** So with slightly less than 30 per cent of the geographic area of Australia covered by mobile phone coverage - - -

**MR EPSTEIN:** Yes.

**MR LINDWALL:** - - - and a large percent of the population's premises being covered, you would expect that additional rounds become ultimately more marginal?

**MR EPSTEIN:** Well, I think that's - you know, that's a natural consequence of things. You know, I think the Australian population can take some reassurance that while the additional rounds become more marginal, you know, for potential applicants, the products of previous rounds tend to drag out.

You know, the commercial prospects of coverage tend to follow the program, as it were. They grow behind it. Carriers wanting to connect outlying black spots to, you know, the denser parts of their network, wanting to connect highway pathways, et cetera et cetera. Technology is undoubtedly improving, and incentives, you know, to have competing infrastructure are undoubtedly improving. You only have to look at the pace of 4G rollout in regional areas now.

As you pointed out, there's certainly large geographic areas that are no longer covered - that are not covered, and some of those will always be under challenge. Now, I want to just make it very clear, in advocating what we do and enjoining you in the thrust of what we think is, you know, the preferred way forward, we are not in way saying that commercial mobile networks are somehow a substitute for 100 per cent geographic coverage. They are clearly not.

And I don't think that's the task we are talking about.

**MR LINDWALL:** No, no.

**MR EPSTEIN:** We are talking about a task where mobile networks can play part of a role, where the NBN can play part of a role, where satellite - all sorts of technologies which will, you know - using, as it were, a multi-technology mix, a tapestry can solve part of the issue that people are still concerned about, which is that tension between population coverage and geographic coverage.

**MR LINDWALL:** But overall, your assessment would be at least another round, maybe one after that, would still be viable.

**MR EPSTEIN:** Correct, and you may - you know, as the outcomes of each preceding round are bedded down and, you know, you see the practical effects on the ground in addition to having regard to what's happening in the broader commercial marketplace, you may want to fine tune aspects of the program.

**MR LINDWALL:** Yes.

**MR EPSTEIN:** You know, I think we're very much at that stage where the initial - you know, the bulk of the initial task is being addressed, and I would say "being addressed". You know, it's very much, you know, a task in progress. So we are now, you know, looking at, you know, what we have to do at the edges.

**MR LINDWALL:** Yes. Now, mobile in one respect is a substitute for fixed line, as in many people in the cities just have mobile and nothing else.

**MR EPSTEIN:** Correct, yes.

**MR LINDWALL:** And in rural and other areas maybe it's a complement. So how do you say - I mean, is that the way it is, or do you - - -

**MR EPSTEIN:** Look, it is a complement, if you're talking about baseline voice services. I don't think these days it should be regarded as a complement or it indeed that it is being regarded as a complement for data services in regional areas, particularly as you are getting more B2B and more machine to machine communications.

And indeed, as I said at the outset, I think there are now grounds for arguing that particularly small and medium enterprise in regional areas is actually more dependent on mobile networks and has the potential to be more dependent in aggregate, in the broad - in percentage terms, than what occurs in metropolitan areas, just because of the nature of businesses and their use of things like telemetry, et cetera, their dependence on electronic trading, digitisation, et cetera et cetera.

And when I - you know, I was speaking to a farmer on Monday night who was very, you know, proudly describing the fact that while he still has to sit in a tractor that's going round his field, albeit an extremely large tractor, this thing is basically driving itself using laser and digital guidance and GPS, and taking advantage of that, he is now trading his crops on international exchanges via his iPad in the field, quite remote from a regional town.

That sort of thing is occurring all the time. It will occur even more with 5G. To some degree, some of the challenges will be addressed by two factors. I mean, one, you know, the mobile technology is becoming more efficient, and two, there are some advantages in, you know, some of this machine to machine communication actually just,

you know, the way that it's working and, you know, the loads it places on networks can actually operate a bit further from towers than your handset, for example.

Now, that's not always going to be the case, particularly as networks load up and more and more of this is used, but both of those are illustrations that, you know, some of the - you know, with technological development some of these problems are not necessarily insoluble.

**MR LINDWALL:** Now, you mentioned 5G.

**MR EPSTEIN:** Yes.

**MR LINDWALL:** That's likely to be beneficial also in rural areas given that I thought they had higher frequencies and smaller cell sizes?

**MR EPSTEIN:** Look, that will be - that will be an issue. Undoubtedly so. But you know, I suppose in that sense I was using it more as an illustration of, you know, the dependence of some regional businesses on some of these new technologies.

**MR LINDWALL:** But what are the implications of 5G, or - - -

**MR EPSTEIN:** Well, look, I think they're to be worked through. But you know, undoubtedly the bandwidth, you know, where it currently sits, and the preferences on bandwidth, you know, are going to pose challenges. You know, that probably isn't necessarily the case in other countries.

You know, fortunately Australian representatives in international regulatory fora on spectrum have been able to get some recognition of our particular challenges. But you know, the fact is that there will be prevailing international standards, you know, which will always pose some of challenge.

**MR LINDWALL:** Yes. Now, I think in the submission Optus estimated - we estimated 90,000, or up to 90,000 premises outside mobile coverage in the satellite zone, and I think Optus came up with 150,000, is that right?

**MR EPSTEIN:** Yes.

**MR LINDWALL:** So do you - how was that calculated? Are you able to share that with us?

**MR SHERIDAN:** That was a fairly simple calculation based on the fact that mobile networks cover 99.5 per cent today, so it's the - it's around the remaining half a percent of households and businesses, yes.

**MR LINDWALL:** Okay, all right. Would you mind being able to show the team the calculations?



**MR SHERIDAN:** I have no - yes, absolutely.

**MR LINDWALL:** That would be great, yes.

**MR SHERIDAN:** Yes, no problems with that.

**MR LINDWALL:** And what - also - this is about it, really, but in our report we've basically said that the baseline is effectively the NBN service, which is the ideal, 25 megabits a second, although as we've discussed, that's the upper limit.

**MR EPSTEIN:** Yes.

**MR LINDWALL:** Is that a reasonable baseline? And how should it change over time, if at all?

**MR EPSTEIN:** Well, these things, I think, should always be, you know, subject to review, if only, you know, to avoid them becoming irrelevant and obsolescent, but also, you know, potentially where you've got a GBE involved, or indeed you might have commercial service providers, to prevent the emergence of, you know, sectional or entrenched economic interests that might inhibit the uptake of alternate means of provision.

But I mean, I suppose to answer your question more fundamentally, you know, we think this is, in essence, a philosophical question, and what you're proposing is a baseline standard, as opposed to a gold plated standard, and we - - -

**MR LINDWALL:** Yes, yes, both practical and cost effective, yes.

**MR EPSTEIN:** And we think that, you know, that that's the philosophical premise from which you should start. That would be our answer to the question.

**MR LINDWALL:** Yes.

**MR EPSTEIN:** Adopt a baseline standard, ensure that it's subject to review, and ensure that it's not likely to be, one, you know, become a constraint through obsolescence, in that it forms a cap rather than a baseline - - -

**MR LINDWALL:** Yes.

**MR EPSTEIN:** And two, that it doesn't form a basis for entrenched economic interests to develop as a further inhibitor on the economy.

**MR LINDWALL:** Yes. Do you have any final comments you'd like to make?

**MR EPSTEIN:** No, look, I think that's about it from us, thanks very much. Thank you for the opportunity.

**MR LINDWALL:** You don't? All right, thank you, gentlemen.

**MR SHERIDAN:** Thanks, thanks.

**MR LINDWALL:** Well, now we'll ask Ben Livson from BAL Consulting to come forward, if that's all right. If you could state your name and organisation and tell us what you want to say today, that'd be great.

**MR LIVSON:** Yes, please. My name is Ben Livson. I'm the Chief Executive of BAL Consulting, presenting the AAA response for the Productivity Commission's inquiry. So thank you very much for the opportunity to comment on the transition options for the standard telephone service USO module of the Telstra USO performance user agreement.

We've been very much heartened by the support that the Productivity Commission has received from - my understanding, from just about all parties. In particular I've been most encouraged by Dr Tony Warren, the group executive, Telstra Corporate Affairs, for his support, and I quote the idea that once the rollout of the NBN is completed there is a real opportunity to examine what technology is used to deliver a universal service that may replace the current USO. And overall, and I quote, Telstra remaining open to reforming the USO if changes mean the experience it provides for customers can be improved. I definitely would raise my hat to Dr Warren, if I had a hat.

We, as in (indistinct) Australia, AAA, support option 1 from the transition options, which is to amend telecommunications Consumer Protection and Service Standards Act 1999 to change the scope of the current standard telephone service USO. And I believe that all the parties would be willing to negotiate, in particular government and Telstra, to reach a revised USO.

The fundamental thinking that we have is that any revised USO needs to reflect mobile service as the primary telecommunications service for all Australians. If the government and NBN had their time again, and hindsight is a great thing, but after some good 10 years, if they would know what they know now, I would think that everybody would realise that mobile service is the primary service, and the fixed location services will more and more become secondary. That's our view at AAA.

I have quoted the Productivity Commission's report. Today it is nearly impossible for most people to imagine life without smartphones, tablets, messaging. Then there is the famous 99.3 per cent quote, which I have to say is greatly misleading, in the sense that there is massive, huge inequality within the 99.3 per cent of the population.

If there is ever in any area more inequality, more for the USO to advance, it must be the mobile service, in the sense that I, as a metropolitan person, probably spend well over 90 per cent of my time under mobile coverage wherever I go, whereas the rural regional remote person is lucky to spend a few percent of his or her time under mobile coverage. Maybe it's one tiny speck of the homestead, perhaps a community centre, perhaps a main road.

In fact, we do, AAA, very long rural regional drives. We stick obviously to sealed roads, what's called in Australia B roads. Not the Hume Highways, but the sealed roads. And even on the Telstra network - and we don't go to remote Australia on these long road trips. We don't get more than 50 per cent coverage.

So there is absolutely massive inequality between Australians that have some sort of mobile coverage. And in fact, when - these quotes about the 90,000 premises, AAA believes that, depending on how you measure it, it is either several hundred thousand, or it's potentially several million, in the sense that if the purpose of the USO is to provide Australians some sort of equality, and if it's accepted that mobile service is the primary service, then we are very far from that. The 90,000 is possibly - or in the AAA paper we are talking about more like the gentleman from Optus said, a few hundred thousand or anywhere from 150,000 to several hundred thousand.

I just refer to the AAA paper that we have in the submission, how we did the calculations, and we have density maps of Australia, what's defined as regional, what's defined as remote. I should say that a very large percentage of people actually use only their mobile service, and this is rapidly increasing. So that's something that needs to be factored in.

Also, I should say that by the 2020-2025 timeframe for completing NBN, we believe that the vast majority of voice calls, and in fact the most valuable data services, will be via mobile services. So AAA's recommendation is for the revised universal service obligation to ensure reasonable access to a standard all-in-one telecommunications service encompassing the all-important mobility for both data and voice to all Australians on an equitable basis, regardless of where they reside, study or work.

And we strongly believe that the USO funding should be used to extend the coverage of mobile services across the entire Australian landmass and surrounding sea to open up the entire country to opportunity, and I hear many people - many well-intentioned and knowledgeable people saying that no, it's not possible. But it is.

And we have the AAA technology. It's an ultra-low cost technology optimised to increase mobile coverage from the current one third or even less than that to the remaining two thirds of Australia currently only covered by satellite.

And one can only imagine the enormous social/economic benefit from implementing AAA, especially to regional and remote Australia. One thing to be said about - and I won't talk about the technology itself, except to say that it's focused on increasing mobile coverage in areas that are very sparsely populated, so areas where the aggregated capacity is small, as opposed to the massive capacity that the mobile carriers who have the mobile towers provide.

Where I think the Black Spot Programme went badly wrong is that they continued - obviously because the carriers wanted it to be that way, continued rolling out the same mobile towers in remote areas, and they just got very minimal coverage.

The Mobile Black Spot Programme covers - added coverage of only 150,000 square kilometres, which is roughly 2 per cent of Australia. So very large spending that you could have used to implement the entire AAA for all of Australia, the whole landmass and the surrounding sea.

It was, in our view - and I'm not knocking down the people that are running the Mobile Black Spot Programme, not at all, it was just that carriers (indistinct) just to use what they're comfortable with.

And I should only say that AAA is the result of some many years of research backed by the European Union, all the four major European powers, England, German, France and Italy, as well as Hungary, have spent some \$12 million of R&D to develop the technology to create this today.

**MR LINDWALL:** Thank you, and did you want to - I thought, sorry - I didn't want to interrupt if that was your final comment?

**MR LIVSON:** A bit more to go, if I may?

**MR LINDWALL:** Please.

**MR LIVSON:** Yes. I should say, in terms of NBN, that the satellite service is absolutely vital. It will take several years even after all the approvals to deploy AAA, and we, as in AAA, could save NBN a massive amount in terms of enabling NBN to delay the cost of sending additional satellites before they planned, 15 year lifecycle replacement, around 2031, and these savings for NBN would greatly exceed the cost of setting up AAA.

The other thing that would be beneficial for Australian NBN is that we would use - this would enable the proper use of NBN satellite capacity so that the areas that are exclusively relying on NBN or actually having to go to other solutions like low earth orbit satellites - we could allow NBN to target the limited capacity to those areas that can't have it right now, here and now. It would take over several years to deploy AAA.

Also in terms of NBN satellites, I should say that NBN was never designed to provide TUSO, and if the government wants to maximise the return to taxpayers privatising NBN, obviously it would be - should be carefully thought. This would have a major reduction in value if NBN is encumbered taking on TUSO for things that it was never designed to do.

Also, a couple of comments about the satellite itself. We've pointed out the satellite-only areas where the NBN satellites are subject to two-hop, around 1,000 millisecond delays, which would prevent the use of lots of modern applications.

The other thing that people need to realise is that a large number of the people that rely exclusively on satellite live in remote Australian areas where there's massive rainfall, and the KA satellites don't work when it rains. And obviously, in a modern society, having a telecommunications service that doesn't work when it rains is pretty sad.

I would just want to refer to the wonderful submission that Professor Reg Coutts made to the Commission, and Reg has been a great inspiration and I view him as my mentor in AAA, so I thank him for supporting us. So in summary, we recommend mobile service forming the new Universal Service Obligation to ensure a reasonable access and an all-in-one telecommunications service encompassing the all-important mobility for data and voice to all Australians on an equitable basis regardless of where people are.

Also the comment that I would like to make is that one can have any type of submission to the Productivity Commission, but if there is no clear thinking how to compensate Telstra for Telstra obtaining the \$2 billion in 2011, dollars out of TUSO, then one would have to question the value of such a proposal, and to my mind it comes down to, let's have this \$2 billion in 2011 value, net present value, used for AAA, for Telstra to obtain the full financial benefit which they are contractually entitled.

**MR LINDWALL:** Could I - would you mind wrapping it up, I think?

**MR LIVSON:** Yes, thank you.

**MR LINDWALL:** Thank you. Now - thanks for this submission and the comments. You say that technology AAA is ultra-low cost. How low is low?

**MR LIVSON:** So the low is - if you think of a rural base station in a very hard to access place, to be - assuming that it's access and we - our solution is completely independent of the terrestrial electricity. We have our own solar battery powered solutions. The big problem in these areas is obviously continuous supply of electricity.

But the rural remote base stations, the very few that we have, run anywhere from half a million to \$2 million. And - - -

**MR LINDWALL:** So how many would you need to cover Australia?

**MR LIVSON:** We think 250. So obviously you would need tens of thousands of mobile towers to do the same.

**MR LINDWALL:** So 250 at \$.25 million each, or something, did you say?

**MR LIVSON:** Yes, so the whole program would be around \$400 million. They vary from half a million to \$2.5 million, depending on the location.

**MR LINDWALL:** All right, that's - do you mind if I say this? I think people would say that I'm the most technophile Commissioner by far. I love technology, and I'm always taking the most up to date technology. But I'm also a sceptic sometimes, so you have to persuade me. Something that sounds too good to be true is often too good to be true, and if it's so cheap and so effective, why isn't it already being used? What's stopping it being used right now?

**MR LIVSON:** Well, it is being used.

**MR LINDWALL:** Which countries are using it?

**MR LIVSON:** Well, I mentioned the four major European powers, the United States, the Australian Defence Force. It's used in - this technology has been used massively by military around the world, including ours, and it's definitely now with the European Union funding at the stage where it can be funded.

Initial funding was to use it for emergency services, major fires, floods, that destroy infrastructure. So the initial application was that. I'm not even going to go through all the numerous - the technology itself is (indistinct) just one supplier, we're talking about, has over 20 years produced several thousand.

Everybody knows about Google Loon. It's a different approach, but certainly raised a lot of expectation. So it boils down to this. Australia is the flattest country on Earth, and 90 per cent of our country is less than 300 metres elevation. (indistinct) coverage.

And AAA is by far the most cost effective means of getting coverage.

**MR LINDWALL:** And it's ready to be deployed at the moment? It's not, like, in development or research?

**MR LIVSON:** No.

**MR LINDWALL:** So have you been in discussion with Telstra and Optus and Vodafone and the other mobile providers to purchase this technology?

**MR LIVSON:** We were in discussions, fairly advanced discussions, basically, to the level of purchase order, when this mobile roaming inquiry commenced, which stopped us there.

**MR LINDWALL:** Yes.

**MR LIVSON:** The carrier involved, one of the three major carriers, and I can't mention them, basically said, "We think we can roam on Telstra." So that sort of put a stop to that.

**MR LINDWALL:** So are there any policy inhibitions that would stop the deployment of AAA technology? So I mean, in the end you have a cost effective technology which, if you're a provider of those services, would be quite attractive, so what's blocking it? If there's no market reason for not purchasing it, is there a government policy blocking to it that needs to be sorted out?

**MR LIVSON:** Not to my best knowledge. Obviously it requires certain regulatory approvals, so like everything else, ACMA approvals for spectrum. So obviously the

carrier that deploys it needs to have the spectrum assets. Also there needs to be, obviously, Civil Aviation Authority approvals, because it's an aerial object.

**MR LINDWALL:** Yes, yes.

**MR LIVSON:** So we selected several sites, got the initial CASA thumbs up. We don't believe there is - as long as we are separated by several miles from the nearest aerodrome, that we would have a problem. And these problems would be, I think, very rare when you're talking about rural and especially remote Australia.

**MR LINDWALL:** What altitude to they apply at?

**MR LIVSON:** So we think that the optimal altitude is between 900 metres and 1,200 metres.

**MR LINDWALL:** I see. That's not very high, no.

**MR LIVSON:** No.

**MR LINDWALL:** No. And as you say, as long as you're far enough away from aerodromes, it should be fine, and it would be marked on aviation maps if it was - - -

**MR LIVSON:** Yes, there would be an exclusion zone.

**MR LINDWALL:** All right, well, I think it's an exciting technology, and if it does what you say it does, all power to you. And good luck.

**MR LIVSON:** Thank you.

**MR LINDWALL:** I appreciate you arriving. It does sound very good. Well, we might now move on to Mark Harvey-Sutton from the National Farmers' Federation. Hello.

**MR HARVEY-SUTTON:** Good morning, Commissioner. How are you going?

**MR LINDWALL:** Paul will do, I'm informal.

**MR HARVEY-SUTTON:** Paul.

**MR LINDWALL:** So if you'd like to say your name for the record and the organisation and make a statement, that would be perfect.

**MR HARVEY-SUTTON:** Sure. Mark Harvey-Sutton, from the National Farmers' Federation. Our vision is for Australian agriculture to become a \$100 billion industry by 2030. The sector is a source of strength in the Australian economy, positioned to capitalise on growing global demand for safe high-quality food and fibre over coming decades.

To achieve our vision, the sector needs regulatory and public policy settings that foster growth in productivity, innovation and ambition. This includes a Universal Service Obligation agreement that enables Australians, wherever they work and live, to have guaranteed minimum access to data and voice services, which includes upload speeds and other features specified for existing and future residential agriculture, health and education applications.

The National Farmers' Federation believes that connectivity represents the next frontier for agricultural productivity in Australia. Telecommunications services have evolved to the extent that it is now reasonable for baseline broadband to be considered a right for all users.

Regional, rural and remote consumers and businesses need rights to access broadband and voice services, and we urge the PC to be conscientious and practical in considering a path forward. We are pleased the PC has identified that the current arrangement for USO is in need of reform, and should be amended to include a baseline broadband service.

However, the declining relevance of the current agreement does not negate the need for a new USO to act as a safeguard for telecommunications users, particularly in regional, rural and remote Australia. There should be no degradation of the services that are currently received. The challenge now will be ensuring the correct transitional arrangements are identified and form part of the solution.

In addition, the NFF is one of the founding organisations of the Rural, Regional, Remote Communications Coalition. NFF has joined the Coalition as they are a critical mass of organisations ranging from relatively established lobby groups through to fledgling volunteer or interest groups which are advocating for similar access and service quality issues for rural and regional telecommunications users.

The breadth and number of organisations involved highlights the telecommunications in the rural, regional and remote areas as critical. For many NFF members and members of the Coalition, access to communications is made possible by the USO. If the USO was not in place then telecommunications would unlikely be commercial viable, nor affordable.

And just for your information, Commissioner, in addition to National Farmers' Federation members, the Coalition also includes ACCAN, the Broadband For The Bush Alliance, Better Internet For Rural And Regional Australia, the national body of the Country Women's Association, the New South Wales branch of Country Women's Association, and also the Isolated Children's Parents' Association.

**MR LINDWALL:** Now, the USO of course is fixed line to the home plus payphone, so  
- - -

**MR HARVEY-SUTTON:** Yes.



**MR LINDWALL:** - - -we're talking about something quite different with our broadband, and the service provided through NBN is quite different to what was available previously, and much better in many ways, so I think it's probably useful to talk about the different aspects of it.

Obviously people in rural and remote areas, some of them will be in a fixed wireless region, and others will be in a satellite region, and that dividing line has been specified by the NBN economics as much as anything else.

**MR HARVEY-SUTTON:** Yes.

**MR LINDWALL:** It's the nature of satellites, of course, that they have a fixed capacity and you can't upgrade them except by launching a new satellite.

**MR HARVEY-SUTTON:** Yes.

**MR LINDWALL:** So logically speaking you'd like to have more people on the fixed line or fixed wireless, which obviously is the case.

**MR HARVEY-SUTTON:** Yes.

**MR LINDWALL:** But when - so when you reflect on comments that have been made this morning - I don't know how long you - - -

**MR HARVEY-SUTTON:** I've only heard a couple of them.

**MR LINDWALL:** Yes, okay. I mean, there is mobile coverage at the moment of about 99 - if you take Telstra's network, about 99.3 per cent of the premises in Australia, and about just under 30 per cent of the geographic area. So in our report, of course, we said that the USO, which as I say is fixed line to the home premises, is becoming increasingly redundant because of those types of reasons. But we said that we didn't think that we needed a universal service obligation, because cities are usually well-served. Why should it be universal? What's wrong with just a more targeted approach to those in need?

And we divided it between the availability of the service, which we thought in the main was handled through NBN, complemented by mobile coverage; the accessibility, people with disabilities and so on; and the affordability, as in people - and we - I mean, equity for me is not, you know, city versus regional, it's more about there are low income families in, you know, western suburbs of Sydney as much as in some regions of Australia and remote Australia, and as well as there are wealthy families in remote areas and in the city. So isn't it more - equity is more about income levels rather than - that's traditionally the way of equity, rather than where one lives.

**MR HARVEY-SUTTON:** I think that probably comes down interpretation a little bit. I mean, if you look at - if you boil down USO to its very essence, it's that ability to have a connection wherever you live.

And I note the figures around the population coverage for mobile, but I think a really important aspect of that is the geographic coverage, and I mean, I'd be cautious in wrapping mobile up in this discussion for that reason, where if you boil the USO down to the essence of having a connection, I mean, that - there's geography that mobile will not extend to. And it's essentially the USO that facilitates the connection for those people that are beyond that geographic reach.

**MR LINDWALL:** Yes, yes.

**MR HARVEY-SUTTON:** So I think in - very much take your point around equity, and very aware that there are social issues attached to the USO as well, but if you reflect on the fact that a number of residences that are geographically remote wouldn't have a connection without the USO, I think that really comes down to the nub of the issue of where we're coming from.

**MR LINDWALL:** But under the NBN, they will have a connection if they ask for it, so why do you need a USO per se if that's been serviced by the NBN?

**MR HARVEY-SUTTON:** Well, it's a - that's a very good question, but I think - I mean, to be frank, if you have a look at the current reliability around the NBN rollout - and that's been well publicised.

**MR LINDWALL:** And I've heard that in hearings too.

**MR HARVEY-SUTTON:** And no doubt you have, and it would probably be a common theme, I imagine. But you know, I think at the moment you have the capability where these residences are connected by landline, and that's their lifeline. There's safety concerns, that's how they run their businesses, and just to take a step aside from that, I think that's a really important point that they run their businesses, because to my mind when we talk about connectivity it's actually about unlocking potential in the economy, and there's a sector of the economy that just can't unlock itself at the moment.

So reflecting on that, I think, you know, if the proposal, for instance, for voice to be rolled out using NBN infrastructure - and I did make the comment in our submission that we understand the logic of trying to leverage an infrastructure base that's being rolled out, but the feedback that's been received by our members, and certainly to us directly, there's great concern about the fact that given the current unreliable nature of the NBN, essentially they don't want the rug pulled out of them either from - with landlines.

**MR LINDWALL:** We did, of course, say in our report that it had to be bedded down. We didn't - and it's a very large infrastructure project, the NBN, and it does have some teething problems - well, that's what we call it, teething problems. And yes, people have had problems with it all through the country, as you would imagine for any infrastructure project.

But we did say that until it's bedded down in a particular area, you shouldn't go ahead with getting rid of the telephone, so - - -

**MR HARVEY-SUTTON:** That's right.

**MR LINDWALL:** I mean, I think you should look through that and say it wouldn't be removed under our proposals until the NBN service is satisfactory.

**MR HARVEY-SUTTON:** Yes. And if that's the case, well, then we're happy with that. I mean - - -

**MR LINDWALL:** So if you then divide it between the fixed line, fixed wireless and satellite areas, the fixed wireless and fixed line areas by all accounts give a very, very good voice service. Is that sufficient?

**MR HARVEY-SUTTON:** Look, I'd answer that by saying, you know, we're very conscious that technology could develop that makes that more reliable, and going back to my first point, there are areas where a landline is it. So I don't think it would be sufficient to rely on the technologies as they are now until there is that guarantee that they are reliable and that connection's guaranteed, and that's very much our position. I mean, as I said, we understand the logic, but it does raise a lot of concern, given the capability.

**MR LINDWALL:** I think you should put it also in perspective, though. The current service is not 100 per cent reliable, is it? I mean, my own mother who relies on a voice service and has no mobile coverage has had her service out for more than a month at a time twice, so people in remote and regional areas already have unreliability, so we're not comparing, you know, some gold perfect system now that's being replaced with something inferior. In fact, you're comparing something that's superior with something that's reliable and it's been around for a long time but it's certainly not 100 per cent reliable.

**MR HARVEY-SUTTON:** No, and we're aware of that and, you know, it is a big issue for our members, so the outages are - - -

**MR LINDWALL:** Yes, yes.

**MR HARVEY-SUTTON:** And you would have no doubt heard this, so look, to answer your question, I think if that technology is there and you can end up with that superior service and reliability, well, that's the goal. But it's just not - the feeling is, and the rhetoric is, that doesn't exist at the moment.

**MR LINDWALL:** Yes.

**MR HARVEY-SUTTON:** And it comes down to my statement - the comment in my opening statement that transitional arrangements are going to be key here. And I think that's what really needs to be bedded down, and I mean, if that's - you make the point that

you've said that that has to be guaranteed before it rolls out, and if that's the case, well, that's great, that's our position as well.

**MR LINDWALL:** Has the NFF had a look at the statutory infrastructure provider legislation that's out for comment at the moment?

**MR HARVEY-SUTTON:** That's the telecommunications reform package?

**MR LINDWALL:** Yes, yes.

**MR HARVEY-SUTTON:** Yes, we have, and I think that comes down to - in our submission we made the point that there's a role for both industry and government to play in funding. We'd very much support - there's provision in that legislation for standards to be set and safeguards, but that's got to be a number one priority in that process, and I think, you know, look if that presents a viable funding source to guarantee that connectivity, well, it would be supported.

**MR LINDWALL:** But also the SIP legislation is about the problem of wholesale guarantee, because of the structural separation with the NBN and retailers. Have you got any comments on it in particular?

**MR HARVEY-SUTTON:** Only - look, the only comment I have is at the moment it's a very confusing regime in terms of addressing concerns for users. We see that in terms of the point of contact to address problem, is it the wholesaler? Is it the retail provider? That's an ongoing problem, and I do think that reform package will take steps to addressing that and by having that separation and that point of redress, I think that would be beneficial.

**MR LINDWALL:** Now, have you got anything else you'd like to say about the satellite service? Because some people have said that they're a bit concerned that their bandwidth limits on a satellite are more limited than people on fixed wireless and fixed line, and also that they're more costly.

Of course, that's the nature of a satellite, as I said, with the fixed limits, and it has to be - they are costly to launch, so it's a balancing act, but - - -

**MR HARVEY-SUTTON:** Absolutely.

**MR LINDWALL:** - - - what would you say about that?

**MR HARVEY-SUTTON:** Look, I think you do have to approach it pragmatically. You know, the talk around a baseline service - well, we're conscious of that. You know, it is a baseline service. It's what it is. And in many areas that baseline service, if baseline broadband is rolled out, that will be better than they've ever had before, and we're very aware of that.

But by the same token, I think you need to be conscientious of the fact that, you know, upload and download speeds and the bandwidth - you know, that's going to change over time. The use of data's going to change over time, and so that baseline does need the capacity to be reviewed from time to time to ensure that it is an adequate baseline.

**MR LINDWALL:** Yes, I think it may. But some people have said in submissions that it's unreasonable that people in the satellite area have to pay more and have lower limits and they should have exactly the same as in the cities, and my question would be, is that a reasonable claim itself, given that that would be very costly to achieve, and is it equitable in another sense between low income families in cities having to cross-subsidise more high-income rural areas that might be in the satellite zone?

**MR HARVEY-SUTTON:** Look, I don't want to be drawn on that rural-urban divide, but suffice to say I think, as I said, we've got to be pragmatic in that baseline.

**MR LINDWALL:** Yes.

**MR HARVEY-SUTTON:** I mean, certainly my experience, and this is very anecdotal, people don't mind paying for a service if it's reliable and good and it adds benefit to their businesses.

**MR LINDWALL:** Yes.

**MR HARVEY-SUTTON:** And if that's what can be achieved, well, that's the outcome. I mean - and to my mind, there's obvious benefit. I mean, this will enhance business capability and productivity in rural areas. I think - - -

**MR LINDWALL:** Yes. No doubt. I mean, the technology's amazing, and we showed some of that in our agricultural inquiry in terms of, as you say, unlocking some of the economic activities in regions and remote areas.

But, you know, is there something that NBN Co or the retailers should be doing more to help the people living in remote and rural Australia to better understand the limitations of the technology and how it's being deployed and why there might be some teething problems, for want of a better term, at this stage?

**MR HARVEY-SUTTON:** Absolutely, yes, yes. I think, you know, if - I think that understanding of the limits around satellite, for instance, it's - you know, there are ways you can structure your computers and IT system at home to take - you know, utilise that to your best advantage, but I don't think that's widely understood.

**MR LINDWALL:** I agree. I think that some people, for example, may have used it by downloading through Netflix, and yet Netflix allows you to schedule a download into an off-peak area - off-peak period, if you wanted to.

**MR HARVEY-SUTTON:** Exactly right. So but I guess the point I was leading to there is that lack of understanding. You know, that communication is not coming through.

And I think there's a couple of ways we could address that. One is you enhance that communication, you enhance that interaction between wholesale and retail so you actually get resolution to issues as they're raised, and you don't do the run-around trying to fix your areas.

And the other thing is consumer safeguards. They're vital. They absolutely have to happen, and we raised the point in our submission that there are a raft of processes happening, and that consumer safeguards review is due to kick off very soon. In addition, under that new reform package there's also the provision for standards and safeguards. So that has to be a priority, I think, and even if you look at it to the extent that, should transitional measures come into place, the consumer has to be protected during that process.

**MR LINDWALL:** So you don't think that you can rely on - well, I mean, the structure of the NBN, one of the merits of it is that it's a wholesaler/retailer split, and it's relatively low cost to be a market entrant as a retailer, and therefore you would expect relatively good competition. In fact, it's observed that on all the 121 points of interconnect, there are quite a lot of retailers.

And normally we would say of society and markets that competition tends to drive good behaviour and, you know, without having statutory guarantees in a lot of areas of our society, is there something that you still think there should be statutory guarantees for consumer protection here above and beyond what you already have through the Competition Consumer Act and the ACCC?

**MR HARVEY-SUTTON:** I do. I do. I think - I mean, competition - the merits of competition are well-founded. I mean, we exist in a competitive market where agriculture competes in a global industry, competition's the foundation.

But competition only exists when there's commercial activity. There are areas where connection is not a commercial going concern for providers, so I think to protect those consumers there must be that baseline access. It's a right.

**MR LINDWALL:** Now, have I got anything else I need to ask you? Have you got any comments on the way in which the NBN is funded and are there improvements that could be made to make it more equitable, perhaps, or to help the rollout?

**MR HARVEY-SUTTON:** I'm not sure I understand the context.

**MR LINDWALL:** Well, so the NBN model is based upon the various different charging structures, and they have some volume discounts, for example, and what they call CVC pricing, and as our Optus representatives here this morning were saying, it's not typically used in a number of other countries.

I take it the NFF haven't looked at the funding model for the NBN, and how people should pay for their accounts?

**MR HARVEY-SUTTON:** Look, I don't have a direct comment on how it's funded.

**MR LINDWALL:** No, that's all right.

**MR HARVEY-SUTTON:** But I'd answer your question along the lines of - I think where the crux comes down for a lot of our members, and again going to that point, that many operate in areas where it's not commercial. It's that uncommercial element that needs to be funded. I don't think we necessarily mind how, and as we mentioned in our submission, there is a role for both government and industry to fund those mechanisms.

So in terms of the mechanics of how the NBN is funded, I mean, there's a broader economic discussion around that, but I think the most important point to make today is around that uncommercial element, and that's where the focus needs to be happening, and there should be a mechanism for that to be funded.

**MR LINDWALL:** And the NFF view on the Mobile Black Spot Programme and its effectiveness? Or are you happy with how it's been rolled out, or are there improvements that you think could be made?

**MR HARVEY-SUTTON:** I mean, we're ardent supporters of the program. I think that goes without saying. I mean, mobile coverage - there's a raft of research that indicates regional users are more dependent on mobile, and that's just because of the mobile nature of their jobs, I suppose.

But look, I'm very conscious there's been an ANAO report into how the program's been administered and all those sort of things. And we're also very conscious that, you know, that shared investment, that co-investment model, you know, that really should be fundamental to it.

But that's not to say that it might reach a point where co-investment isn't feasible, and in which case there should still be efforts to expand mobile coverage, and look, I think one of the things that really does need to be focused on - and I'm not making a comment whether it has or it hasn't, but just as a basic principle, I think that ability to infrastructure share is just so pivotal to the program. It has to be there. I mean, we don't understand - I mean, smarter brains than I might, but we don't understand how the dynamics of the industry might evolve in the future, so why not build a program and infrastructure that's capable of having a shared infrastructure basis so the industry can evolve.

**MR LINDWALL:** I've got one more question, which is about the NBN satellite, the Sky Muster. Obviously we hear a lot about concerns by people who have it or in some cases have only recently got it, or maybe they're using the interim satellite and maybe they're conflating concerns about it, I don't know.

Have you got any positive things to say about it? Have you got experiences that you could share with us about people who have been very happy with their service on the NBN satellite? Or is it universally bad?

**MR HARVEY-SUTTON:** I wouldn't say it's universally bad. I think, you know, going back to my comments about technology being the future of agriculture, people are using it now, and I did hear a couple of examples that were put forward this morning, and I'd be happy to take on notice to provide some positive examples.

**MR LINDWALL:** That would be good, yes. It's good to have balance on this type of thing.

**MR HARVEY-SUTTON:** Yes, absolutely, and we're very conscious of that.

**MR LINDWALL:** You don't want to get a message out that everything's wrong with your satellite, we should stop it then.

**MR HARVEY-SUTTON:** No, no, and I think that there is the potential to be misconstrued in our arguments around our concerns about its rollout. I think if you got to the nub of the issue why people are so frustrated it's because they are looking at it going there's such a positive benefit that can come here.

**MR LINDWALL:** And we want it, yes.

**MR HARVEY-SUTTON:** And we want it. And so when, you know, they have to sit on the phone all day to try and address a problem because they're talking to the retailer, the wholesaler, or they - it's not communicated how best to make the most of their bandwidth, or they're waiting around all day for an installation, that's frustration.

**MR LINDWALL:** Yes.

**MR HARVEY-SUTTON:** And that's what we're seeing at the moment. There's this groundswell of frustration, and I think a part of that is the fact that communication needs to be improved, actually. Because my experience with rural people is that by and large they don't mind issues. They understand. They're pragmatic, you know. Problems happen, there's teething. But if they're not explained why or they're left in the dark about why it's happening, that's when you see this constant frustration.

**MR LINDWALL:** Yes. Well, given the time, Mark, do you have any final comments you'd like to make?

**MR HARVEY-SUTTON:** No, but I'm happy to take on notice those positive examples, because I think that really is the context we need to look through for connectivity. It's unlocking the economy.

**MR LINDWALL:** Indeed. All right, well, thank you very much for coming.

**MR HARVEY-SUTTON:** Thank you.



**MR LINDWALL:** I think we've got Dan, yes, from Vodafone, and then we'll have morning tea after it, unless you want to have morning tea before? Doesn't worry me.

**MR LLOYD:** Whatever puts the audience in a more receptive mood.

**MR LINDWALL:** Who wants to have morning tea right now?

**UNIDENTIFIED SPEAKER:** You've got (indistinct).

**MR LINDWALL:** Okay. Give us one second. Actually, I need morning - I'll be back in one second.

**MR LLOYD:** I think that's the answer to my question.

**ADJOURNED**

**[10.05 am]**

**RESUMED**

**[10.27 am]**

**MR LINDWALL:** Ladies and gentlemen, I think we might get started again, if that's all right. Actually, I'll eat my cake first. So welcome, Dan Lloyd from Vodafone, who will introduce himself now.

**MR LLOYD:** Thank you very much, Paul. So I'm Dan Lloyd. I'm the Chief Strategy Officer (indistinct) Director, Vodafone Australia. Thank you so much for the opportunity to speak to you and answer your questions today.

As you probably know from our submissions, we are very passionate about this issue. We have got a lot of experience in a whole range of Telco policy issues including universal service from the 26 countries that Vodafone operates in, and I hope we've been able to bring a bit of that experience into the submissions and the ideas that we have put forward.

I am indeed very passionate about this issue. I'm constrained by the fact I've got a 12 o'clock flight to Armidale, so hopefully that means I won't go on too long.

There are many interrelated elements, and listening to the NFF presentation and questions, that was coming out, and it's very tempting to put forward a whole series of suggestions about the interrelationships between USO, NBN, mobile black spots, the telco access regime and the mobile roaming debate, but I'll constrain myself in my comments to the USO.

Our starting point is there's undeniably really good policy reasons for which government wants to identify, needs to identify, critical communications services and to

define minimum standards, and to even put in place obligations and to put in place funding arrangements for those. That's something that we fundamentally accept.

But our key point is that if you're going to do that, you are running the risk, if these schemes are not cleverly designed, carefully focused, efficient, transparent, and so forth, you can run a whole range of very serious risks of not only not delivering the services that you're trying to deliver, but actually, as we think has happened in Australia over the years, put in place highly inefficient opaque arrangements that essentially produce a very significant anti-competitive impact, and I'll outline some of the indicators of that.

So the first thing that I think is very clear, and I think was very clear from the draft report, which is what we'd suspected, but I think is now made very clear, that the current system has what you could only describe as perverse incentives. It produces the opposite incentives from what it was supposed to deliver. It was supposed to deliver an obligation to deliver the defined infrastructure, particularly for regional Australia, that delivered the policy and social objectives that had been originally defined.

The problem is, this system seems to have done the opposite. The funding is fixed at \$300 million a year, roughly, but there's no transparency, there's no controls, there's no accountability, and there's significant evidence, even though none of us really have all of the numbers and all of the facts on the table, but there seems very significant evidence that a significant number of fixed copper services and payphones have nevertheless been shut down.

And since the funding is fixed, the incentive for Telstra is the exact opposite of the intention of the scheme. The incentive isn't to maintain the infrastructure, the incentive is to shut down as much infrastructure as quickly as possible in order to reap a bigger and bigger windfall gain and effectively then be able to use taxpayer and subsidies from the rest of the industry to deploy however the incumbent sees fit, and we believe that that's been a key factor in the deployment of the regional mobile network of Telstra, for example, of Telstra's ability to run proprietary commercial services like Telstra Air, the Wi-Fi service on the back of payphones.

And those sorts of things are very dangerous warning signs of a subsidy system that's producing inefficient and anti-competitive results, that doesn't provide an incentive for Telstra to maintain the services it's supposed to be maintaining, and in fact over time gives a growing and growing windfall gain or subsidy that in fact raises barriers to competitive investment, raises barriers to others investing in infrastructure which could provide the very services that the scheme was originally intended to deliver.

So I'll come to some of the indicators of that in a moment. The second point that we made in our submission, whenever we've seen these exercises done in other countries, there's been huge transparency, huge care, huge concern, to ensure that you target the services, clearly define them, have clear transparency on how you're costing the net cost of the service, and critically that you're looking for the net cost of the service.

So if you look, for example, in the UK, whenever the UK's looked at it, it's said, okay - their payphones, for example, there's undeniably a question as to whether some payphones are loss-making. Let's clearly identify which ones they are. And it doesn't appear in the current scheme that there is any mechanism for identifying which services are actually loss-making, so that we're not wasting money subsidising services that are in fact highly profitable.

So in the UK, let's narrow it to the payphones that are unprofitable, but let's look at the net costs, because there are undeniable benefits of having those payphones there for BT and Kingston in the UK. And there's very easy, transparent market mechanisms that you can use to value the benefit, so in the UK they said, "Well, BT can advertise on payphones. You can value the advertising space." And in fact, in the UK and in Australia you can buy the advertising space. There is a market rate.

So in the UK they said payphones have a loss of between 47 and 74 million pounds, but benefits - once you value the advertising on very standard arguable metrics, benefits are between 59 and 64 million, so there is no net loss that's actually incurred because of the payphones.

So we've had a look at this in Australia. So there's about 16,800 payphones as far as we can tell. You can go to JC Deco and you can ask them to take advertising space on a payphone. They told us that if there's one panel per payphone, it's \$350 a fortnight. That's \$164 million of benefit, or potential benefit, on the back of the 16,800 payphones.

So something that we think is a very significant net benefit, taxpayers and the rest of the industry are nevertheless contributing \$44 million a year supposedly to ensure that those payphones are kept running, when in fact there's no obligation for Telstra even to continue those payphones running.

So it's a truly perverse system, and that's without taking account of the benefit of the proprietary Wi-Fi service, Telstra Air, that's on the back of the payphones, only available to Telstra customers.

So we think all of that can and should be valued. It should be a very - if there are these sorts of mechanisms it should be a very transparent, rigorous net cost approach that ensures that we, and particularly regional Australia, are getting the value for money they deserve. If you are inefficiently subsidising then you're getting far less for those subsidies than you should be getting, and you're raising barriers for others.

So the competitive impacts of our current USO we think are deep and profound. Even if you believe there is no direct subsidy, so that the \$300 million a year is roughly the net loss - we don't believe that, we'll come to that. But even if you believe there's no direct subsidy, the USO for copper for example is funding regional transmission, is funding regional exchanges, and then happens to be funding the copper local loop.

When Telstra come to deploy a regional mobile network, their cost of deployment is exponentially lower than anyone else's because they've already got the sunk cost of the

transmission, the sunk cost of the regional exchange, and putting a tower on top of the regional exchange is available to them at a far lower incremental cost.

So even if you don't think there's a direct subsidy, the competitive impacts of this, the barriers that it raises to anyone else deploying competitive infrastructure, and its competition that drive infrastructure investment, quality of service, pricing, all of the benefits of competition, that means that the market is not able to drive the infrastructure to the level it should, and therefore creates artificially a bigger gap for universal service than would otherwise be there.

So if we put it in context since the new USO was put in place, so it magically doubled from about 160 million to 300 million, if we look at the roughly four years it's been in place that's about - and if we look just at the contributions of taxpayers and the rest of the industry, so we'll leave aside the money that Telstra's put in, that's 171 million a year, 700 million over four years. For that same money, at about \$500,000 a base station, which is the average of round 1 mobile black spots, we could have built 1,800 new mobile base stations.

If you included Telstra's contribution on the assumption that it should be a competitive fund that's available for the best impact, the most efficient investment, then that goes up to 1.2 billion over four years, 2,400 mobile sites. That would have allowed us to match and exceed Telstra's regional network by over 1,000 sites or about 300,000 square kilometres, the size of Victoria.

So those are rough numbers. We don't have enough transparency on any of this, but that just puts into context the competitive impact, the disincentives for investment, the competitive advantage that establishes and fuels a monopoly which then creates all of the need to regulate quality of service, to try to regulate pricing, to create NBN, creates all of the flow-on impacts that mean that the government burden, the regulatory burden, it expands further and further than it should have from the start if you'd had an efficient scheme in place.

So we think that - and if anyone's read our mobile roaming submission, where we bring together the USO, other subsidy schemes, and the state of competition in regional Australia, we outline this vicious cycle. So Telstra's had \$1.9 billion in subsidies since 2006. That's USO plus direct state subsidies. That has fed and created what can now only be described as a natural monopoly in regional fixed and mobile. Fixed is being solved through NBN, but mobile has not yet been addressed.

Telstra's mobile network through all of these subsidies is now 1.4 million square kilometres bigger than the next nearest network. That means anyone wanting to invest in incremental coverage beyond Telstra's network is facing a near-impossible task in needing to leap over 1.4 million square kilometres to build isolated sites to try to sell a service where you don't have contiguous coverage, and people know as soon as they head down the highway they're going to lose the whole point of a mobile service coverage.

And that monopoly advantage has now gone so far that it's even prohibiting effective competition for seemingly competitive subsidies. So Black Spots we've been a huge supporter of, we've enthusiastically bid for sites, but if you look across round 1 and round 2, 75 per cent of the sites have gone to Telstra. Telstra's monopoly advantage has now been extended just under round 1 by another 150,000 square kilometres, so the next time government tries to put money in, it's become even less possible for anyone else to compete for that, even less possible for anyone to drive competitive infrastructure, competitive investment.

So we've just spent this last week in a bit of a road trip of regional Australia. We had a fantastic telco policy forum that David Littleproud sponsored upon in Maranoa in Dalby. But the one thing that came out in direct response to the PC's draft report was a real anxiety over the NBN satellite service and particularly when, you know, communities are quite large and they all know what's going on in the next town and down the road.

The people who are being told they're getting satellite where their neighbours or the town down the road is getting fixed wireless or fibre to the node. That's creating a lot of anxiety. There is a perception, and I think to some extent still a reality, that the satellite service is not as reliable as the fixed wireless service, and therefore a lot of - and that's kind of led them to an assumption that the only answer is maintaining fixed copper.

But when we talked to them and tested, "Would you be comfortable if you had, for example, fixed wireless and mobile coverage, so two networks, so that if one went down you've still got a fall back, you've got good quality voice on mobile, you've got reasonable voice and data on fixed wireless," that that was actually quite palatable to them, and I think it goes to the fundamental proposition that we put forward in the submission, if you're going to have these sorts of schemes, if you're going to put taxpayer or industry subsidies into these sort of schemes, you need to make absolutely sure that they're targeted, focused, that they focus on the service that you're trying to deliver, and then have some flexibility and some competition in the ability to bid for those subsidies to provide the service, rather than be preoccupied and lock down the technology and the provider for 20 years.

It just seems that once you continue down the current path that we're on, you're simply establishing and feeding a monopoly, and then having to deal with all of the negative consequences of that, rather than defining a narrow, targeted scheme that actually has the obligation and actually delivers the services that people want, but can do it through a much more flexible process.

So we've suggested, in line with the regional telco review, if there was an ongoing scheme it should be transparent, it should be technology neutral, it should be competitive, and should define the service that you're trying to deliver so that Australia, particularly regional Australia, actually get the services that they need in the most efficient and competitive way.

**MR LINDWALL:** Well, thank you very much, Dan. Yes. Now, obviously in our draft report we've based it around the NBN being the monopoly wholesale provider of

broadband services, and we've clearly said that broadband should be the base, with voice as part of that, and complementing it by mobile phone coverage. And the transition from where we are to where we propose depends a bit on the rollout of the NBN.

**MR LLOYD:** Yes, yes.

**MR LINDWALL:** And you've noted some of the problems, and other people have noted some of the concerns with the satellite service and so on. Is there anything that you'd like to say about the NBN rollout that could be improved to make it more amenable for people to be confident that the service is there?

**MR LLOYD:** Yes. Yes, so a couple of thoughts on that. The first one is that NBN's trajectory is clearer and clearer, but still not 100 per cent clear, and I heard again on Monday the very clear concerns around that. That's why we suggested that it should be a gradual mechanism, that you roll back the existing USO, transfer the obligation to NBN as the infrastructure provider of last resort, and that therefore once the alternative infrastructure is in place and is clearly delivering and working, it's only then that you're rolling back the USO obligation, rather than leave people with an uncertainty.

But I think the other couple of comments I'd make, one of which is NBN seems - and you can understand why they are, but they seem quite almost religious about their technology choices, and this question around whether the fixed wireless footprint could be stretched in order to leave fewer people on the satellite footprint I think is really one of the biggest questions, and one that I don't think a huge amount of thought and effort has been put into it, or at least it hasn't been explained publicly, and I think if that could be looked at and explained that would be very useful.

And the last thought is, again on Monday we met a phenomenal outfit called Red Wi-Fi, who are operating out of Maranoa, who almost accidentally now find themselves a very significant fixed wireless provider because people who were told they were getting NBN satellite were looking for an alternative.

They are building, it seems, at one sixth of the cost of NBN, about \$120,000 per fixed wireless tower, building a fixed wireless service that is offering, depending on the distance and the spectrum that they can use, 15, 20, 25 megabits per second, and they have now built in a very short period of time a customer base of several thousand, and then they are leveraging that into also being an RSP on NBN.

And again, this goes to the point of competition - there must be a role for, and there should be incentives for, competition, so that we don't end up with a single inflexible model where NBN tells people what technology they get and they have no alternative.

So I think finding a space in this whole environment to identify and encourage the innovative smaller players who are out there already making up their own solutions and delivering things that seem to answer the question, and I just worry that the sort of almost monolithic NBN model might not leave enough space for those sort of people.

**MR LINDWALL:** So Red Wi-Fi, how is it funded?

**MR LLOYD:** Privately, as I understand it. David might have more detail. So I understand entirely privately. They started as a local technology and IT outfit and almost accidentally someone asked them - "You know, I'm not happy with the pricing I'm currently paying to Telstra, I'm being told that I'll get NBN satellite, could you guys build a fixed wireless service for me?" And they put up their first tower and connected, and only then thought, "We'd better check with the ACMA whether we need a carrier licence and so on," and have been able to build at quite a low cost, often leveraging existing infrastructure, water towers and other local infrastructure, to build at a very low cost and move very quickly, so in 12 months have built a customer base of several thousand.

**MR LINDWALL:** That's quite an exciting - - -

**MR LLOYD:** Needing no subsidy. Needing no government funding, no industry funding.

**MR LINDWALL:** Now, the government's put out some statutory infrastructure provider legislation - - -

**MR LLOYD:** Yes.

**MR LINDWALL:** - - - in draft for comment. Has Vodafone got any particular views on that, the merits and demerits of it?

**MR LLOYD:** Certainly. Yes, so there was a package of things that came out. You know, the general trajectory of recognising that taxpayers have already spent many tens of billions of dollars building NBN, and that in the long term for the vast majority of Australians that will be the infrastructure provider of last resort, that seems unambiguous.

The bit that we were concerned about was the cross-subsidy, the tax from metro to regional, and again, we don't have a per se objection to subsidy schemes, including industry subsidy schemes, but it just struck us as odd that almost the same time that the Productivity Commission draft report had come out pointing out that it's very difficult to get these schemes right and that you need to take great care, and that they can raise barriers to entry and have other negative impacts, that something that had been the subject of some consultation a couple of years suddenly came out as establishing yet another industry cross-subsidy scheme.

And we can be a little bit more dispassionate about that. We've announced that we're going to be providing services on NBN, but we don't currently do that, so we don't have any - you know, there's no margin loss or revenue loss because of that, but it just seemed odd to establish yet another industry cross-subsidy model when we were having a serious discussion about whether that was the right model to start with.

**MR LINDWALL:** Yes. And the way in which retailers of NBN services, including in the satellite area, communicate with customers, do you think the understanding of what reasonable expectations of what customers should get, and - in terms of, say, throughput and download speeds and volume? Or are there regulatory needs to be added in that - to improve that? I mean, is it sufficient as it is?

**MR LLOYD:** Yes, that's a very fair question. Again, we don't have yet - we're building our plans and learning as we go. We don't yet offer services on NBN, so it's probably one we'll reserve judgement for others who know better, but certainly talking to people in regional Australia, there's a lot of confusion and concern as to what they are actually getting.

There's quite a lot of talk, of course, about the ACCC publishing some real statistics on what speeds and service people are actually getting. Providing that sort of information seems a no brainer. That seems very sensible.

**MR LINDWALL:** Now, of course, it depends where you are. Mobile services for some people are a substitute. In other words, they forego their landline and the NBN service and just rely on mobile. For others, it's they want both, obviously for large downloads, for example.

Do you see it as more as a complement or a substitute? And how do you see that evolving over in the future?

**MR LLOYD:** As both a complement and a substitute. The ACMA published some new figures showing 30 per cent of Australians now on mobile only. So clearly there's a very significant and rapidly growing group who see it as a substitute, and as 4G networks are fully deployed in regional Australia and as we move from plain 4G to 4G plus and add additional features, and let alone 5G, which we think is going to come quite early in Australia, we think there's going to be a continuing trend to a larger and larger group of people who see mobile as a complement and it delivers - again, if you define what's the service they're trying to get, it gives them the voice, it gives them the data speed, and data inclusions on mobile are exponentially growing, so we think in a big part it's going to be a substitute, but undeniably there are people, and particularly in the business sector as opposed to consumer, it's going to be a substitute for the foreseeable future. Sorry, a complement for the foreseeable future.

**MR LINDWALL:** Yes,. And in the areas covered by - and you saw our estimate that up to 90,000 premises in the satellite footprint - - -

**MR LLOYD:** Yes.

**MR LINDWALL:** - - - would not have mobile phone reception, and that will change over time, obviously, for various reasons, including the Mobile Black Spot Programme. But we thought that if you need to - rather than the universal service, you should target services based upon need, in terms of availability, accessibility and affordability, which you agreed with before.



But for those that have a mobile coverage that's reasonable, and their USO - sorry, their NBN satellite service, would you consider that a reasonable baseline?

**MR LLOYD:** So I'd actually - I wouldn't so much put forward my view or our view.

**MR LINDWALL:** Yes.

**MR LLOYD:** But certainly talking on a number of occasions, including on the last couple of days to a large number of regional stakeholders, I wouldn't say all, but I think the vast majority accept that that is actually a very reasonable outcome, and particularly having the redundancy of networks rather than pure reliance on one network was pretty -  
- -

**MR LINDWALL:** All those important things.

**MR LLOYD:** Yes.

**MR LINDWALL:** Now, Dan, you've mentioned, of course, what's happened with the - where we are today - - -

**MR LLOYD:** Yes.

**MR LINDWALL:** - - - because of the contract with Telstra and the rollout of the mobile phone networks, and what you say is a cross-subsidy from one to the other. But the fact is that we are where we are - - -

**MR LLOYD:** Yes.

**MR LINDWALL:** - - - and policy will change in the future for a variety of reasons. Couldn't you argue - or some people might argue that Telstra's now got property rights over that extensive area, and you know, however it's been achieved that's the way it is, and of course we respect property rights in Australia, and that dominance will continue because they made those investments?

**MR LLOYD:** And is this in the context of USO or in the context of the mobile roaming?

**MR LINDWALL:** Well, I'm just saying, if the USO were to terminate today, just hypothetically - - -

**MR LLOYD:** Yes. Yes.

**MR LINDWALL:** - - - the investments that have been made in the past based upon however you might say have occurred, and it does have the extra range as a result - - -

**MR LLOYD:** Yes.

**MR LINDWALL:** - - - and they are property rights, so how do you address that?

**MR LLOYD:** Yes. So I think every monopolist in the world would say that. Every country in the world has a competition law, and most countries have a sector-specific access regime. We have part 11(c) of the Trade Practices Act, which says that you need to look for very serious competition reasons that are fully explained in all the explanatory memorandums to the act, that you need to identify a monopoly infrastructure.

The ACCC have three tests. Essentially one headline test, what is in the long-term interests of end users? Then have a look at, if you were to regulate access to a service would it promote competition? Would it promote any connectivity? And would it promote the efficient use of and investment in infrastructure?

The ACCC has looked at many services and declared 13 services, mostly on Telstra's network - access to local loop unbundling, which was the key driver for the last generation or the first generation of broadband connectivity. So I think it's pretty unarguable that there are circumstances where you need to intervene, where you need to declare access, regulate access to particular services. You need to be very cautious in doing that. You need to have a serious body like the ACCC that have detailed criteria for how they go about making that decision.

We think that the natural monopoly characteristics of the mobile footprint, regardless of how we got there, even if you ignore the subsidies, we think that they pass all tests. In 2004 the ACCC looked at it and said, "We think it passes all three tests but the industry has reached some commercial arrangement so we won't regulate it for now."

So we think there's a very strong case, and it would be very consistent with the way the ACCC and many other regulators have looked at regulating monopoly infrastructure.

**MR LINDWALL:** Now, again, if we assume away the telecommunications USO and look at regional Australia in particular, are there any other structural impediments to more investment, like of the kind you mentioned with Red Wi-Fi, that could improve services in regional Australia beyond what they've currently got in the NBN? Or should something change? Should there be some other policy changes?

**MR LLOYD:** Yes, so there's a couple of things, but I think all of them probably fall into the category of infrastructure sharing, and it always struck me after working for 10 years on 25 other Vodafone countries to see the extent of enthusiastic infrastructure sharing that had lowered the cost of deployment and therefore increased incentives for infrastructure investment while also preserving and promoting competition, and how enthusiastic that collaboration and infrastructure sharing has been in virtually every country.

So if you look in the UK, four mobile networks have rationalised down to two underlying network infrastructures, and it's been particularly prevalent in regional areas with large land area, low population density, because the need to lower everyone's costs while preserving competition is higher and higher and higher.

And it really strikes me that in Australia, the country - because we've got 7.6 million square kilometres and a population density outside the cities of well below one - most needs infrastructure sharing has some of the least infrastructure sharing.

And I think we've started and succeeded in some areas. So for example, why couldn't NBN, having deployed a ubiquitous transmission network, also sell transmission services so that mobile operators could build mobile towers at a lower incremental cost.

We've won that argument. NBN is now providing that service to us. But that's just one example of the many ways in which different types of players could collaborate in order to share resources and infrastructure.

Red Wi-Fi is a very good example. I came across them because they said in the press that they were concerned that mobile operators would get all the 5G spectrum, the 3.4 to 3.7 gigahertz bands, and that they would be priced out of that market and unable to continue to offer their fixed wireless service which depends on that spectrum.

And I reached out to them to say, "We've got a lot of spectrum, a lot of it's national licences, we're probably not using and don't have plans to use it in the areas that you're deploying your network, tell us where you want to deploy it and let's have a discussion about whether we can sublease our spectrum."

So I think that's another example of how the sharing of resources and infrastructure can actually enhance everyone's incentives and can stretch further and further the possibilities of infrastructure development.

**MR LINDWALL:** It does seem like it needs some community leadership to be able to push in a different direction, because it often won't happen unless there's someone, you know, talking to you about the option of spectrum leasing.

**MR LLOYD:** And I think there's probably a role at multiple levels if particularly federal government is putting very significant sums of money, \$100 million a year under the USO, \$100 million under Mobile Black Spots round 1, \$60 million under round 2 and so on. Whenever they're doing that, I think we've just started on the journey of ensuring that you provide some incentives for cooperation in infrastructure sharing as a result of that money.

You don't have that in the USO. I think that's a big problem. The regional telecommunications review made a very fair point, which was whenever state and local government are looking at major planning decisions, major infrastructure projects, why aren't they required to think about communications alongside that? So if you are putting up a new water tower, why wouldn't you think about whether it's designed to be useful for NBN fixed wireless, mobile communications and so on? Often it is as it is, or even with small tweaks in the design at very low cost it can be incredibly useful.

Whenever you're digging a road for gas infrastructure, why aren't you thinking about whether you could lay communications fibre and exponentially lower costs than if you

were just doing it alone? So I think there's a role for multiples levels of government and the industry to just constantly think, "I'm about to do this, what are the opportunities to maximise the public benefit, particularly to maximise the reach of infrastructure and regional Australia?"

**MR LINDWALL:** And local governments, obviously.

**MR LLOYD:** Absolutely, absolutely. And planning permission is another big one. We sometimes find the lengthy planning processes can be a little bit frustrating, particularly when we're building a Black Spots site, so it's the community saying, "We desperately want mobile infrastructure precisely in this area," and then we - and it's only after the site's awarded that local government starts a long process of planning procedures, and then we find it frustrating because the community come to us saying, "Why isn't the tower built?"

So if there was a way to - and you don't want to cut corners, because you need community consultation, you need to make sure the planning requirements are met. But if there's a way to accelerate that, the benefits can be magnified.

**MR LINDWALL:** I mean, when I visited Alice Springs I had a good example where there was a tower - optimal locations for a mobile tower, and some of the residents nearby objected to its location.

**MR LLOYD:** Yes, yes.

**MR LINDWALL:** And it became a bit of a cause which caused - delayed everything quite a lot.

**MR LLOYD:** Yes.

**MR LINDWALL:** So it is possible that a couple of residents who don't like mobile towers will object to something which benefits a large number of people.

**MR LLOYD:** Yes, and that gives government a genuine dilemma, because you want to recognise and work through the community concerns, but sometimes you can't resolve them, and the question is do you want the infrastructure or not? So that is a genuine dilemma.

**MR LINDWALL:** Now, if we get rid of the USO, TUSO, as we propose, and made it more targeted, what are the cost implications, do you expect, for the NBN?

**MR LLOYD:** The cost implications for the NBN? So of the - - -

**MR LINDWALL:** So the NBN has got a mandate to provide broadband services to all premises on request - - -

**MR LLOYD:** Yes.

**MR LINDWALL:** - - - and they have an expectation in different areas of a take-up of whatever it might be.

**MR LLOYD:** Yes.

**MR LINDWALL:** And if you get rid of the TUSO then some of those services will now move onto the NBN, though they might be only voice, hypothetically. So there could be some implications for cost on the NBN. It may not be much.

**MR LLOYD:** Yes.

**MR LINDWALL:** I just was wondering if you thought about that.

**MR LLOYD:** It's a great question, and we've tried to look at this a few times. And maybe the data's out there somewhere, but we really struggle to find enough data that actually identifies what those costs are likely to be. So we'll have another look and see if we can give you a view, but - - -

**MR LINDWALL:** Well, it would be handy, but the fact is that, you know, they might be concerned about the amount of spectrum available, but I would have thought from my understanding that if it's voice only, the bandwidth is very low, like 150 kilobits a second or thereabouts. That's about right, isn't it?

**MR LLOYD:** And spectrum is very highly constrained in metropolitan Australia, and then if you go to regional centres above 100,000 or so, some constraints. Beyond that, actually spectrum's not really a barrier, there's plenty of spectrum.

**MR LINDWALL:** That's right, yes, yes, all right. Anything else you'd like to say, Dan, while I've got you about payphones and - in our proposal to phase them out in terms of being subsidised. It doesn't mean they won't still exist, obviously.

**MR LLOYD:** Yes.

**MR LINDWALL:** In terms of alternatives for some communities to have satisfactory services?

**MR LLOYD:** Look, I think that's - I think that's going to be a - I think time will tell what happens. I think the first point is that payphones are already being shut down, so we are not convinced that the current arrangements have a significant impact on maintaining the payphones, so we think there's very unlikely to be a detrimental impact, and as I say, we think there are a wide range of significant benefits that actually come from maintaining the payphones, that we would expect a significant number of them are maintained.

**MR LINDWALL:** Yes.

**MR LLOYD:** But again, if they aren't, and there's specific communities particularly that don't have mobile coverage for example and are on NBN satellite, then let's look at innovative solutions, and I think Optus came up with some for round 2 of the Mobile Black Spots.

**MR LINDWALL:** Yes.

**MR LLOYD:** Satellite backhaul for various purposes. I think those look much more efficient and targeted solutions.

**MR LINDWALL:** Some of the programs that are used in remote Indigenous communities, for example?

**MR LLOYD:** Exactly. Exactly.

**MR LINDWALL:** PM&C have some programs. Anything else about the Mobile Black Spot Programme you'd like to add?

**MR LLOYD:** Yes. So on Mobile Black Spot, so we'd just like to remind people there were two objectives of the scheme, one of which was to drive incremental coverage, but to recognise that significant public subsidies were going into that coverage, and therefore obligations to give preferential colocation - so to allow other operators to come - sorry, other operators to come onto the tower with their radio access equipment, and to give preferential transmission pricing, so that there was a recognition that the subsidy had gone into the building of the tower, and to maximise the public benefit there should be discounted co-location and discounted transmission.

Our understanding is that the implementation of that has failed to deliver that second objective, and that of the, for example, 429 Telstra sites in round 1, as we understand it, there are virtually none that are going to have other operators co-locating and sharing transmission.

We think that's a huge opportunity lost. For 150,000 square kilometres of incremental coverage you could have had and should have had, and the guidelines promised, not only the coverage, but competition and all the benefits that that would bring. We're not sure that the scheme's delivered the second one.

**MR LINDWALL:** Yes. I think I - I mean, I know you have to get to the airport, so any final points you want to make, Dan?

**MR LLOYD:** I don't think so. Thank you so much again for the opportunity.

**MR LINDWALL:** Thank you, Dan. Now we've got Teresa Corbin, Rachel Thomas and Una Lawrence from ACCAN, if I'm not mistaken. Hello.

**MS LAWRENCE:** Hi.

**MR LINDWALL:** Hello again.

**MS CORBIN:** Good to see you again.

**MR LINDWALL:** Likewise, thank you. If you could state your name for the record and just give an introduction as you start in, that would be fine.

**MS CORBIN:** Sure.

**MS LAWRENCE:** So it's Una Lawrence. I'm the Director of Policy at ACCAN.

**MS THOMAS:** Rachel Thomas, policy officer at ACCAN.

**MS CORBIN:** And Teresa Corbin, CEO at ACCAN. So thank you very much for the opportunity to discuss the Telecommunications Universal Service Obligation at this hearing. The Commission's inquiry is an important examination into re-evaluation the delivery of the telecommunications services of this kind for all Australians, and we'd like to thank the Commission for undertaking this difficult but much needed piece of work.

In our statement today, we'd like to address key points, and which we have also raised in our submission, of course, in response to the draft report released in December. A number of our members are also presenting, not just today but also over the next couple of weeks.

So first some introductory comments about ACCAN. We are a peak consumer telecommunications organisation in Australia. We represent consumers from many different walks of life and many different geographical areas, and we represented them on communications issues relating to telecommunications, broadband and emerging new services.

So we act as a unified voice for consumer issues. So we work quite hard to do a lot of consultation with all the different groups, and we work for availability, accessibility and affordability of communications services.

Our members are very wide-ranging, and I am sure you would have appreciated that from our submission. They include a number of groups who are deeply affected by the issues under consideration, so obviously small businesses, Indigenous communities and consumer groups, low income people, people with disabilities, and of course our fellow members from the Regional, Rural and Remote Communications Coalition, such as the National Farmers' Federation who presented this morning, and of course New South Wales Farmers' Association you'll hear from this afternoon, and I understand the Isolated Children's Parents' Association are presenting in the various chapters across Australia, which is excellent.

So just to make some overarching comments about the direction that is proposed by the draft report in relation to the obligation versus the policy objective. Due to the essential nature of communications for the community and individual consumers,

ACCAN is concerned that ensuring access to communications service through a policy objective rather than an explicit obligation such as the Universal Service Obligation may result in a moveable goal, that varying levels of commitment and funding, depending on the political outlook of the day and the body responsible for delivering the specific elements, may well undermine or affect in some detrimental way.

Communications services are undoubtedly essential. This gets raised many, many times in the public debate and discussion and the community. They need to be supported by guaranteed consumer rights that are easy to uphold, subject to independent review, and transparent and accountable.

There is a current gap in the consumer safeguards, as they do not apply to broadband services. The government's review of consumer safeguards must be a high priority, and I know you've said that in your draft report, but it really can't wait, and it should commence as soon as possible.

Reforms to the Customer Service Guarantee and priority assistance arrangements are long overdue. The pain point is now, as consumers experience blame shifting between wholesaler and retailers for connection bungs and slow fault repairs, and I know that you've experienced that yourself personally - - -

**MR LINDWALL:** Yes.

**MS CORBIN:** - - - and you've expressed that to me when we met previously.

Secondly, in relation to the delivery of voice services, ACCAN believes that consumers should continue to have access to voice services without degradation in the level of service. We have concerns about the extensive changes required to ensure that NBN fixed wireless services will meet consumer voice needs, as it is currently a broadband service designed to be a broadband service.

NBN Co has identified these changes that may be needed as technological, operational and service quality, as well as cost implications. We believe that alternative, innovative, technology-neutral and cost-effective ways to deliver voice services in satellite areas should be considered.

To ensure that consumers are not put at risk, the delivery of the current Universal Service Obligation and the copper continuity obligation should remain until adequate alternate voice services can be assured - established and assured, or assured in the long term.

Thirdly, in relation to baseline services and community programs, we welcome the Commission's consideration of a baseline broadband service. This is the single most thing that people got excited about when they saw the draft report.

Clearly we back the fact that it should be reliable and intelligible. However, we have some concerns about the difficulty in translating this to a deliverable service that meets



consumer needs. There are many factors involved in a broadband service, and we ask that the Commission in its final report recommend a deeper analysis of these factors.

Community services are, and will remain, essential points for connection, particularly where there is no mobile coverage or consumers face affordability barriers. The costs and benefits of serving these communities may differ to the general community due to the remoteness, population density and potential revenue generated from the service.

This may affect the comparative benefits arising from targeted supports in these areas under a service-specific community-wide program, with programs in more densely populated areas comparatively delivering a higher benefit at a lower price and a lower cost.

Continued support for communications is vital and may need to be delivered on more flexible terms. The community telecommunications program should prioritise remote areas with no services, and a specific Indigenous telecommunications program may ensure that money is dedicated to meet particular needs of this community better.

We have two different approaches in relation to affordability. Firstly, in relation to general affordability, ACCAN has a number of concerns with the draft report's analysis and conclusions on affordability. I know we mentioned this to you at the ACMA Consumer Consultative Forum Meeting a few weeks back.

While the initial entry prices for NBN services may be comparable to ADSL, as they were designed to be, we are cautious that this could lead to the interpretation that the long-run affordability of the network will not be an issue.

Consumers are expected to need a greater level of service, and we believe the current arrangements do not currently give sufficient assurance that affordability will not become an issue for more consumers. But then, more specifically in relation to low income affordability, ACCAN welcomes the recognition by the Productivity Commission that services are not affordable for some consumers.

Since our initial submissions to the inquiry, we have completed further joint research with the South Australian Council of Social Services, SACOSS, and they're a member of ACCAN through ACOSS, and they, I understand, will be presenting, I think, in Port Augusta. Yes, anyway, at one of the later hearings.

Anyway, we've just released a report called *The Connectivity Costs*, and this outlines a number of issues, and these include the inadequacy of Centrelink telephone allowance in addressing affordability barriers through the tax welfare system due to the poor targeting and level of support, the varying level of difficulty to pay for telecommunications services among different groups of recipients of the Centrelink telephone allowance, the poverty premium paid by low income consumers of some five times the price paid per unit by the highest income quintile and the need to contact government bodies through telecommunications mediums with a shift to digital first and the financial difficulty that this can create.

And in our submission we've gone into that in a lot more detail, but clearly you can also access that research, and you'll be able to ask SACOSS some specific questions.

So in conclusion, further detail in relation to these and other points can be found in our submission, and also is available on our website through varying different research reports that we've done over time, and while these are the main issues we wanted to raise in the hearing, we're happy obviously to take more questions, and I'm sure that you'll have plenty.

**MR LINDWALL:** Good. Thank you very much, yes. Well, could I start on the baseline?

**MS CORBIN:** Yes.

**MR LINDWALL:** Now, the NBN does provide a baseline of sorts, you know. It does have an objective of a minimum - I mean, this is what is stated - minimum 25 megabits per second capacity, although as you know, retailers generally offer packages which are below that.

**MS CORBIN:** Yes.

**MR LINDWALL:** And from all the people who have spoken to us in the last period since this inquiry started, they've been pretty clear that voice over fixed wireless and fixed line is very, very good, and easily a substitute for the traditional fixed line. Is that - you'd agree with that, would you?

**MS CORBIN:** Yes. So I mean - look, anecdotally we're getting the same reports, but of course it's not widely tested. It's going to be different in different locations. It will depend on what kind of voice service the person is using. You know, whether it's an application or whether it's a carrier-grade type service. But also I think we can't forget that NBN have actually specifically said it's going to cost more to make sure that it is actually a voice grade service.

And of course the other concern that we have is the consumer safeguards that hang off current voice services, such as obviously the customer service guarantee. There would have to obviously be some adjustments, but adjustments that still provide an adequate level of protection, and more concerning, medical alarms and priority assistance services.

There just needs to be more testing and more investigation before, in fact, we could actually commit that that could be a good transition. And in the meantime, of course, people are very concerned that there not be a gap and that the ball not be dropped, yes.

**MR LINDWALL:** Yes, of course. But talking about the consumer services guarantee, a lot of people voluntarily are foregoing that - - -

**MS CORBIN:** Yes.

**MR LINDWALL:** - - - by using mobiles only.

**MS CORBIN:** Sure, and they're also foregoing it in metropolitan areas when they choose to take a bundle with NBN service - - -

**MR LINDWALL:** Yes.

**MS CORBIN:** - - - that's a VOIP-based bundle, and the only way that they can actually get that service delivered is if they agree to a waiver. Of course, most consumers from our research don't understand what the waiver is, and they treat it just like accepting the terms and conditions for an application or a software program or a website that they want to use, and they tick the box without even really reading or understanding what it means.

The waiver is highly legalistic, and most people don't understand what they are waiving. And so I guess the concern from our perspective is, you know, outside of obviously mobile being a completely different technology and people having different expectations, is that when we're talking about having adequate access to voice and we're talking about the people that are using those fixed services, they are choosing them because they are expecting a certain level of connectivity and all the things that are attached to that, and they don't necessarily know the name of the customer service guarantee or all the - you know, the timeframes and everything that are built into all of that, but they do have some basic understandings, and you can see this whenever there's an outage, the uproar that is created, and the expectation that there should be compensation.

So you know, I think that we need to look at it more broadly, and we need to look at not just, you know, delivering on something in the future, but actually something that can actually address the situation now.

**MR LINDWALL:** Is ACCAN confident that people who are eligible for compensation under the current CSG are receiving compensation?

**MS CORBIN:** Look, it's very difficult to know the answer to that. Clearly if they elevate their complaint to the TIO then obviously they would be receiving what they were entitled to.

**MR LINDWALL:** Yes.

**MS CORBIN:** But I think that we've seen the amount of the customer service guarantee being paid out, which is still quite large, actually diminishing, and that is because people are waiving their right to the customer service guarantee.

It doesn't actually mean that the expectation of the customer is not still there, and in fact a lot of people would waive it and then find out later that they can't actually get

compensation and they'd be surprised and they'd contact us and say, "We don't understand this, why don't we have a choice?"

And the other problem, of course, is that we've had the experience of people who don't have any other provider except a provider that requires that - so they're in a new development, an apartment block, and the only way they can get a service is to waive their customer service guarantee, and many consumers consider that to be really unfair, so really they don't think it's okay. I don't know if - Rachel, if you wanted to add anything to the points about - - -

**MS THOMAS:** You already made them.

**MS CORBIN:** Yes.

**MR LINDWALL:** Well, let me explore a bit more about a guarantee, because - and I know it's peripherally related, but - - -

**MS CORBIN:** Yes.

**MR LINDWALL:** - - - there's a lot of items that we deal with in our side of telecommunications where there are no guarantees, and of course nothing is 100 per cent reliable - - -

**MS CORBIN:** Yes.

**MR LINDWALL:** - - - and people go through life interacting with other businesses without guarantees quite happily.

**MS CORBIN:** Sure, yes.

**MR LINDWALL:** So what's special about telecommunications that requires a guarantee?

**MS CORBIN:** Okay. I have a number of things to say on that. First of all that, yes, okay, generally speaking many services may not have any guarantees attached to them.

**MR LINDWALL:** Legislative - they may have a trade - - -

**MS CORBIN:** But an awful lot do. Yes, an awful lot do, because the Australian consumer law has guarantees in it, and that's relatively untested in relation to utilities.

So it's much better to have an explicit guarantee in relation to telecommunications services, and we believe that's the case because of the nuances about it. First of all, that it's an essential service, that you absolutely cannot participate in society, you cannot get a job, you cannot stay employed, you cannot access government services, without a telecommunications service, you know, preferably that and a broadband connection.

**MR LINDWALL:** But there's no guarantees in other essential services? Like, there's no guarantee that you'll get an ambulance when you call it within a certain period of time or that the fire brigade will respond within a certain period of time. They have objectives, but there's no guarantee.

**MS CORBIN:** Yes, but there are guarantees in relation to electricity, which is deemed an essential service, and is probably more similar in its nature to telecommunications. So you know, I think, you know, you're right to raise these nuances, but it's pretty clear to us that the community expects that there should be guarantees in relation to telecommunications services, simply because of the outcry every time that, you know, things are not fixed quickly. And I'm not talking about just the odd outages, which obviously when they go for more than a day, or even more than half a day now, there's an outcry.

I'm talking about people that actually forego services for weeks on end because they can't get a resolution, or the people that are now falling between the crack, between the debate between is it the wholesaler's fault or is it the retail service provider's fault? And this is an increasing problem with NBN. It's not something that the Telecommunications Industry Ombudsman has jurisdiction over to resolve, because these are inter-operator disputes.

**MR LINDWALL:** Yes.

**MS CORBIN:** And the customer is powerless. So without having any rules around this, then basically we have an enormous gap that the consumer doesn't have any real rights, and - - -

**MR LINDWALL:** I'll have to explore that, because yesterday a person - I can't remember which one - mentioned that - gave the analogy of, you know, a Ford manufacturer or BMW or whatever, and the local dealer. The dealer's a retailer, the manufacturer is the wholesaler, if you like, and people go to the retailer. If there's a problem, they deal with their retailer and the warranty is expressed through the retailer.

What's different, in a sense, with the NBN and the other retailers that needs to be repaired to make that type of relationship more clear - - -

**MS CORBIN:** Yes, and I think the other thing too is that there's - in many instances there's a lack of competition still in relation to telecommunication services, so there isn't necessarily a choice, and the dependency is very high.

Like, you know, we are actually talking about people who are using these services to contact the emergency services, as an absolute extreme example. But even just to operate your business, if your business - we found in our research that if a small business doesn't have access to a telecommunications service for any number of hours, it's not just inconvenient, it's actually catastrophic, and something like, you know, an enormous amount of businesses who have had ongoing issues with their communication services actually go out of business, because if you think about it, you can't even do an EFTPOS

transaction, so your actual revenue, your income stream, is affected immediately that you don't have a communications service.

So I mean - so there's a massive productivity argument here that we actually do need those guarantees in place to ensure that services are seamless, and also the people that - - -

**MR LINDWALL:** But guarantees generally are for consumers, not for businesses, aren't they?

**MS CORBIN:** Yes. Although small businesses qualify in the same category. They're covered by the same consumer law. So up to a certain level.

**MR LINDWALL:** Yes, that's right, yes.

**MS CORBIN:** And so we represent small businesses of that size as well.

**MR LINDWALL:** Yes, yes.

**MS CORBIN:** And there's a very, very large number of businesses - small businesses in Australia, it's an extremely high proportion, and a lot of people are operating from home, and you know, so in actual fact there is a massive impact, and we've actually tried to, at different times, investigate service level agreements as an option for small businesses who may not be getting customer service guarantees that are adequate.

But we've actually found that there is not many services out there that are linked with offering a service level agreement.

**MR LINDWALL:** Yes, yes.

**MS CORBIN:** So even if a business was prepared to pay it, the choice is not there.

**MR LINDWALL:** But in terms of what the NBN or the retailers should be doing to make it clearer to the consumers about who is responsible for what - obviously they deal with the retailer first, but there can be a bit of buck passing.

**MS CORBIN:** Yes. Yes. Look, I absolutely think that you should only have to deal with the retail service provider. There shouldn't be any engagement between the consumer and the NBN, because there shouldn't have to be, but there is engagement between the consumer and NBN because of the fact the retailers aren't getting what they need out of the agreements that are supposed to be in place between the retailer and NBN, and we're seeing this on a wide scale with Sky Muster services at the moment, and we're also seeing this in metropolitan areas.

And the reasons are complex and very varied, and highly related to the fact that it is a mass rollout, and you know, it's very difficult to say there's one specific systemic issue with the rollout except to say that, you know, there is many different issues and many

different solutions, and that in actual fact that is too complex for the customer to actually navigate themselves.

And I actually think it's appalling that the customer might actually be in the situation where they might have to actually - might be told that if it turns out to be the retail service provider then you're going to have to pay the bill for NBN to come out and fix that, and you know, obviously if you're desperate to have your service fixed, you're going to say, "Yes, I'll do that," but just the fact that you'll be told - there's no transparency to you, as a customer, whether in fact it is your fault, the retail service provider's fault or the NBN's fault, and to me, in those sorts of situations, you absolutely need consumer protection in place.

**MR LINDWALL:** The statutory infrastructure provider legislation, is there any comment that ACCAN would like to make about it, and whether you think it goes far enough or not far enough?

**MS CORBIN:** Sure. Do you want to take - - -

**MS THOMAS:** Yes. We're very welcoming of the telco reform package in general. The fact that it's putting in legislation that there will be access to NBN guaranteed, or that a provider, depending on the area, is definitely a step forward.

We have some concerns in terms of what the qualifying standard service that will be delivered - it's not specified that it will be the 25 megabits for everyone, and it doesn't have any of the other features such as upload speeds, which is currently in the statement of expectations, so we fear that it's a little bit of a backwards step, and that it should at least have the same features as in the statement of expectation.

And you have also in your draft reports outlined the 25 megabits as the speed, but I suppose we're concerned that there are lower speeds on sale, and that if it's not in that legislation then that may not be guaranteed to everyone.

**MR LINDWALL:** Did you - I don't know if you were here at the time when the Optus representatives were speaking, but - - -

**MS THOMAS:** Yes.

**MR LINDWALL:** - - - they did say that if you had a guaranteed speed of 25 megabits a second, the price would be three or four times more than currently on offer.

**MS THOMAS:** Well, that's the - - -

**MR LINDWALL:** The retail.

**MS THOMAS:** At the retail level, yes.

**MR LINDWALL:** Did you find credible or not?

**MS THOMAS:** Yes, we accept that there is - there are balancing that the retail providers do do. When they sell plans of 2,500 they are balancing how many customers they have.

**MR LINDWALL:** Okay, and they have to spread it out a bit and so on.

**MS THOMAS:** Which is totally fair. We have no - we don't say that everyone should get 25 megabits at every stage, or whatever they are buying. The transparency over what you are being sold - - -

**MR LINDWALL:** So do you think that could be sorted by retailers saying that if - for this package your average speed will be this, and your minimum would be that, or something like that? Or is there some better way of communicating what type of service you're actually buying?

**MS THOMAS:** We have supported the ACCC and their broadband speed claims and also their guidance to the retail providers, having a revised guidance. It's a very difficult area to provide to consumers as well. It's quite technical. In the first instance, consumers don't understand speed. If you have a number of devices connected in your house, it's not translatable to, say, what that speed will deliver if you're using seven or eight different services at one time.

**MR LINDWALL:** Well, they understand speed when they don't have it.

**MS THOMAS:** Yes. Or if limiting them, they know that it's not enough, but they don't know what they need - - -

**MR LINDWALL:** Yes.

**MS THOMAS:** - - - how to work it out, what's limiting them. So we accept that there are a lot of challenges for industry and regulation to address. Greater transparency is definitely needed, and we think that that has to be the first step.

**MR LINDWALL:** Okay, excellent. Now, on ACCAN's view of the NBN satellite, the Sky Muster services, the two of them, you know, we've heard a lot of stories about how people are having problems with them.

**MS THOMAS:** Yes.

**MR LINDWALL:** Are they fundamentally flawed, or is there just teething problems? Are you confident they'll be sorted out?

**MS CORBIN:** Okay, so - well, okay, there are some good news stories, like Lord Howe Islanders, who had previously very bad internet, are extremely happy, because they had nothing and no mobile coverage, so you know, there are - you know, there is a very diverse experience at this point in time, but of course we're hearing a lot from the people that have got very grave problems right now, and they have very good reason to be



concerned, because of the fact that the interim services will be switched off at the end of February, and once again it comes back to the fact that there are no guarantees in relation to, you know, connection times and repairs and all that sort of thing.

People's businesses and their daily lives are being significantly affected because appointment times are being missed, and then even after they have the installation and they have navigated that challenge, then they are having ongoing issues with the actual operation of the service.

And of course, this highlights the worry and the concern that these consumers have in relation to perhaps using the satellite service for their voice service as well, which is why we've called for the copper continuity scheme to continue, at least for the foreseeable future, until there is actually an adequate alternative.

And so obviously a lot of these customers are using copper services for their voice currently, or they are using a radio capacitor type technology, which is aged and is not great either, and also the copper is often not in great condition. So there are already existing issues with that, but the big concern is that there is no plan for the future of that, and that satellite, given that, you know, there are times when satellite services are also not going to be available for a lengthy time due to weather and perhaps other issues, at this point in time hopefully they are just teething problems, and you know, we are led to believe by NBN that that is the case, and we're hopeful that they'll be resolved sooner rather than later.

But of course the sheer volume of issues that they have to deal with also is adding to the length that it takes to actually address them all. So it's quite unfortunate, because I think the expectation was built up by NBN that these services would solve many issues, and unfortunately, you know, as with most rollouts there are going to be questions and problems and challenges.

Unfortunately, there's probably been a lot more than anybody anticipated. Even NBN have been quite honest about that fact.

**MR LINDWALL:** So it's like life, it's better to over-promise - sorry, under-promise and over-deliver than the other way around.

**MS CORBIN:** Yes. Yes, but I guess the point is that there are real concerns as far as ongoing continuity of voice services and also what will happen post the end of February when the interim satellite service actually gets switched off, because there is no budget or plan to continue that, and of course you'll be hearing from quite a number of different organisations that have significant members that live in remote areas and that are using these services and in fact completely dependent on these services.

And I think the other thing to mention here would be in relation to the limitations on the services as far as the amount of data you can actually use, that there are some - you know, obviously for capacity reasons and to juggle the large number of people that they're expecting to be using these services in the long term, there are some limitations on

how much data customers can use, and also even in relation to education packages, one of the big benefits is recently that many of the children that are using those services for their studies now have separate bandwidth, which is a big positive.

**MR LINDWALL:** Yes, yes.

**MS CORBIN:** But they're - you know, we're yet to hear - we're yet to see the evolution of a business-grade product, which would also help somewhat for those people that are running businesses as well as, you know, living in remote areas, and I'm not sure if you wanted to add anything else there, Rachel or Una? No, okay, yes. So yes, I think that summarises the concerns for satellite users at the moment.

**MR LINDWALL:** Are you confident that once the NBN satellite is properly bedded down, and assume it's working as it's advertised, that you would have sufficient - and the people that have mobile coverage, is that sufficient, do you think?

**MS CORBIN:** So I guess the problem here of course is that the mobile footprint is not the same as the satellite footprint.

**MR LINDWALL:** No.

**MS CORBIN:** And there are massive gaps. There are a lot of people who are not going to have mobile as a backup. They'll have a mobile phone, but only to use when they go into town or when they go, you know, down a highway.

We do have some concerns, particularly in relation to voice services and also the limits of data. Because as technology improves and grows and changes and our usage changes, then people's expectations of use of data increases exponentially, and we see this all the time when people connect from a - you know, perhaps previously dial-up, then they went to a DSL service. When they change over from DSL to NBN, in every instance their data usage goes up significantly, and we also see this in the development of services that are run over the internet, that the reality is that those service providers don't take into consideration the limitations that remote users might actually have, so there's a high dependence on videos, forms and applications that don't work when there's a latency aspect involved - - -

**MR LINDWALL:** Which I understand that, you know, for government services, they're trying to repair it to make it low bandwidth requirement and get acceptable - - -

**MS CORBIN:** Yes. I mean, over time hopefully people will learn, but you know, just like we see with accessibility, constantly we are having to reinvent the wheel and re-educate a new group of designers for content services and, you know, we're just going through this now with touch screens with EFTPOS machines with blind users. All the work that was done to make sure that keyboards and keypads were accessible is down the drain because, you know, we've shifted to a new technology, great for everyone except for people who've got sight impairment.

And that's the same with what happens with rural/regional consumers all the time, is a new - you know, brand new great service that we're all very excited about, Netflix, comes on board, everyone wants to use it the same as the people in the cities want to use it, but they've got these severe limitations.

**MR LINDWALL:** Could I hold you for a second? I don't think we've authorised any videoing in here.

**UNIDENTIFIED SPEAKER:** Yes, we're taking it down.

**MR LINDWALL:** Please, thank you. Please continue.

**MS CORBIN:** Yes, I think that's enough, and I've finished the answer.

**MR LINDWALL:** Now, on the affordability issue, I think - I remember our discussion a couple of weeks ago, and I think there was a point - there was a reasonable point that obviously telecommunications prices have - compared to most other things in life, have come down dramatically.

People are using them in different ways, so I think you gave the example of people once would have had one contract for a landline, and now they might have five family members each with a mobile phone. That's quite a different usage pattern, obviously.

**MS CORBIN:** Yes.

**MR LINDWALL:** I guess the question goes to that, is where do you draw the line as a government to subsidise that for affordability? Because people want more and more, but in the end it costs a lot more money, ultimately.

**MS CORBIN:** Sure.

**MR LINDWALL:** And the taxpayer has to ration resources in one way or another - - -

**MS CORBIN:** Yes.

**MR LINDWALL:** - - - and target them to ones in genuine need.

**MS CORBIN:** Sure. So we've called for a review of the Centrelink telephone allowance, which at the moment is a fairly small amount that gets paid on a quarterly basis, and it's not distinguished separately from your Centrelink allowances otherwise, so you don't have to prove that you're necessarily paying for a telecommunications service.

**MR LINDWALL:** Yes.

**MS CORBIN:** But clearly there's a number of ways to solve that issue, and there's also a question about how much money would solve that issue, which is why we've called for a review, because we don't proclaim to have all the answers for what we think is quite a

complex thing, and we think that there's a lot of players and stakeholders that need to have input into this debate/discussion, particularly the welfare agencies that are actually supplying services for people that are on low incomes and are struggling.

Because they are very aware of the emergency assistance that they provide, and they are very aware of where they are filling the gaps by providing public access points and other sorts of supports for family. You know, for example the Smith Family offering their Tech Packs program, which is fantastic.

So they've got a lot of learning and understanding that we need to take into consideration with that, and you know, clearly we need to have something that is targeted, but we need to make sure that in targeting it it's still broad enough that it actually allows for all the different variations of users and, you know, somebody who's just left school who's supporting themselves will have very different needs to a remote user who, you know, is paying a higher price to connect and to - you know, for their data.

So you know, there's - but currently, the allowance is the same amount no matter where you live, so yes.

**MR LINDWALL:** And finally - and I'll let you, if you want any final points to make. I think you don't like the idea that we don't think there should be an obligation; it should be a - - -

**MS CORBIN:** Yes.

**MR LINDWALL:** I mean, I thought - we're pretty much targeting them. We do analyse it in terms of availability - - -

**MS CORBIN:** Yes.

**MR LINDWALL:** - - - which is just mainly by the NBN, but targeted proposals to address those which have gaps.

**MS CORBIN:** Yes.

**MR LINDWALL:** Affordability by directly subsidising those that don't, that have issues there.

**MS CORBIN:** Sure.

**MR LINDWALL:** However one defines that. And accessibility, obviously, for people with disabilities and so forth.

**MS CORBIN:** Yes, sure.

**MR LINDWALL:** So why should you also need an obligation to cover people who are outside all of that, who have good availability, plenty of money and have no accessibility problems?

**MS CORBIN:** Okay. Sure. So we absolutely appreciate the fact the Productivity Commission has looked at the full raft of issues and, you know, that it is a very challenging area to make some, you know, broad-ranging recommendations about, and believe me, this was very hotly debated in our organisation.

But the single thing that members kept coming back to was that they really felt that there needed to be an obligation, but you know, it was all well and good to have great policy programs, and you know, there's plenty of opportunity to influence those policy programs, but they're still very dependent on the government of the day, and also the budget of the day, and it's just - it was felt by our members that it would just be too easy to put a red line through something if you really had to because of, you know, some budget reality being weighed up against something.

But that people really felt that ultimately, you know, telecommunications services are so essential and so basic to just being able to do anything in their lives now that there absolutely needed to be an obligation there, and people felt that, you know, even though the current obligation hasn't kept up with current expectations, and also even though - it's often difficult for a customer to say, "I have a right, I have got a USO." You know, doesn't mean anything much to the customer.

Even though there are those challenges, that the reality is that they still felt it was really important to have this overarching statement of obligation, that then you could hang consumer safeguards off, you can hang redress off, and you could build other thing into that to actually, you know, make sure that it actually does get delivered in a future-looking way rather than, you know, in lots of respects it's become, you know, kind of stuck in time, which is frustrating and sad, but - - -

**MR LINDWALL:** But obligations can become stuck in time.

**MS CORBIN:** Yes. Yes. And we recognise that challenge, and I think you - you know, we've actually, you know, used language to that effect in our submission, that we recognise that. But I think the thing is, about universal service overall, is that it's the single greatest thing that can make a big difference to everybody's lives when it comes to communications policy.

And that doesn't matter whether you're a small business or whether you're an Indigenous community or whether you're a low income person, or even if you're just an older person who, you know, only wants a voice service anymore.

It's the single biggest policy area that actually has an impact on every single Australian, and I think that's one of the reasons why we get so - this is the one policy area where we get so much engagement across all our member organisations, and people do feel very passionate about it, so - - -

**MR LINDWALL:** And then my final question to that - sorry, please.

**MS THOMAS:** If I could just answer that, it's - one of the issues that we're looking at with the SIP legislation is that NBN only deals with retail providers, so for a consumer to get a service they have to have a retail provider to act on their behalf to guarantee that access, to invoke that legislation.

And we've had a number of consumers who have come to us who, for different reasons - and I know NBN rollout is happening, so these might be quite unique, but they've - the location or the address has not appeared on the network that NBN have, and the retail provider have said, "Oh, there's an issue here, we can't serve you, we're cancelling the contract," and then the consumer has no access. NBN can't come out and ensure that access and put that in, and for them to get the service.

So there's been a number of consumers who have - we've been contacted with, and we've had to keep asking them to order a new service so that we can go to NBN and say, "Listen, this service is actually ordered, there's a problem here, someone needs to look at what's happening, why isn't the connection happening?"

Quite often the retailers say, "We can't service you, there's a problem, we're just going to cancel and find someone else."

**MR LINDWALL:** I concur with that, but my problem is that an obligation may be more costly than a targeted approach, and it may also reduce incentives for innovation and improvement. So the obligation, if it is more costly, which I conceive it could be, that comes at a cost to improving telecommunications services. So the obligation runs counter to what you want.

**MS THOMAS:** I'm not sure if it would be - I'm not sure there necessarily would be a cost. Having a - like, having a provider that will step in and do that, it's not - because NBN is providing a platform where there is universal cost, and they're going to be guaranteed that service, so they're going to be gaining a customer, having that reassurance that someone is there that you can say, "Listen, this customer is having a problem, you need to be their provider for whatever reason, if their current provider can't service them, goes out of business or whatever happens," just that guarantee doesn't necessarily mean that the government have to pay that provider to do that job.

**MR LINDWALL:** I just - I highlight the potential risk of obligations, that the current obligation may, hypothetically, have reduced the progress of telecommunications in broadband than we might have otherwise in an alternative universe if we didn't have the obligation. So I don't think anything comes for free.

**MS THOMAS:** Sure.

**MR LINDWALL:** Obligations actually do have costs, and you have to weight them against their benefit.

**MS CORBIN:** Yes, I think there's many reasons why broadband has and hasn't progressed in Australia as fast as many of us would have liked. You know, notwithstanding that, we're a very, very big country, and no matter which way you do it it's going to be costly, and ultimately, whether it's customers or citizens that pay for it through their - you know, through their plans or their taxes - - -

**MR LINDWALL:** Taxes or plans.

**MS CORBIN:** - - - the truth is somebody has to pay. But when you talk to consumers about what they want, they want everybody to be connected, because the value as being a city consumer is only as valuable as being able to contact your country cousins as well, if we refer to - - -

**MR LINDWALL:** I agree, it's a network problem. Did you have any final comments? Because I think we're - - -

**MS CORBIN:** I think that's everything, although I do just want to make a quick comment in relation to payphones.

**MR LINDWALL:** Yes.

**MS CORBIN:** So we think that there just needs to be more investigation into this obligation before it gets - or this program, before it is wound back in any way, shape and form.

At the moment there are options in place for Telstra to remove payphones for various different reasons. Notwithstanding that it's challenging and costly for them to do the consultation and go through the processes, there is a process in place.

We think that, you know, there's potential for future services to, you know, assist with making the payphones that currently exist perhaps more usable, but we just think it needs more information about what type of calls are being made from these payphones, and also consideration taken into in regards to mobile coverage and other things.

So we would recommend that there be more research and another separate inquiry that looks very specifically into payphones before there's any further action in relation to that, because even we find it very difficult to gauge what the usage is with payphones.

Even though we accept generally usage has gone down, but identifying what is that essential service at the basic level that needs to be provided by payphones. There needs to be more research done on it.

**MR LINDWALL:** Okay. Well, thank you very much then.

**MS CORBIN:** Yes. Also I did bring some of our publications which may help. That's one on broadband speed. But anyway, there you go. Thank you.

**MR LINDWALL:** All right, we'll - I think our final one today, and then I'm off to Cairns, is Derek Schoen, Jaimie Lovell and Charlie Cull from the New South Wales Farmers' Association. Hello, welcome.

**MR SCHOEN:** I'm Derek.

**MR LINDWALL:** Derek.

**MR CULL:** Charlie.

**MR LINDWALL:** Only two of you, is that right?

**MR SCHOEN:** Yes, Jaimie's an apology.

**MR LINDWALL:** That's all right. If you'd like to just introduce yourself for the record, and give a little presentation, that would be perfect.

**MR SCHOEN:** No, that's not a problem. So Derek Schoen, President of the New South Wales Farmers' Association, and with me is Charlie Cull, senior policy advisor handling telecommunications in the New South Wales Farmers.

Firstly I would like to thank the Commissioner for the opportunity to appear before you today as part of the inquiry. New South Wales Farmers is the largest SFO, state farming organisation, in Australia, and we are also part of - a member of the National Farmers' Federation.

Wherever they live or work, all Australians need guaranteed access to voice and data services. We can't understate how important access to reliable, modern telecommunications is for our members. There is nothing that generates as much frustration and concern as when you cannot communicate with the outside world and run your farming enterprise in the manner that it should be.

This inquiry goes to the very heart of what underpins access to effective telecommunications for regional and rural and remote Australians. The current universal service obligation and its associated consumer safeguards has been important in delivering everyone in Australia access to voice services.

However, this is the 21st Century. Voice service is no longer enough if you want to run a business, educate your children, interact with government agencies, access healthcare, or even just communicate with your friends and family.

Furthermore, simply having a connection isn't enough. The physical existence of a connection or a piece of infrastructure doesn't guarantee its performance. This is why any new USO must include minimum standards for voice and data and must be accompanied by updated consumer safeguards.



Updated consumer safeguards go hand in glove with the modernised USO. Without them, we risk losing many of the benefits that should come from improved access to voice and internet services.

The Association supports the Commission's recommendation to end the current USO. We have been calling for it to be replaced for some time. We support the NBN taking over the role as a universal wholesale provider of baseline broadband, and we support the Commission's recommendation that a new USO should be formed that covers baseline broadband and voice services.

However, we are here today to sound a note of caution regarding the transition process that is to be followed between the current USO and whatever replaces it. We are concerned that even with NBN delivering access to broadband internet services, if the current USO is ended prematurely, many farmers in the most isolated parts of Australia may end up without access to a voice service of acceptable quality and reliability.

We note in its submission to the Commission's issues paper, NBN stated that the Sky Muster satellite was not designed to deliver universal voice service. The Commission's draft report also identified that the voice services delivered over Sky Muster would be of inferior quality to the current USO for voice services in many terms of latency and fault repair timeframes.

The reformed USO must not result in a downgrading of the existing services, and must not leave farmers without an acceptable voice service. There must be no gap between the dismantling of the current agreement and the implementation of its replacement.

As it stands, Sky Muster is an unacceptable platform for the delivery of universal voice service. Our members are vehemently opposed to the idea that their current landlines or microwave service can be replaced with voice services delivered over Sky Muster.

They are very uncomfortable with the idea that Sky Muster satellite could be their only link to the outside world in the case of an emergency. They have told us this in the plainest of terms. They regard it as unreliable, even before considerations are made for the adverse weather or blackouts.

I know that members of the Country Women's Association, the Pastoralists' Association of West Darling, and the members of the Rural and Regional Remote Communications Coalition are united on this as well.

Farmers need to know that they will have reliable access to the outside world when they need it most, when there is a flood, fire, blackout or medical emergency. It can be a matter of life or death.

The current systems for delivering voice services across regional and remote Australia are not perfect, and as an association, we see many occasions where the flaws in

the current system come through. However, it is apparent that there is not an acceptable long-term replacement for the existing landline infrastructure. There is no solution ready to be deployed that would supply a service of sufficient quality.

We believe that as a part of work to end the current USO there needs to be careful consideration of what can provide the best long-term solution for voice services in areas that are serviced by NBN satellites. In addition, the current landline infrastructure should be maintained and augmented until a long-term solution is found for the delivery of high quality voice services in the NBN satellite area. It would be highly regrettable if customers were forced to transition off their current landlines onto an inferior satellite service.

**MR LINDWALL:** Okay, thank you. I just want to clarify, where are the areas of most concern? Are your members who happen to be in a fixed wireless are - are they happy with their fixed wireless service as a voice service as well as a broadband service?

**MR SCHOEN:** Yes, on the general I think there's general agreement that fixed wireless is providing adequate - but you know, technology changes so quickly, and it was like the other day, I had to send a fax, and I asked my wife where the fax machine was, and she said she'd thrown it out, so - - -

**MR LINDWALL:** Yes.

**MR SCHOEN:** So now it is all done via the internet, scanning documents, and that's going to be the future until they come up with a new technology. So technology does change very quickly.

**MR LINDWALL:** Indeed, yes, yes. Well, that's exactly right. Of your members who have now moved into the Sky Muster service, how have - and of course there have been concerns. Are people still finding it good? I mean, they're happy with it compared to the interim satellite service?

**MR SCHOEN:** Charlie?

**MR CULL:** So I sit at the phone and get the phone calls when they come through. I think it's fair to say there's an enormous range of experiences, and a lot of them are very unhappy. I had a call yesterday from someone that hasn't had internet for five days since it was installed. They've been back and forth for hours between the NBN and their provider, and they still didn't have a resolution for how they were going to get their service fixed.

We ran a survey of over 250 - with over 250 responses. I think there were two or three positive comments on the performance of Sky Muster in that.

**MR LINDWALL:** Is that partly because they deal with the retailer? And I think there's about 12 retailers that offer satellite services?

**MR CULL:** Yes, something like that, yes.

**MR LINDWALL:** There's nothing you can say about - without naming them - whether it's systematically a particular retailer causing problems, or genuinely an NBN problem, or - - -

**MR CULL:** Well, I haven't broken the figures down, but there didn't appear to be any particular pattern in terms of retailers.

**MR LINDWALL:** Okay.

**MR CULL:** The general comment we've seen is that all retailers have been taken by surprise by the number of complaints, and that perhaps they weren't staffed adequately to deal with that. But there's - it's across the board issues.

**MR LINDWALL:** Yes, yes, okay. And the New South Wales Farmers have spoken to NBN, I guess, to - in general? Is that - have you spoken to NBN itself? I mean, have you received feedback that this is temporary, it's a teething problem, don't worry about it, you know, it will be sorted out, that type of comment? Or is it more fundamental?

**MR CULL:** We have. So we were part of a group with ACCAN and CWA and a number of others that the NBN's pulled together as a consultative group. The comments we actually received were a long way beyond teething problems. They were the words of the NBN. They apologised for that. The NBN CEO used those words. That they were - the issues were systemic, and they were trying to solve them within the system.

They gave us a list of the nine or ten technical problems. I'm not amazingly technically savvy, but some of them sounded quite serious. So - and they've committed to working very hard to resolve them.

**MR LINDWALL:** Would New South Wales Farmers think that a person or a family that lives in a region with a very - with reasonable mobile phone coverage and has the USO - sorry, the NBN satellite, that it would be sufficient? Or is that insufficient too?

**MR SCHOEN:** I think it depends on the circumstances and the reliability of the mobile service, but we are seriously considering at home - getting rid of the landline, the copper wire service. Whenever it rains, we do have problems with water in the lines, and it's very costly for Telstra to maintain that line, and I think that will be a gradual progression throughout the areas that do have satisfactory mobile service.

Another area of concern with New South Wales Farmers and our members is that the Sky Muster was not designed for voice transmission and, you know, maybe technology will take up that slack and we can get rid of that lag time in communications, but we also have concern that the more people that log on to Sky Muster, of course that loads up the system and we have heard that they are looking at offloading a proportion of bandwidth for Qantas to use for in-flight entertainment.

So you know, when you have a couple of thousand people flying along using in-flight entertainment through the Sky Muster, which it wasn't designed for, that bandwidth was actually designated for providing data capability for rural and remote people - residents - so we do have concerns that, you know, there are the issues with sort of hiving off bandwidth to other customers that it was not originally designed for.

**MR LINDWALL:** Okay, yes, yes, but you would agree with our general logic, which was that no system is ever perfect. Certainly the copper lines are not perfect, they do have reliability problems.

**MR SCHOEN:** No.

**MR LINDWALL:** But if you have a level of redundancy by having an alternative, that minimises the risk of you having no service.

**MR SCHOEN:** Yes, yes. And the other thing with the Universal Service Obligation is, like, if you have a medical condition or something like that, then Telstra would give priority to maintaining a service. If it did go down, and if NBN was to become the provider of voice, then that would have to be part of the agreement, because you just can't leave people that need a service urgently partly down.

**MR CULL:** Sorry, Commissioner, if I might make a comment about mobile coverage. In the experience of our members, the coverage claims on a map don't match up to the coverage experience on the ground. So we're very cautious when we start hearing discussions about, "Oh, well, there's mobile coverage in that area, that's fine, they may not need landlines." And I've now forgotten what I was going to say next, so that's all right.

**MR LINDWALL:** No, I accept that. I mean, some households add those antennae to improve their reception, but you're saying that even when they do that, they may not get a good service.

**MR CULL:** Yes, and the - - -

**MR LINDWALL:** Like - they're right on the fringe of the coverage, I guess.

**MR CULL:** Yes, or there's maps that say that there should be adequate mobile coverage across the entirety of the farm but they just don't experience that. And the other interesting phenomenon that we've seen at a number of different sites across regional New South Wales, probably in the last six months, has been a degradation in the quality of services from a number of particular mobile sites.

It seems to be that as people are seeking to do more with their phones and use data more, towers that weren't necessarily designed for the capacity that's now being put through them are shrinking in their footprint, so people that previously had excellent 3G service now don't have service on their property. People that were using that for internet have suddenly found that they can't get the reception. So mobile coverage and the

internet coverage that comes from that is not necessarily static and not necessarily guaranteed.

**MR LINDWALL:** Yes. And of course, it may improve and it may get worse.

**MR CULL:** Yes.

**MR LINDWALL:** But obviously at the moment - you're supporters of the Mobile Black Spot Programme I assume?

**MR SCHOEN:** Most definitely, yes.

**MR LINDWALL:** And that's aimed to expand the coverage, of course.

**MR SCHOEN:** The other thing that's worth noting is that not all mobile phones are created equally - - -

**MR LINDWALL:** Yes.

**MR SCHOEN:** - - - and you know, if you live in a rural/remote area, if you don't have a blue tick phone, well, then you're probably not going to get reception. And so like with the latest, name a brand, Apple phone, the Apple 7, it's not a blue tick, so you actually have to request an Apple 6S, which is a blue tick. So yes, not all phones are created equally, so if people sort of buy the latest and greatest - - -

**MR LINDWALL:** Yes, yes.

**MR SCHOEN:** - - - you have a very good chance that you're not going to get reception.

**MR LINDWALL:** Do you think consumers are adequately informed about these types of things?

**MR SCHOEN:** Definitely not, no. No, especially urban consumers that may be going on a trip into a rural area, they may think, "Oh, we've got a mobile phone," and it may be connected to one of the networks that doesn't have as good a coverage. We often have people that come in and they say, "Oh, you've got no mobile phone here," and we say, "Yes, we do, but we're with a different carrier."

**MR LINDWALL:** Yes, so Jane and I found that when we visited Marree in South Australia and they were telling us of tourists who arrived there who assumed that their mobile phones will work quite happily going up, you know, outback tracks or something like that.

**MR SCHOEN:** That's right, yes, yes, definitely.

**MR LINDWALL:** So yes. But I'm not sure how you can solve some of these information problems. It's not so easy. It's easy to talk about them, but - what about the

high capacity radio concentrator, which some of your members would obviously be using? Have you had much feedback about its reliability?

**MR CULL:** It's not perfect, but it - our members are pretty reticent to let it go, especially if it was going to be replaced by a Sky Muster voice service.

**MR LINDWALL:** Yes, yes.

**MR CULL:** So I think there are plenty of faults with it. Plenty of people have been - are telling stories about, "Here's the time I was out and lost service for a week, two weeks." Others say, "Look, it's pretty good, it gets looked after." But I guess, to echo comments that were made earlier, it's a redundancy system, and our members want to see it replaced with another form of redundancy system which isn't a satellite service.

**MR LINDWALL:** The broadband through the USO - sorry, I keep saying the USO, sorry, but NBN satellite - Sky Muster, I should say Sky Muster, the Sky Muster, is reported - well, it's aimed at 25 megabits a second, and then you - the customers choose a package that they like with the amount of - up to about 50 gigabytes, I think it is.

**MR SCHOEN:** Yes.

**MR LINDWALL:** And then they have an education allowance and so forth. Are there - obviously people want more, but satellites are limited in their capacity, so what advice do you give to your members about optimising their usage of the satellite services to get a reasonable usage and not find that they're up at their limits all the time.

**MR SCHOEN:** Yes, well, look, some of the problems also eventuate from web designers. They design a great website which when you actually go onto the home page it has so much information on the home page that you're using up a lot of your download just accessing the initial portal.

**MR LINDWALL:** Yes, exactly.

**MR SCHOEN:** And you know, government agencies should be very aware of that as well, that, you know, that if people want information, that that information shouldn't be sort of clouded in a whole lot of flowery dressing that actually uses up a lot of bandwidth to actually access it.

**MR LINDWALL:** The Australian Government does have a policy to try and reduce its - the bandwidth requirements of its websites - - -

**MR SCHOEN:** Yes.

**MR LINDWALL:** - - - and that's gradually being rolled out, as far as I understand, so that they use a minimum amount of data.

**MR SCHOEN:** Yes.

**MR LINDWALL:** But what about, you know, banks and other private companies?

**MR SCHOEN:** Well, most of the banks have a fairly plain home page, and you access the internet banking quite quickly through the home page. But you know, we have a lot of members at the moment on traditional internet access that, you know, you can be waiting up to 20 minutes for a home page from a bank to download, which you just can't - and then, you know, when the kids come home from school then that even slows down further.

So with the NBN that has improved, but you know, we're currently connected to the mobile service for our internet, and we'll be staying with that, because we find that adequate to handle our situation, and as more people move off that to go onto the satellite, our service is actually getting better.

**MR LINDWALL:** So some of the people who use banks, banking services, will have a separate device which gives a six digit number, for example, as a second-factor authentication tool.

**MR SCHOEN:** Yes.

**MR LINDWALL:** And I think they last for about a minute, or mine does anyway, and then it regenerates with another number. That must be frustrating if you have to go through multiple iterations, so I don't know if you've heard any problems with accessing banking services like that?

**MR CULL:** We do. There's a member who featured on the front page of The Land newspaper not long ago who has to - she runs a millinery business out of her homestead in New Narradin. Every time she has to put a banking payment through she has to jump in the ute, run up the hill, get the mobile code and come back down, but of course that's even more frustrating if you don't have mobile service, so to be honest I'm not sure how our members get around and the bank protocols for that. No, carry on.

**MR LINDWALL:** I thought you were about to say something - - -

**MR CULL:** No, I was, and I forgot again.

**MR LINDWALL:** That's all right, that's all right. I just want to see if there's anything else that I should ask you about.

**MR CULL:** Oh, it's - sorry, Commissioner, memory's coming back. The change to the peak and off-peak times for - - -

**MR LINDWALL:** Yes. They change from what and to what?

**MR CULL:** They - they changed to - peak time is now - there's only a six hour window that isn't a peak time. And I'll have to take on notice what it was before, I can't remember.

**MR LINDWALL:** Yes, that's all right.

**MR CULL:** But - so our members - there's been a couple of things our members have found. They've been frustrated that their usage in the peak times has gone up, because the off-peak window has shrunk. So even if their actual usage of the internet hasn't changed, they're consuming more of their peak data allowance, and they're also not entirely sure how to use that off-peak data. They're very frustrated that it's sitting there and they're paying for it, but they can't see any real use for it.

We've chatted with NBN about them doing some education on how to get people to use it, but it's kind of a bit of a red flag at the moment that it's there and there's potential.

We also haven't seen a lot of transparency on how the current peak and off-peak settings have been set. We'd love to see some transparency, and even just a subtle shifting of when is peak and off peak. Yes.

**MR LINDWALL:** Anyway, I can understand that, but are there any final points you'd like to make?

**MR SCHOEN:** No, not really. We do have serious concerns about the capacity of the Sky Muster. I think that's one thing that we - - -

**MR LINDWALL:** I think that's quite clear. If I could summarise what you've basically told me, is obviously the concern is principally about the Sky Muster - - -

**MR SCHOEN:** Yes.

**MR LINDWALL:** - - - and some of that may be short term. Some of them may be long term, that will be determined. Obviously people who are - as I found out in the other inquiry we completed recently on agricultural regulation, the use of technology in farming businesses is very important and quite - it makes a massive difference to productivity on the farm.

**MR SCHOEN:** No, it is, and it frees up a lot of time that, you know, if you can actually be doing a lot of your work while you're sitting in the header - - -

**MR LINDWALL:** Exactly.

**MR SCHOEN:** - - - rather than when you're coming home at night, it makes a big difference so - to quality of life.

**MR LINDWALL:** I mean, we had - you know, self-drive tractors, one of them I heard in Western Australia - unfortunately the person lost - who was in a home somewhere



controlling it remotely lost interest or lost attention of it, and it drove through several fences before it was relocated back or something, but - these types of things happen, but they are an amazing technology if available, and of course it's advancing all the time.

**MR SCHOEN:** Yes, and agriculture is really lucky to be at this point of time.

**MR LINDWALL:** Yes, yes.

**MR SCHOEN:** We really are able to utilise the advances in technology and is increasing our productivity on the - - -

**MR LINDWALL:** So I just wanted to make sure that we're clear that - - -

**MR SCHOEN:** Yes.

**MR LINDWALL:** - - - whilst there are frustrations with the rollout of the NBN, overall the benefits of these technologies are immense for the farming sector - - -

**MR SCHOEN:** Definitely.

**MR LINDWALL:** - - - and your members, basically, yes.

**MR SCHOEN:** Yes. So we just - we don't want an existing service replaced by something that's inferior.

**MR LINDWALL:** Of course, yes.

**MR SCHOEN:** And you know - and in the country it can be a matter of life and death, so - - -

**MR LINDWALL:** Yes, all right. Well, thank you very much.

**MR SCHOEN:** No worries, thank you.

**MR LINDWALL:** Thank you. Now, this is a time we always allow anyone else who wants to come and say something or who wants to object to something that's been said, or what I said, and have another say. Malcolm, do you want to come and have another say?

**MR MOORE:** Please.

**MR LINDWALL:** It will have to be fairly brief.

**MR MOORE:** I'll be very quick.

**MR LINDWALL:** Yes. And again, you'll have to state your name for the record, and - - -

**MR MOORE:** I'll do that. Thanks, Paul. Thanks very much. Malcolm Moore, acting on behalf of myself. Very quick analogy. There's a Superman movie that I saw several years ago where Lois is falling out of a helicopter down the side of a building and as she's falling she's calling out, "Help, help," and Superman comes down and grabs her and says, "It's all right, I've got you," and she turns around and says, "But who's got you?"

Now, the analogy is that David Epstein from Optus and Dan Lloyd from Vodafone and I - might have mentioned, I'm not sure - from Telstra might have mentioned - but all this talk is about the access network and getting access to connectivity. The big missing point is that we've got optical fibre up around the coastal areas of Australia and nothing much in the inland except for a quick run that goes down from Sydney and Melbourne via Canberra and another one that goes from Brisbane down to Parkes.

What we really need to have - - -

**MR LINDWALL:** What, the Hume Highway area?

**MR MOORE:** Yes.

**MR LINDWALL:** Yes.

**MR MOORE:** Yes. What we really need is to have an inland broad network of 144 fibre - optical fibre put in the ground, manufactured in Australia for Australia, basically running about 27,000 kilometres, it costs about \$810 million to put in the ground including all the equipment to go with it.

If you go from about Shepparton up Mount Isa is one run, another one from Canberra up to Cairns is another one, and then have crosses going east/west to join all that. Another one going from Alice Springs out to Exmouth, and having another one coming from about the middle of that down to Albany, that sort of thing.

That's what's needed so that then you can get - you can bypass the problem of having satellite. It also provides all of the infrastructure, so you can have the radio black spots covered at virtually nil cost and you can do rural farm connected homesteads. That's what you need.

**MR LINDWALL:** Okay, all right.

**MR MOORE:** Thanks very much.

**MR LINDWALL:** Thanks very much, Malcolm. Now, anyone else wants to come and have a - yes, please. Rachel, you have to give your name again.

**MS THOMAS:** Sorry, yes, Rachel Thomas from ACCAN. Just wanted to make a further point, just about the mobile coverage. One of the issues I suppose we've made in our submission is assuming that the - how you define what the coverage is and where you assume it is.

We've seen a lot of consumers contact us who are in the CBDs of cities who are having extreme difficulty getting coverage in their apartments or in their houses.

**MR LINDWALL:** Yes, yes.

**MS THOMAS:** A number of the companies are now offering Wi-Fi calling, so that you can use your mobile in your house using the fixed broadband connection that you have.

**MR LINDWALL:** Yes.

**MS THOMAS:** And we've also seen those NBN - because priority assistance needs to have a certain standard, and the NBN network doesn't have the power support that the copper would have initially - - -

**MR LINDWALL:** And without battery backup.

**MS THOMAS:** Yes, so they're looking at alternative kind of mobile solutions, and for some of those customers who don't have full coverage internally there's antennae being set up in their house to distribute that coverage.

**MR LINDWALL:** Yes.

**MS THOMAS:** So those are pretty - most of those examples that we have are in very central CBD areas, and so assuming that the coverage is in an area does not necessarily mean that it's in your house. So if you need - - -

**MR LINDWALL:** At every point in your house, yes.

**MS THOMAS:** Yes. So just defining what is "mobile coverage" and where it needs to be within your premises or your land can have a big impact on what's the service level that you're getting.

**MR LINDWALL:** Okay. Well, thank you very much, Rachel. Anyone else would like to say something? It's your last opportunity. All right, well, I'll adjourn the proceedings, and we'll resume again tomorrow in Cairns. Thank you everyone for coming.

**MATTER ADJOURNED AT 12.13 PM UNTIL  
THURSDAY, 2 FEBRUARY 2017 AT 9.22 AM**