TRANSPORT AND PUBLIC WORKS COMMITTEE

Members present:

Mr SR King MP (Chair)
Mr CE Boyce MP
Mr RI Katter MP
Ms KE Richards MP
Mr BJ Mellish MP
Mr TJ Sorensen MP

Staff present:

Ms D Jeffrey (Committee Secretary)
Ms M Telford (Assistant Committee Secretary)

PUBLIC HEARING—INQUIRY INTO TRANSPORT TECHNOLOGY

TRANSCRIPT OF PROCEEDINGS

TUESDAY, 29 JANUARY 2019

Brisbane

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The committee met at 10.32 am.

CHAIR: I declare open the public hearing for the committee's inquiry into transport technology. I would like to acknowledge the traditional owners of the land on which our parliament stands. My name is Shane King, member for Kurwongbah and chair of the committee. The other committee members with me here today are Mr Ted Sorensen, member for Hervey Bay and deputy chair; Mr Colin Boyce, member for Callide; Mr Bart Mellish, member for Aspley; Mr Robbie Katter, member for Traeger, who is joining us on the phone; and Ms Kim Richards, member for Redlands, who is substituting today for Mrs Jo-Ann Miller, member for Bundamba.

The committee's proceedings are proceedings of the Queensland parliament and are subject to the standing rules and orders of the parliament. The committee will not require evidence to be given under oath, but I remind witnesses that intentionally misleading the committee is a serious offence. You have previously been provided with a copy of instructions to witnesses so we will take those as read. The proceedings are being recorded by Hansard and you will be provided with a copy of the transcript. To assist with clarity, can you please identify yourself when you first speak and speak clearly and at a reasonable pace.

The purpose of today's hearing is to assist the committee with its inquiry. Media may be present and are subject to the chair's direction at all times. The media rules endorsed by the committee are available from committee staff if required. All those present today should note it is possible you might be filmed or photographed during the proceedings. I ask everyone present to turn mobile phones off or to silent mode. If witnesses take a question on notice today, I ask that you provide the information to the committee by 4 pm on Tuesday, 5 February 2019. This hearing is the third hearing the committee has held for the inquiry. The committee intends to conduct more hearings on the inquiry, with information to be updated to the committee's web page as it becomes available.

AUSTIN, Mr Peter, Manager, Vehicle Safety and Performance, National Heavy Vehicle Regulator

CALVER, Mr Richard, Adviser, Compliance and Workplace Relations, National Road Transport Association

CARLISLE, Mr David, Program Director, Business Improvement and Innovation, National Heavy Vehicle Regulator

SHAW, Ms Amelia, Policy Officer, AgForce Queensland

WHALE, Mr Zachary, Grains Policy Director, AgForce Queensland

CHAIR: I welcome representatives from the National Road Transport Association, the National Heavy Vehicle Regulator and AgForce Queensland. Thank you for your assistance and your attendance here today. Would each of you like to make a short opening statement?

Mr Austin: Thank you for the opportunity to appear before the committee today. As the committee is aware, being the relevant committee which scrutinises the Heavy Vehicle National Law, the regulator is an independent statutory authority responsible for the in-service regulation of all vehicles with a gross vehicle mass exceeding 4.5 tonnes in Australian states and territories, with the exception of Western Australia and the Northern Territory.

The heavy vehicle industry is a commercial industry responsible for delivering the national road freight task. Being a commercially focused industry, operators of heavy vehicles are often looking for new and innovative ways to deliver the freight task more effectively, more efficiently and in the safest manner possible. Because of this, operators are already adopting technology that allows them to do this. As a regulator, our role is to provide a regulatory environment that allows the industry to deliver the freight task in the most efficient way but while ensuring the safety of the industry and the general public.

In opening, there are two matters I would like to briefly touch on. The first is the regulator's data based approach. To be an effective regulator, it is essential to have a solid understanding of our industry, who the industry is made up of, what they are moving, where they are moving it, when they are moving it and what they are moving it on. Through the development of the regulator's safety and compliance regulatory platform, we will connect a number of custom, state based and national datasets to provide a comprehensive overview of the heavy vehicle industry. This data will enable the regulator to make more informed policy decisions such as identifying areas where safety or productivity improvements could be made, and develop a strategic and coordinated national approach to address these. It will also form the basis of our service delivery functions, ensuring our roadside compliance officers have the data and tools that they need to support more effective national service delivery operations. In short, it is about using technology to regulate better.

The second focus area relates to vehicle based technologies. While there is much interest, and rightly so, at looking to the future to ensure that our community is ready for innovation such as autonomous vehicles and the safety and mobility benefits that they will provide, it is also important we do not forget that vehicle technology can deliver, and is delivering, safety and productivity improvements today.

Historically, a number of technology based solutions have been introduced to the vehicle fleet to improve the safety of vehicles. Supplementary restraint systems such as airbags and seatbelt pretensioners are something we are all well aware of as they are in our everyday cars. Additionally, technology driven improvements to vehicle combinations have emerged through the performance based standards, or PBS, scheme. These have seen notable changes in how we deliver the freight task. One such example is the innovative A-double combination that was born right here in Queensland and which is now delivering freight improvements across the country. Here in Queensland it has changed the way we deliver freight between Toowoomba and the Port of Brisbane.

Looking forward, there are a number of emerging technologies that are becoming available now or are under development and have the ability to reduce the number and severity of road crashes—systems such as stability control, which will become mandatory for a number of heavy vehicles starting from July this year through to 2021; autonomous emergency breaking; blind spot detection systems and the like. These technology based systems, while not replacing the role of a driver in a heavy vehicle, are available and are capable of assisting those drivers in being safer and have an important role to play in reducing road trauma.

In closing, the National Heavy Vehicle Regulator believes that the effective use of technology within the heavy vehicle sector along with a range of innovative programs and solutions focusing our service delivery will be essential parts of delivering the regulator's vision of a safe, efficient and productive heavy vehicle industry that serves the needs of Australia.

CHAIR: Thank you. We will now move to AgForce.

Ms Shaw: Thank you for the opportunity to appear before the committee today and to bring to your consideration the agricultural industry needs regarding the future of Queensland's transport technology and future network. Transport is a large cost to the agricultural sector, contributing more than 40 per cent of a farmer's production costs. Therefore, access to quality and affordable transport options is vital to growing Queensland's agricultural industry. We also know that when we have a vibrant and profitable agricultural sector we have vibrant rural communities.

AgForce would like to raise concerns around Australia's maintenance deficit for road and rail infrastructure to the committee and highlight the impacts this will have upon the future of transport technology. It is critical that these assets are ready for the vehicles of the present day and maintained to a standard to ensure the readiness for future demands. The majority of infrastructure that we are using today will be used over the next 50 years. However, investment and maintenance activities are paramount. It is AgForce's recommendation that Queensland establish consistent benchmarks to assess our road network performance and consider future load and vehicle requirements.

As Queensland seeks to increase its economic competitiveness, it is critical that our current and future network considers the supports, the needs and the desired outcomes of not only agriculture but also the wider industries affected by it. Along with seeking benchmark maintenance standards, AgForce is also recommending increased investment and support of Queensland's key trade inland routes. The efficiencies of the transport network are significant to the agricultural industry due to strong correlations to both the cost of production and competitiveness. Currently there are fleets of vehicles being used across the industry that have positive impacts on productivity and the wider state economy.

The conventional cost-benefit analysis favours economies of scale which leads to underinvestment in less densely populated regions. To address this, AgForce recommends that regional transport projects—either maintenance or investment—should consider the supply chain modelling in their analysis.

While AgForce is not a technical expert in this space, we would like to highlight that consideration needs to be given to the rural needs and challenges of Queensland such as isolation and the effects that has upon recharge points, repairs and mechanical support. AgForce would like to thank the committee once again for the opportunity to briefly outline the recommendations to ensure that Queensland agriculture is considered when observing the future of our transport network.

CHAIR: We will now go to the National Road Transport Association.

Mr Calver: We provided a written submission dated 28 August to the committee. In addition, on 7 January we provided the committee with a copy of a paper that sets out the vision we have for reaching a zero road toll. That paper discusses the role of technology in assisting to reach that ambitious target of zero road fatalities.

In short, advanced safety features like autonomous emergency breaking and electronic stability control, which my friends from the NHVR have said will be mandated very soon, must become commonplace in heavy vehicles. Newer, safer technologies moving ultimately to autonomous vehicles will have a revolutionary effect on the transport task. There is a correlation between newer vehicles, both heavy and light, and greater safety. The research done in the light vehicle sector by ANCAP, Australia's independent vehicle safety authority, shows cars built in 2001 or earlier make up one-fifth of the cars on the road—20 per cent of cars built in 2001 or earlier—yet they account for more than one-third of the vehicles involved in fatalities.

To our knowledge, no similar comparison work has been done for heavy vehicles, but our paper indicates that NatRoad seeks both regulatory reform and incentives from government to increase the uptake of safety technology. One of the things outside of this inquiry which we have urged is the abolition of stamp duty on heavy vehicle registration, because that is around three per cent of the cost of a heavy vehicle and it stops the newer vehicles being purchased.

The balance of NatRoad's evidence today relates to the term of reference which seeks input on how employment arrangements will be affected by transport technology. This is the irony. Whilst technical change will ultimately have the revolutionary effects that I have just mentioned, the irony for the industry is that one of the most significant challenges facing the road freight transport sector is a critical shortage of truck drivers.

The average age of heavy vehicle drivers is around 53 years—53—with a mere 15 per cent of truck drivers under the age of 30. With the road freight task expected to double by 2030 and the simultaneous loss of retiring drivers from the workforce, this problem will be compounded unless urgent action is taken by industry and government. As well, women make up just three per cent of the truck driving workforce and unfortunately represent one of the greatest gender imbalances of any occupation. Initiatives to make the job more attractive to sections of the broader community, including Indigenous Australians, must add to its diversity and help address this driver shortage. This is what NatRoad is working on at the moment.

Fear of losing jobs through technology should be replaced by a perspective that the introduction of technology will enable those who are properly trained in the heavy vehicle industry to thrive. They can do that as they master the new ways in which the heavy vehicle industry tackles the freight task, including the use of increased levels of technology. NatRoad is keen to promote new technologies as a way to attract more young people to work in the road transport industry and make heavy vehicle operation a viable career choice. We do not want it thought of as an industry that is dying on the way to automation. That is the wrong perspective to bring to bear. That is why in submissions about technology we always highlight the human cost and impact. Rather than fear the technology that will change the face of the industry, it is best to help the workforce adapt to that change and embrace the benefits technology will bring, inclusive of the expected reduction in the road toll that I began with.

Mr BOYCE: I would like to raise the issue of B-double road closures throughout rural and regional Queensland on the basis that it is not safe for that type of vehicle to travel down a particular road. It is widely recognised that a B-double, being a larger truck, is more unsafe than a double-decker trailer. This is not the case; for example, they have more axles, less weight per axle, more braking capability, better stability, 30 per cent fewer trucks on the road if you have B-doubles, and so forth. My question is: why are these rural and regional roads being closed to B-doubles?

CHAIR: We are about future technologies, but I assume there will be B-doubles in the future as well as B drones. I do not know. Can you answer that?

Mr Carlisle: I definitely appreciate the background to the efficiencies that these larger vehicles and modern technology, as Peter mentioned earlier, bring to both the industry and our community. The challenge with the use of some of these vehicles is the ability of local authorities in particular to have a strong understanding of their asset. Often that is in terms of an education program to let them understand the benefit of these sorts of vehicles in relation to carrying capacity and the safety that comes with those. Clearly there are some roads in rural Queensland that potentially will not be able to handle these vehicles, but in talking to councils we often find that it is about them understanding the benefit of these vehicles on the network and the efficiencies they can provide along with safety. Often the permit process which we end up administering utilises an education process after the fact. The NHVR has invested a lot of time and effort in working with individual councils to bring them up to speed with engineering standards and the benefit of these newer vehicles on the network. Our challenge is certainly in opening up these roads to bigger vehicles and reducing the number of limitations they currently have. Part of that is through education and bringing road managers or councils on that journey to understand their benefit.

Mr BOYCE: Thank you for your answer; I have a comment in relation to what you said. Basically, a lot of these roads are being used by B-doubles at the moment and they are being closed. That is what is happening. My next question is about automated braking that might be included in heavy vehicles in the future. I wonder how that might apply to older transport trucks that are on the road now.

Mr Austin: When we look at new technology that comes into the fleet there are three parts: we have older trucks in the network that do not have this technology; we have the current stuff that is currently there and beneficial; but we also have the future stuff coming through. We are talking an average vehicle age in the heavy vehicle fleet at the moment of just short of 15 years. A good example is stability control. If we were to roll out stability control, that will start rolling out through trailers from July this year as a mandatory requirement. It will then roll into trucks et cetera through to 2021 as a mandatory requirement. Once that is mandatory, it takes 15 years for that technology to reach a 50 per cent saturation rate in our industry. One of the questions that the NHVR is looking at currently is what could we do to offer incentives to industry to either (1) adopt some of this technology into their older vehicle fleet, as some of this technology can be retrofitted; or (2) what commercial incentive could we provide to them to move towards a new vehicle. That may be a brand-new vehicle or it could be a new second-hand vehicle, but regardless how do we get that shift?

We are currently having a conversation nationally with the Commonwealth to come up with a plan about how we accelerate that uptake to try and get these technologies more broadly across the industry. There are potentially going to be some measures around incentivising that. It is a commercial industry, so what incentive could we offer an operator so that they could potentially carry more freight if we get a safety benefit in return for that. It is standard policy that the regulator has when we issue exemptions or we look at new schemes. Buses are a key example. In return for a significant safety improvement with electronic braking systems, stability control and antilock braking systems, the NHVR recently nationally provided an extra two tonnes worth of carrying capacity to buses, but as a trade-off we need the safety that comes with that. What does the comprehensive national strategy need to look like to provide that incentive to the commercial road freight part of the sector?

Mr BOYCE: Those are all of my questions for the moment.

Mr MELLISH: My first question is for the NHVR. What do you see as the next big technological leap in safety for the industry?

Mr Austin: In the current National Road Safety Action Plan autonomous emergency braking is seen as the next big technology that will come through, and that is a priority action under the National Road Safety Action Plan. The Commonwealth Department of Infrastructure, Regional Development and Cities, as the responsible department for new vehicle standards at the federal level, is currently undertaking the regulatory work required to look at introducing that. That involves regulatory assessment, cost-benefit analysis et cetera, but the rough numbers that we have seen coming out of Europe, where this technology is available, show there is a significant road safety benefit and a significant reduction in road fatalities that goes with this. It is just a matter of looking at what that looks like here in Australia.

Mr MELLISH: I was looking at the NatRoad submission. They were talking about alternatively fuelled vehicles. Are you able to elaborate on any sort of future work you are doing on alternatively fuelled vehicles? Is there any new technology coming up in that space?

Mr Austin: The NatRoad submission refers to a trial that was done by a company based out of Victoria, from memory, which was moving towards dual diesel gas technology. The problem faced by that company was that when you modify a vehicle there is a requirement that the person modifying

it demonstrate that the vehicle continues to comply with all of the vehicle standards. When you talk about a brand-new vehicle which is being designed, that requires the engine of a vehicle to be taken out, strapped to a bench in a laboratory and run through a laboratory test. The problem with that in Australia is that there is one test facility that does that testing process and it is based out of Western Australia. In terms of the issues faced by that operator to bring a more environmentally friendly technology to the market, it was likely to cost them about $300,000 every time they wanted to do a new engine family. You cannot just do the test once: you have to do it when there are slight variations as well.

In working with that technology provider—and it will commence on 1 February this year—the NHVR developed a new alternate testing procedure—many would be aware from some of the news stories that have come out—called portable emissions testing, so real world emissions testing. Instead of having to take the engine out, bolt it into a lab and do the test there, you put the emissions testing equipment on the back of the truck and you drive the truck real world on a dedicated test circuit, and then you map its emissions testing performance from that. The advocate estimated a reduction from roughly $300,000 per test to $60,000 per test, which for them is the difference between being able to bring this technology to market or not. That has now been finalised. It took about 12 months of work between the industry and the regulator to achieve that, but we have now reached the point where we can provide an alternate test procedure. The upside is that that test procedure is being written not just to account for diesel gas but for any alternate fuel type. It will require the vehicle as it is built to be tested, so we get a baseline, then go and modify the vehicle and test it again. It is about making sure that it is no worse than the vehicle when we first tested it. That will enable industry to now decide what fuel types they wish to use.

As a regulator, I am not here to tell a truck driver or a truck operator that diesel is the best fuel and they must use diesel. If they find an alternate technology out there that suits their particular road freight task, whether it is short distance urban stuff or line haul, if they find something that meets their business needs, then we should be able to facilitate them using that whilst complying with the regulations.

Mr MELLISH: Thank you for the very thorough answer. What are the barriers that you see in the uptake of alternate fuels going forward? Some of the evidence we have seen shows that 99 per cent of trucks and 50 per cent of light commercial vehicles are diesel. Mr Calver, you might want to throw in something at the end as well.

Mr Austin: Fuel distribution is always going to be the big question. If you move to anything where you are required to fill up a tank on a vehicle, a line haul run between Brisbane and Melbourne, you need somewhere in between to potentially fill that vehicle up unless you are going to put sufficient fuel tanks on that vehicle to fuel you from end to end. If you do take your full journey's worth of fuel so that you can fuel up at your own depots at either end you then cop weight penalties as well. Access to refuelling points is going to be the big part. Having reviewed previous hearings transcripts, it is the same with electric vehicles. Whilst Queensland has the electric vehicle super highway up the east coast of Queensland, being able to get that out into the regional areas potentially may be something that holds back the electric vehicle side of it as well.

Mr Calver: This is addressed in the NatRoad submission at paragraphs 11 through to 16 where we talk about some of the unfortunate barriers. The studies into energy use in Australia clearly show that diesel enjoys a virtual monopoly in fuelling heavy freight vehicles and there are economic or operational compromises for others, including the driving range issue or a reduction in the load that you can carry, lower thermal efficiency and limited availability of fuel or fuelling facilities. The lack of refuelling facilities is also one matter that will hinder Australia in the rollout of electric light vehicles at the same speed as in Europe, because those refuelling centres are absolutely integral to the rollout of electric vehicles. Most heavy electric vehicles are still only prototypes.

Mr MELLISH: Following on from that, do you see mass distance location charging as helping or hindering the move towards alternate fuel use?

Mr Calver: We have made a comprehensive submission on this issue. There was a regulatory impact statement issued by the department about moving to a pay-as-you-go system that has those characteristics rather than the current system, which relies on a mix of excise tax and registration fees. The user pays idea must completely displace what we have now in order to be efficient.

The regulatory impact statement unfortunately had a few lacuna or omissions. There was no real investigation of what a community service obligation would look like. There was no real investigation of how you treat toll roads. We do not think you should pay a mass-distance charge and at the same time pay a toll—you are paying twice. There was also no discussion in that regulatory

impact statement about local government individual charging. There are more omissions at this time than there are matters of substance that we can agree on. It is certainly ultimately the model we would like to move towards but we think in the meantime there should be an independent price regulator that is established federally that can bring together all of the arguments, fill in those gaps that we just talked about and have a role in establishing a mass-distance charging price that can be done fairly taking into account road tolling, taking into account landside port charges and other matters that will require a great deal of investigation. What does the community service obligation look like? Once we pay tax how much of a road does that buy? Those are questions that need to be thoroughly and thoughtfully investigated rather than having the system introduced with the objectives that it has without that detail preceding the system's introduction. We think it is some time away. It is an objective which we thoroughly support, but the devil is in the detail.

Ms RICHARDS: My question is for Mr Calver. That was really interesting information that you provided with regard to employment in the industry with the average age of a driver being 53, two per cent women. In regard to how technology is affecting employment arrangements in the transport industry, what do you see as the key issues for government and what needs to be done to improve these statistics?

Mr Calver: We would like to see a path to a recognised trade and we would like to see use of technology integrated into that. We are working on developing, with various authorities, a path to a recognised trade. That will lift both the internal image of truck drivers and the external view that is taken of truck drivers. We are working on that at the moment. We also believe that there needs to be positive messages sent about heavy vehicle drivers, their schooling and education, and that heavy vehicles have certain characteristics. One of them relates not only to employment, it relates to the road toll and that is that the evidence that we have that has been the most complete shows a staggering statistic that on 93 per cent of occasions where there is a fatality involving a heavy vehicle it was the fault of the light driver. That statistic has not been tested more broadly, but a similar statistic a few years ago said 80 per cent. It fluctuates between those two numbers. Education about what heavy vehicles do, not viewing them as the enemy, but as integral to the economy, so education, and more structured education leading to a trade. We think that will be a very good way to deal with the issue of the skill shortage that we have.

Mr SORENSEN: In relation to technology, I was in New Zealand recently and I hired a vehicle. Going down the highway it told you if you got too close to the white line. It went 'beep, beep' and you had to get off the line. Is that technology in trucks in Australia?

Mr Austin: It is called lane departure warning. There are two steps with that technology. You get the first one, which is the just the 'beep, beep' that lets you know you are approaching a line marking. The second step is lane keep assist which is actually an active safety system and what it will do, unless you flick your direction indicator on, it will actually steer your vehicle back into the middle of the lane. There are two versions of that technology.

On highways in Australia the technology would likely work quite well. As soon as we start stepping out into the regional areas your centre line may still be there, but not your outside line. That technology is readily available now. It is an option that truck operators can choose to spec on to their vehicle. Part of that push for trying to get some of this technology is what kind of package of technology will be likely to come into the heavy vehicle industry, what is going to be the best benefit to Australia's environment, and try to pick those out. Lane keep assist is a simple system that warns you that you are drifting.

Mr SORENSEN: You do not go to sleep with that beeping like that. Especially in rural areas, if you have a breakdown with technology and you have to get somebody to come and fix up that technology and you are miles away, are there enough people trained up to deal with that technology in rural areas?

Mr Whale: I would be keen to answer that. Thank you for the question. In the grain sector in Australia we have already seen a movement where farmers are seeking to be able to work on their own machinery because they cannot get the technicians on-farm in a timely manner. In Western Australia in particular there are a lot of people with large and quite technologically advanced headers. They cannot operate on them by themselves without fully voiding warranty and it is causing a real production issue in rural areas. One of our concerns, whilst we would never advocate for holding back technology, is how do we ensure it actually works for people in rural Queensland and we think that those technicians, in fact, are not there and if you let pure economics dictate where those technicians are they are going to hug the south-east corner or hug the east coast, they are not going to be in Roma.

Mr SORENSEN: The next question I would like to ask is: when you are talking about the average age of about 53 for drivers, where can young people today learn to drive heavy machinery? When I was a kid we were driving trucks around the farm but today that is not there. Where can they get the training? What does it cost to train some of these people to drive some of these heavy vehicles?

Mr Calver: A lot of the time young people learn on the job. One of the things that we want is more young people coming in and taking up roles as yard hands and then having a stint in a light vehicle, but because of the highly specialised nature of the heavy vehicle industry now, it is very difficult for a young person to go from driving a light vehicle to a rigid to a heavy combination. There are TAFEs that offer courses in heavy vehicle driving. I know there is one in Wodonga. I do not know the costs. I can get the committee costs from the TAFEs if that would assist, but I am not sure that they would reply to me by 5 February. NatRoad does not have those statistics at the moment. What we need is a structured, properly set out, nationally endorsed trade that has greater levels of integration of new technologies so that the sort of training you are talking about can occur in a much better, more formal structured manner.

CHAIR: As a tradesman myself I do not see any problem with that at all. I just had a follow-up question from before when you talked about the lane departure technology. I do not suppose you would have an exact cost of what it would add to a new vehicle or even retro fitting these technologies to a vehicle? Is it prohibitive? I know you cannot get to dollars and cents.

Mr Austin: Not off hand I do not have those numbers. I can definitely make inquiries with the truck manufacturers and come back to the committee on that.

One of the interesting things is that in about April last year the regulator undertook a vehicle technology survey with truck manufacturers just to get that snapshot of what technology is currently there and what is fitted. The point that is really worth highlighting there is we talk about a minimum package of six safety technologies that we see as the big up and coming. You are talking stability control, lane departure warning, roll stability—I can come back to those. There were six minimum technologies. The newest trucks that are coming into the Australian market, as standard you get every single one. It is not the case anymore of that technology and that safety option being optional, you get that technology on every new truck that comes through. It is almost getting to the point now where instead of having to buy the technology and bump up the price of your truck, if you want to remove that technology you actually pay to remove the technology now because as it rolls down the production line in Europe or the US where we get our trucks from you get that technology as standard. We have started to see a little bit of a flip of that old paradigm that you pay more for safety.

Mr Calver: Can I interpolate there Chair? We do make trucks in Australia still. We do not get all of our trucks from the US and from Europe.

CHAIR: Member for Redlands has a follow-up and then we will go to the member for Traeger.

Ms RICHARDS: Following up on that lane keep technology in regard to heavy vehicles, we have just heard that light vehicles are generally predominantly at issue when accidents are happening. Are there any trials in terms of normal on-the-road cars with the active lane keep or is it cost prohibitive to have that as part of any vehicle on the road?

Mr Austin: If you think about the grand scheme of it, worldwide car production versus truck production, car production is through the roof. Most of this technology is developed in the light vehicle space and eventually it then finds its way into the heavy vehicle space. Lane departure warning, I have it currently on my Volkswagen. It is also on the Suzuki Swift as standard. It is already available. Whilst light vehicles will get it a lot quicker because we turn over light vehicles a lot quicker, fleet purchasing et cetera, it is in both parts of the fleet, but I guess the question is technology can only help fix a cause of an accident. Lane departure may not necessarily be what causes a light vehicle to cause a heavy vehicle crash.

We do see a lot of promotion from regulators and industry associations about making sure that you are aware of blind spots on heavy vehicles, giving heavy vehicles space, we take longer to brake because we are heavier. Some of the systems that may assist in those kinds of environments are things such as blind spot detection. Again we see multiple issues where a light vehicle may be in a spot where a truck driver just cannot see and again there is an incident. It is looking at the purpose of the technology and the cause of the crash and trying to make sure that we map those together to get the best benefit out of it.

CHAIR: Do you have any questions at this stage, member for Traeger?

Mr KATTER: I am having trouble hearing, but I have no questions.

Mr BOYCE: My question is to Peter or perhaps Richard. It is in regard to compliance officers who do mandatory machinery testing. In my electorate, which is a rural electorate, the fifth biggest electorate in the state, I continually come across complaints from people about the compliance officers who cannot actually explain the rules. NHVR and the rule book is a complicated document and difficult to navigate your way around. I was wondering whether you would care to comment on what is being done to make sure our officers can explain the problems when they are asked.

Mr Austin: I will start with that. Dave may have some more to add. From the perspective of the vehicle standards, so if we are talking about the technical standards a vehicle has to meet, you talk about the HVNL which is around 600 pages, the Australian Design Rules that a truck has to comply with, which is about 2,500 pages, you then talk about another 550 pages when we add the modification standard on top of that. They are complex rules, but when you look at publications that the regulator has already put out, such as the *National Heavy Vehicle Inspection Manual*, that is a 92-page document that summarises all of that into a plain English version of that. That is the standard here in Queensland.

Annual inspections that are done here in Queensland, your normal annual machineries that are done to renew your registration, are done by Queensland accredited inspectors according to Queensland rules. When you are pulled over on a road they are authorised officers acting on behalf of the regulator. That book is the go-to for all of them. It does not matter if you are a transport inspector, a private vehicle inspector or you are in your own workshop doing your own maintenance, it is getting down to that plain English version that, prior to the regulator coming along, was never maintained. It was written first in the 1990s but was never introduced anywhere other than Tasmania.

It formed the basis of some state codes, but it is about coming down to that common language. That is the value that the regulator can add here—a single national rule book that is maintained and is applied in every jurisdiction equally so that they start to get the idea that it does not matter if you are pulled over by a transport inspector here in Queensland or a transport inspector in New South Wales: you are being measured against the same rule book and it is a rule book that is written for a mechanic to understand.

Mr Carlisle: We are working with all states and territories on establishing a nationally consistent approach for our safety and compliance or for our inspectors on the side of the road to apply these compliance requirements. Part of that will be to develop the data warehouse that the information goes into so that we have a consistent view of an operator—from their compliance history and their defects all the way through to their habits and their trends—but also on the side of the road having a consistent tool. We are building a national approach to the mobile compliance functionality that will ensure that whether you are in Victoria or Queensland the compliance officer will be looking at the same rule book and using the same or similar tools so that there is a consistent approach across the country.

That is progressively rolling out. Queensland has only just introduced some new technology for their compliance officers to get that consistent flow and consistent format, to get some of the challenges of roadside intercepts across the state done in a common way. That will be rolling out more broadly across the entire country. That is a program of work underway at the moment.

Mr BOYCE: I might make a brief comment in relation to that from personal experience. Road trains in the Northern Territory, for example, are not necessarily compliant in Queensland. I think the industry would welcome a rule book that covers everybody so that we are all operating under the same set of rules.

Mr Calver: That is precisely what I was going to say. The NHVIM does not operate in WA or the NT unfortunately, just like the HVNL. The police do not consider themselves bound by its terms. If they think there is another defect that is not in the National Heavy Vehicle Inspection Manual, they will issue an infringement. Quite often there is a marked difference in the level of that infringement. One of the things that NatRoad is concerned about is that when you look at whether or not there should be a warning, whether or not it is a self-clearing defect, whether or not it is a minor defect or whether or not it is a major defect, the consistency in approach across the jurisdictions should be the same. Our members report to us that there is a marked difference between the police and roadside officers. That is not to denigrate anyone, but so that we are singing from the hymn sheet the NHVIM should be rolled out. It should be consistently applied and it should apply everywhere.

Mr Carlisle: To complete that view from a compliance perspective, historically each state has applied its own ways of undertaking enforcement action right through to their risk based approaches to looking at compliance. The challenge for the regulator is to work with each state to establish that

nationally consistent approach. We have a number of programs underway that are looking to do that—everything from a national compliance manual through to developing consistent training programs for staff who are undertaking that task. At the core of it we are undertaking for a number of states what they call National Services Transition, where we are bringing back some of that compliance functionality underneath the complete control of the National Heavy Vehicle Regulator. At the moment it is delivered through service level agreements with the states, but in various states we are looking to take on that functionality and hopefully get that greater consistency that we may through economies of scale and better control of that complete function.

CHAIR: AgForce, you have been listening patiently. Your opening statement was quite comprehensive, talking about road maintenance and if it is not suitable now where do we go in the future. What do you consider are the other key barriers to the uptake of electric vehicles or newer technologies in Queensland?

Mr Whale: There are a few things. I specifically work in the grain sector, but parts of the agriculture sector are incredibly well adjusted to adapting to new technologies. We have seen at least auto steering and almost fully autonomous tractors on farm. We now have bots that are run on a combination of electric and diesel that race around the farm doing small-scale spraying and planting and a whole range of different things. The farming sector can adjust to new technology really well. We see the vastness of the Queensland road network, especially in the western parts of the state, as being a real limiter. Talking about lane assist technology, we would need lanes and lane markings for that ever to be a possibility.

When we speak to our members, they like the idea of thinking about what is going to come next in terms of technology on road but they worry that we are not getting the most out of the current road network, whether that is a producer who has to apply for a permit and wait a minimum of 28 days to try to work out whether he can get his type 1 road train all the way to port then to be told that he cannot and he has to go a different way or then to be told that he has to use a B-double or, heaven forbid, just a single semitrailer. It is those sorts of issues that worry out members in rural Queensland. We would implore government, whilst it is looking at what the future looks like, to ensure that we are getting the most out of the current network. As Amelia mentioned at the start, around 40 per cent of our cost of production is the transport piece, and our competitiveness relies on keeping that as low as possible.

Mr SORENSEN: In relation to how technology can resolve the challenges that the road transport industry is facing, how can we use technology to get permits faster and things like that? You have computers and laptops in trucks and all of that sort of thing. How do we use that technology to get permits a lot quicker than we are at the moment? Do you understand where I am coming from?

Mr Whale: From the agriculture sector and from my personal experience in working with both the Transport and Main Roads and the National Heavy Vehicle Regulator, it is the ability to quickly work out what the road managers deem to be the most appropriate route. I should note that there have been significant improvements, but at the moment, unfortunately, if you are a producer at Theodore and you are trying to take a load of chickpeas to the Port of Gladstone, if you want to push the envelope and take a higher sized vehicle along that route, you have to go through a permit process. The regulators have to work out what the road managers think about having a larger vehicle on that road network.

For us it always comes back to having the network understanding articulated in a way that the users of that network can tap into it really quickly and work out, 'The regulators and the asset managers want me to go in a particular direction.' We have members who apply for permits where they ask for the entire state because they want an indication of where they can go. That then causes regulators a huge problem because they have to ask road managers whether that vehicle can go everywhere in the state. From our perspective, it is a question of how do we get the network understanding into a way that producers or any freight users can easily access it? We jump on our phones and we can see Google and Uber and different modern platforms doing it, but our networks are so vast that we have not been able to crack that in terms of road access for heavy vehicles.

Mr Carlisle: From the NHVR's perspective, we are undertaking a number of initiatives to educate, as I mentioned earlier today, the road manager to free up the network to make sure that the right vehicles are on the right roads. With that comes some underlying data that we can then use to better inform the permit process. At the moment people are required for a lot of areas to apply for permits where they have already approved permits before. We encourage those to go under notice. There are a range of harmonisation activities around notices which mean that it eliminates the need for permits altogether.

Since the introduction of the NHVR portal in about 2016, we have seen 100,000 approvals and refusals. About 89 per cent or 90 per cent of all applications get approved from road managers which means that they are okay. Sometimes they are changing the journey through the application process which does take a bit of time and adds to those delays. We are interested in using that data now to start to better inform industry about where you are more likely to get an approval and then work with road managers, too, to eliminate the need for permits by putting these routes under notice or pre-approval so we can speed up that permit processing time frame. There are number of initiatives we are working with industry and road managers on to make sure that the experience around permits and the need for them in the first place is hopefully reduced and that will see the time frame come down as well.

Mr MELLISH: My question is for NHVR. In other areas of the transport industry—passenger transport and food delivery sectors, for example—there has been a shift recently through technology such as apps into more on-demand employment with a few safety concerns or issues around that. Do you see in the future that there could be a shift towards on-demand employment through technology in the heavy vehicle sector and are there any safety implications of that?

Mr Austin: It is probably one that Richard can tack onto a little bit as well. When it comes to driving a heavy vehicle—and this is something I will harp on about time and time again—we are in a professional industry with professional drivers. This idea that the public seems to have that we are cowboys out there, pushing limits et cetera, is just not true.

Yes, there is going to be a certain amount of that gig type economy come in where they have spare capacity on a truck, say, that is going to Melbourne and so they can put a little bit more on it—trying to fill those gaps. The majority of the road freight task is planned. There is a need for it. The big operators are going to be moving it. Potentially it will mean a little bit of a change in their business model for some trucking operators around filling that last tonne of their truck that, again, they were not going to fill in the first place—and potentially there is a new revenue stream.

I cannot see that there is going to be a massive shift towards this whole idea that you need a truck driver for one week. A truck is worth half a million dollars to an operator. There is a certain level of trust that goes with that, so you are going to put somebody in it who you know. The chain of responsibility is an obligation to ensure the safety of all of your transport activities. It is about trying to meet all of those obligations. I cannot see that trucking operators would be overly favourable to putting a casual in their truck for one week with that level of investment.

Mr Calver: NatRoad has at the moment a platform that is a member. It is growing. The issue is how the platform fits into the chain of responsibility. The issue is that some of these platforms act like Google and just provide a noticeboard but others actively become involved in the exchange and they eschew responsibilities. The NatRoad solution is—we are promoting this and this is the ideal committee to assist—to change the test for chain of responsibility to those in a chain who influence or control the transport activity. At the moment it is those who influence and control the transport activity. Then there is a designated list of parties. It is not an exhaustive definition; it is an inclusive definition. If these platforms are going to take an active role—you can generally tell that if you follow the money. If there are monetary transactions involved as part of these platforms, they influence the transport task. They do not control it—they act like matchmakers and they take part of the money—but they influence it.

Our proposal to federal government, and obviously to this committee given your importance in helping shape the Heavy Vehicle National Law, is to extend that test. There is a review of the Heavy Vehicle National Law underway at the moment—it kicked off about a week ago—where we will be promoting the expansion of that test. There was a bill in Victoria before the parliament was prorogued for the Victorian election which deemed all of those freight platforms as the equivalent of freight forwarders, but that does not really take all of the forms of those operators into account. Some are like the white pages, to use a more traditional example, and others are actively involved. We think that the NatRoad test of those that influence or control will catch those who try through that digital forum not to meet the vehicle standards or their chain of responsibility duties.

Mr SORENSEN: What are your feelings on driver aids and driverless car technology at this point? I would not drive one in case there is a big hole in the road and the car just keeps driving. What are your feelings on driverless cars?

Mr Austin: It is developing technology. Potentially, if you were able to take all of the driver related features off a heavy vehicle, the productivity benefit that you would receive from an extra two to three tonnes worth of freight is going to potentially make autonomous heavy vehicles attractive in the future. However, there are a lot of issues to work through before we get there. You have heard

from the Department of Transport and Main Roads previously about their estimates on time frames for this. It is a future technology and we are talking about some time down the track. However, again if you look at the causes of crashes, the major cause of road trauma in Australia is at fault of driver, not at fault of vehicle. It has potentially a real safety and productivity benefit, so I think it would be very attractive to the industry once the kinks are ironed out.

CHAIR: Thank you. The time has expired. There are questions taken on notice. The National Heavy Vehicle Regulator has a question on the costs of retrofitting. The National Road Transport Association has a question on the costs associated with training. If the answers could be provided to the committee by 4 pm Tuesday, 5 February 2019, that would be appreciated. Thanks for your attendance at today's hearing. A transcript of these proceedings will be available on the committee's parliamentary web page in due course. I declare the hearing closed.

The committee adjourned at 11.32 am.