JULIE McCROSSIN: Ladies and gentlemen, I will ask you to take your seats. We'll start in just a couple of minutes but I've put Peabody and Sherman - remembering Peabody is the incredibly intelligent dog, Sherman is Peabody's boy, so in this situation, that's Peabody, I'm Sherman, the inadequate human. Peabody has a degree in economics from the London School of Economics - I'm not making this up, but this is her first go of being a spokesmodel. Peabody, go up and down the aisle showing them the drone. Give her a round of applause. This is tremendous.

(APPLAUSE)

>> It's very important for ageing feminists to initiate the next generation into humiliation! She's got extreme fun written on that box. Extreme fun. I have sensed a certain cynicism about the commercial world in aspects of this room. You may see this as advertising. But I put it to you, if you give this to someone in your family, particularly the age of 18-25, they will experience extreme fun. How do you get this? You enter Peabody's Jetson competition. Some of you came late but, remember, we have been showing you predictions Bill Gates made. We look at The Jetsons this morning. We may give you one last look at The Jetson video because it is so good. My learned friend intercut the Jetson with it all coming through. Rachel is Peabody's other name, give it to her on a piece of paper, or there is her personal email which she is sharing with you, or tell her in whatever communication mode you have your idea. It has to be some sort of prediction to do with telecommunications or the media in the future. Something that's going to happen and has the characteristics of being thought-provoking, intriguing or fun. The winner, who will be chosen by Peabody - if you think about it, she is from the London School of Economics, that's a qualification. I may influence her. I will bring stupidity to the equation. We will decide who gets this. If you have to leave early tomorrow, don't worry, the merit of your idea will still win and we'll get it to you, we might even fly it to you! We have three entries so far. One man in a fit of overexcitement and inaccuracy has Tweeted his submission. That's how you submit to Rachel. We have some braniacs in this room, if you can bring a picture to it, even better. Do you feel I have sold the concept to you? It is characteristic to say yes and then clap.

(APPLAUSE)

>> Thank you, Peabody. It is a remarkable physical resemblance. I look like Sherman, she looks like Peabody. I will ask Peabody to remove that. What were our principles from the Shadow Minister? Accountability, transparency, clear standards, avoiding blame-shifting and then we had the addition of accessibility. I like to think that this transparent bowl has all those elements. So now I'm going to - has everyone got a lucky number? We haven't had any late arrivals, have we? Anyone else? Peabody! Peabody!

(LAUGHTER)

>> Management potential. She never knew she was Peabody until today. The prize for the late arrivals is a Bluetooth speaker. We've had a lot of late arrivals. Anybody else? There you go. Peabody, you need three more, I will put the stubs in. So sorry for the delay, guys, but this is critical! This is called access. Okay, ladies and gentlemen, thank you, we now have everybody in. I am a Protestant but I have been trained at conferences run by nuns and what they always do is they circulate them like that. They do. They are always very, very careful. The person who has to be here or it's a redraw. F-28. Fantastic! Congratulations. It is customary to give him a round of applause.

(APPLAUSE)

>> Fantastic. Ladies and gentlemen, thank you. I'm sorry for that delay but it was good that everybody was in it. It gives me great pleasure, just before I introduce a man who used to be with the Sheepmeat Council of Australia to show you this. That was called a sudden throw.

(music plays)

>> There is an audio description. Can we play it again and I will endeavour to have an audio description? This is my first go. We have got a beautiful green paddock, we've got a narrow gate, a mob of sheep. I'd estimate, what do you reckon, about 500 sheep? That's a lot of sheep. It's all being herded by probably kelpies but we can't see very clearly through a narrow file. It has the flow of water, do you want to give it a clap?

(APPLAUSE)

>> It introduces Mark Harvey-Sutton who is going to talk about the connected farm and Mark is the manager of rural affairs with the National Farmers' Federation, formerly with the Sheepmeat Council, the Cattle Council and the Australian Government and he has a legal background. Would you welcome him by going Baaaa!

(LAUGHTER)

MARK HARVEY-SUTTON: I don't know whether to acknowledge that baaad joke but, anyway, we will move on. Thank you very much for having me today. It's a great privilege to be here. I actually got really excited when I found out I'd be introduced by Julie. I was a huge fan of Good News Week. I reckon Good News Week could get a second run with the way of the world with Trump and Brexit. I work for the National Farmers' Federation. I'm here today to tell you about the connected farm. You know, I just want to actually paint a little bit of a picture about why the connected farm is so important. I think often when we talk about the connected farm, these visions of drones and driverless tractors and all means of technology buzzing around a farm come into mind but I think the one question we often don't ask or answer is: But why? I think there's a very unique Australian context to why the connected farm is so important so I'm going to talk to you about that today.

I'm using the example of the red meat industry because that's what I'm most familiar with but I should point out I'm not employed by the red meat industry, I'm just using it as an example. This is by no means official red meat policy.

(LAUGHTER)

MARK HARVEY-SUTTON: I will start with a very shameless plug. We are very pleased to say on 21 November this year, we have been celebrating National Agriculture Day. We are having lots of events to do this. There is a website agday.org.au. Lots of social media activity, posting videos of barbecues on social media. I'm concerned about how widespread the social media and video activity will be because, unfortunately, a lot of our members don't have connection. That's something we really need to address. I'm going to talk about that a little bit in my presentation.

About the National Farmers' Federation, we're the peak agriculture body for agriculture in Australia. Agriculture is such a diverse industry and sector. I mean, this is a picture of all our members and we range from horticulture, livestock production, chickens, cows, sheep, you name it, they're all in there. With that comes unique opportunity and unique applications for technology.

At the NFF we have this vision for agriculture becoming a $100 billion industry by 2030. It's a bit of a notional figure because someone pointed out to me with inflation, you'll probably get there anyway but, nonetheless, we need to be so mindful that we need to be ambitious, we need to grow our sector. What we've got on the screen is a recipe for what we see as getting to that goal. There is market access which I will talk about in a minute but one of the things about Australian agriculture is we actually are a net exporter. We are so trade-exposed. We sell the premium products of the world to the world. Essentially, only 30% of our produce is consumed in Australia. 70% is exported. We do this on a very, I guess, uneven playing field as well. A lot of other countries have subsidies for their farmers. We don't have that here. We also have unique challenges around geography and connectivity which I will talk about but they are some of the other issues we deal with. Human talent, accessing labour is such a talent to Australian farmers, as is accessing capital. One of the issues we are facing at the moment is getting young people on to the farm but often accessing their - their ability to access capital to invest in those operations is really challenging so we look at ways of, I guess, coming up with innovative ways of getting them on farm and technology could be one of those keys.

Technology also represents the accelerating productivity. The efficiency from having technology utilised and applied is significant. That will see our productivity go for time to come. Premium branding, we sell the premium product to the world. We are considered a reliable and safe producer of food and I will talk about that a little bit more as well, about why, but the key one is digital connectivity. That is the one crucial element that's actually stopping us from applying this technology on farm.

This is just a slide to indicate, I guess, the value of our global exports. The lamb industry is quite extraordinary. The United States is actually our biggest market. It's a multibillion-dollar industry and I have to apologise, sorry, I can't remember the figures and I can't see them either - probably need some glasses! It is a multibillion-dollar industry. One of the things I have found amazing about the lamb trade, with the US being our biggest market, Costco is, in its own right, the second biggest lamb market for Australian lamb. You've got the domestic market, which is 30%, then Costco is, in its own right after that. They import premium lamb legs that are just, you know, so valued for their quality and reputation.

What I'm going to do today is try and give a practical example about why technology is so important for agriculture. What's on the screen here are electronic ear tags. For the Australian beef industry, it's compulsory for cattle to have an electronic ear tag. In the sheep industry, it is not compulsory yet. There is a whole range of industry politics about why it is and isn't but for today's presentation, I'd like you to assume every sheep as an electronic ear tag too. What these electronic ear tags are used for is traceability. In the event that we have a disease outbreak in Australia, you can literally track every animal in Australia within days and know where they are so you can cut the outbreak off at its source. At the moment, the way these tags are used for is having an individual identification for the animal. When you sell the animals, there will be a scanner on farm, you run it through, they detect the movements. Likewise when they get off the trucks, they run through a scanner again so you end up with a series of movements for that animal so you know where they are. One of the things that could really revolutionise that industry is having the ability for those ear tags to carry data. We do this to some extent already. This is quite a technical part of agriculture. In the sheep industry, we used to use the term this is them getting their heads cut off. We have the picture of lamb carcasses here. When you sell your animal to an abattoir, they go through, obviously, get slaughtered, cleaned up, this is the end product that you have here but those ear tags I was talking about actually still are assigns an individual identification to that animal. Even when they are travelling along the hooks, they are still a means of tracking the individual carcass. Now, why this is so important is because that carcass actually - the producer will get some feedback on how that carcass performs in its eating quality. You might have seen the logo in the bottom right-hand corner, Meat Standards Australia. This is a concept that's been developed by the red meat industry whereby they've gone into the science of determining what makes a steak taste so well, what's the positive eating experience you get and same with lamb. There's a whole range of factors in there.

Some of them include how you hang the carcass when you are in the abattoir so there's certain ways you've got to do that. How they're transported. I guess, you know, making sure they have a low stress environment because what's been found is a happy animal actually eats really well.

There are real-time - I just want to put this scenario. Once your product goes to the abattoir, the producer will get what's called a grid. On that grid it will say, "This is how much we paid you for your animal". They'll run it through the requirements, the matrices that sits under Meat Standards Australia and attribute a grade or score to that animal. That gets passed back to the producer. The producer can adapt their on-farm practices to make sure they improve the quality of their product.

Just imagine if those ear tags, for instance, could carry data that actually gives a real-time indication of what the situation an animal is in so you could actually have the ability to monitor the animal while they're alive 24 hours a day and actually see whether they're exhibiting the qualities or having the experience that's going to produce the optimal eating quality at the end because, ultimately, that will drive the profit for the producer and the industry as a whole.

That scenario can actually be replicated across a whole range of commodities. Crops, you could monitor what the conditions are in real-time, make adjustments if you need to. All these things go to enhancing the value of the product. It's not so much about - to my mind, connectivity on the farm isn't so much about adding efficiency, although that's going to be a really critical factor with the labour issues that we face but there's also this element where we can add value and improve the quality of what we're producing just from a simple technology, having an ear tag that could actually carry real-time information.

But - there is a huge but for our industry - it's called connectivity. At the moment, vast tracts of Australia do not have that ability for real-time connectivity to the system. I'm actually really excited. There's a report being released on Friday. Although I won't go into all the details, they've actually put a figure on what connectivity actually represents to the agricultural industry. That figure is, if every farmer had the ability to have real-time connection, apply agri tech innovations to their farm, this would mean $19.1 billion would be added to the value of the sector. That is significant. If you take on board the flow-on effects of that added value to the sector, this actually means, according to this report, $24.3 billion being increased on the national GDP. That is amazing. It is an astonishing figure! There is one crucial hurdle to actually getting there. That's connectivity.

But I am quite optimistic about connectivity on farm. Because 2017 is a great year to actually further that case. You heard from Minister Fifield this morning about some of the activities that the government is undertaking but the fact we have a response being generated to the PC's report into the universal service obligation is so crucial. The fact we have the telecommunications reform package happening. That's going to be so significant in actually guaranteeing people access to broadband connectivity on their farms. All of a sudden, this whole new world for agriculture is opening up on the back of connectivity. But connectivity in the bush is also more than just that added value in agricultural productivity. There is a whole range of social benefits that can come to the community from being that connectivity.

It means better healthcare, it means better education. It means the ability for people to stay in rural and regional communities. That's one of the reasons we are very proud to be one of the founding members of the Rural, Regional and Remote Communications Coalition. This is a group of like-minded organisations that have come together and basically the reason we came together is because we all realised we were saying the same thing. We need access to connectivity. It's been such a wonderful experience being part of this group. The ability to interact among these organisations. We started out as 14. We have now become 21 with the most recent addition being the National Rural Women's Coalition. We have been together for about 12 months now, just shy of 12 months. Over that time, we have conducted over 80 meetings with politicians on the hill, trying to further our cause and actually explain what's happening because one of the crucial things that comes with our predicament, if you will, is I think it is just raising awareness of what the actually quality of connectivity and access to technology is in the bush.

I think the one thing that we have always been really critical to bear in mind is that we didn't want to do an exercise in negativity. This isn't about complaining or whinging about the plight of connectivity. It's actually trying to get the message across that there is this huge untapped economic potential in rural and regional Australia. This is illustrated by that report I referenced before where you've got nearly $20 billion of added value coming to the agricultural sector if you have connectivity.

That pretty much concludes my report but I just wanted to do one very important thing because critical to the success of the Rural, Regional remote Communications Coalition has been the work of ACCAN. I'd like to give a lot of credit to what ACCAN has done for us. Without ACCAN's support and their expertise, we would not have been able to achieve what we have. So I'm breaking from process a little bit here but I'd like Teresa to come forward.

(CHEERING AND APPLAUSE)

>> This is a gift on - from the National Farmers' Federation to ACCAN to thank them for their significant work in supporting the Rural, Regional, Remote Coalition. They are so important. It has been so valuable. Thank you very much.

(APPLAUSE)

TERESA CORBIN: There is a lot of people here that were there.

MARK HARVEY-SUTTON: It was.

(APPLAUSE)

JULIE McCROSSIN: Thank you very much. Any questions or comments from that presentation? Malcolm Moore. A simple question, you talk about $20 billion per year, was it?

MARK HARVEY-SUTTON: I'm actually not sure, to be honest. It's an added value from the 2014-15 figures so it's an additional value. I'm not sure what the year-to-year figure but that's an addition on what the value is now.

>> I would take it as per year. That's $100 billion wasted by a Federal Government looking after just the metropolitan areas only. The problem that you have got is that the - what do you call it? The global manufacturers or telecommunications equivalent design it for urban environment, not regional environments and that is why they cannot put what you want in your areas. We are working on it.

MARK HARVEY-SUTTON: Absolutely. Just by way of response, I agree, I agree but also, I think, what we are seeing with the agri tech revolution on our doorstep is the development of these technologies that offer an add-on. It could be something as simple - I know some of the big northern pastoral operations are actually building infrastructure on their cattle stations that gives coverage across the whole station so they can all actually talk on the phone to each other. It's a real safety innovation. But just having that connectivity. To my mind, there is a lot of those solutions that are on our doorstep that we need to encourage the market and get the conditions happening because it is going to be a commercial drive to develop that but I think once people begin to understand the carrot that's at the end of actually utilising these technologies, I think that market will come.

JULIE McCROSSIN: Got a question here?

>> It's Greg. Although there is an issue with connectivity in the farmlands, there is a lot of technology or specific technology being used on the farms like the autonomous vehicles to plough the fields and stuff like that. Do you know if the farmers are eager to take that technology up? Do you know what the percentage is? Is it fast or slow in taking that technology up?

MARK HARVEY-SUTTON: I couldn't give you a figure, Greg. I would say it is probably not rapid take-up. That's because there are certain inhibitors to it. One that comes to mind is demonstrating that tangible value of that application in the first place because, because of that connectivity issue, I mean, you can still run that technology on your farm but it's the real-time information that's missing there. Actually, one thing I neglected to mention in my presentation was there is a huge issue coming for the agricultural sector, too, in terms of that real-time information and who owns that data. I know it's a broader debate that's happening but if I use the example that I just did around carcass feedback for lambs, I mean, ultimately it's going to be an abattoir that owns that information that passes back but what sort of proprietary interest should a producer have in that data? It is going to be a huge challenge that comes with the agri tech revolution.

>> Angus from Darwin. We are seeing media push for knowing where what you are eating comes from. In Darwin, we have fantastic bespoke steak houses. You get a card that says where your food is from. Do you see this technology enabling a unique story for each meal you are eating?

MARK HARVEY-SUTTON: Without a doubt. It is that premium branding that drives our produce. I had a picture up there of the True Aussie brand. That's used in our export markets. I've been to supermarkets overseas where you go there and it says there is True Aussie on there. It says it is from Australia and provides that image. With the ability to track animals, there is that potential for people to have the bespoke experience and understanding where the animal comes from. In Japan, it has been part of the practice for years where the Wagyu.

JULIE McCROSSIN: I've been to restaurants, people love it, it is not just which hill which side. It is a marketing tool.

MARK HARVEY-SUTTON: Absolutely. Bruce Bevington, Bridge town Western Australia, we have satellite for our communication. Two issues with the reform package and the USO thing. Everyone is lauding we will have a standard which says capable of providing 25 megabits. That's no good to anyone. The ABG was supposed to do six megabits. We never got it. We need a standard that says, "You will get 12". Capable of is worth nothing. That's what everyone is applauding at the moment. The Productivity Commission, the backward step for customers if the Productivity Commission gets their way, those people who do not have access to mobile will be using voice communications as their telephone. That is a big backward step. Nothing is being done about that.

MARK HARVEY-SUTTON: Just to respond to that, you are exactly right around the telco reform package. One of the things we are mindful of is the speed that's encapsulated in the package, I guess we'd acknowledge it as slow but the critical thing that comes with that package is the fact it is enshrined in legislation now. What's enshrined is the fact that people now have a right to access broadband. Everyone should have that right. They should have the right to access a minimum connection which is going to be so critical. We are not saying that they've hit the speed right or it is going to be the right speed but there is a mechanism now to actually say, "This is what you have to have as a minimum". I think that's a really positive start. I'm not for one minute lauding the speed that comes but I think it's a critical first step.

In terms of the PC recommendation to utilise voice over nbn infrastructure, that's actually been one of the critical and major points the Rural, Regional and Remote Coalition has been making. In our 80 meetings, at least 60 of them, because 20 happened before the report came out, we have been saying to keep our landlines. The Sky Muster is not at a point where we can.

JULIE McCROSSIN: You have been a delight. Give a hand to Mark Harvey-Sutton.

(APPLAUSE)

JULIE McCROSSIN: Peabody is now giving him a present. You have to get one of these London School of Economics degrees. It opens up a lot of opportunities! Ladies and gentlemen, we have two more speakers who are going to give us another look into the future for what the world for the consumer is going to be, what sort of devices, how many, how will we manage security and upgrades and so then. Just before we break for the day for drinks and snacks outside, we are going to have a surprise. I found that interesting! Okay.