
AADA
AUSTRALIAN
AUTOMOTIVE
DEALER
ASSOCIATION
INQUIRY INTO
TRANSPORT
TECHNOLOGY
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Section 1

FOREWORD

The Australian Automotive Dealer Association (AADA) is pleased to lodge this submission to the Queensland Parliament's Transport and Public Works Committee Inquiry into transport technology.

The AADA is the peak industry advocacy body exclusively representing franchised new car Dealers in Australia. Our members total around 1,500 franchised new car Dealers that, together, operate some 3,500 new vehicle outlets. In Queensland, new car Dealers employ 13,568 people, while paying $1.193 billion in wages. Overall, new car Dealers make a $2.845 billion annual contribution to the Queensland economy.

In making this submission, we would like to highlight three key points:

1. Regional rural and remote Australia needs to be included in the thinking towards electrification.

Our members also make up a significant part of the economy in regional, rural and remote Australia. We think that the impact of electrification on those areas needs to be considered as fully as the impacts for highly urbanised capital cities. Similarly, the development of charging infrastructure needs to include regional and rural corridors at the same time as the urban cores.

2. Skill base may need to transition as we move to electrification.

Our members will continue to sell, maintain and repair vehicles regardless of how they are powered. However, the skill sets required will evolve and so will our staff. Government needs to consider how to assist industry to retrain, redevelop, or redeploy the state workforce through such disruption

3. The move to Electrification appears to be a matter of 'Two steps forward, and one step back'

We would like to commend the Queensland Government for their strong leadership and vision with respect to electric vehicles, particularly on the development of the Electric Vehicle Strategy, and of the Queensland Electric Vehicle Council as a way of bringing together the various stakeholders in this complex policy area. Our members also note the recent introduction of a State Luxury Car Tax on vehicles over $100,000. This is a tax on a tax, as such cars are also liable to the Federal Government's Luxury Car Tax. Many of the more advanced and desirable electric vehicles are in this upper price bracket, and such a tax acts as a disincentive to the wider adoption of electric vehicles. More importantly, it works against the long-term interest of a sustainable and electrified Queensland Transport Infrastructure.

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Our organisation is committed to Queensland for the long haul and is deeply invested in the future of transport technology in Australia. That future may see autonomous vehicles, or it may not. It may be dominated by battery electric vehicles, or it may not. We, in the AADA are technology neutral and have no pre-conceptions about how the cars of the future will be powered, driven, or even owned. To our members, all futures are acceptable if supported by wide-based consumer demand.

Our submission reflects the discussions out members have with their customers and with the vehicle manufacturers to whom they are franchised.

David Blackhall
Chief Executive Officer

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THE CONTEXT FOR FUTURE CHANGE

Before addressing the specific Terms of Reference of the Inquiry, we would like to place our submission into a broader context.

We are living in an epoch of tremendous change. One of the characteristics of radical change is that it is never clear where it is taking us. Much of the change that is forecast in the transport sector is dependent on technological developments that may or may not come to fruition. This is particularly true of the shift to both autonomous vehicles and Mobility-As-A-Service (MAAS). Both changes (discussed further below) depend on both technological change, and significant societal changes. Despite expectations to the contrary, evidence from Europe suggest that, even in that market, consumers currently still prefer to own their own car.

The range of possible futures is well captured in some of the background papers for the Commonwealth's forthcoming National Freight and Supply Chain Strategy. We understand that this significant contributor to the policy directions affecting the future of transport in Australia is due for consideration by COAG early in 2019. Like the work of the Senate Select Committee on Electric Vehicles and the National Transport Commission's (NTC) consideration of autonomous vehicles, it forms part of the matrix of research and policy development that will support the nation as it embraces changes unprecedented since the introduction of the motor vehicle during the early years of the Twentieth Century.

While the impact of the likely changes to the transport sector are going to be global in their scale, we'd urge caution about applying overseas lessons directly to the Australian context. Specific local conditions such as the sharp difference between a highly urbanised majority, and the vast reaches of our sparsely populated rural and remote Australia mean that it will be difficult to find a 'one size fits all' solution, and that adoption of new technologies and ways of dealing with change will be highly site-specific. Any policy response to the expected changes in transport technology and infrastructure will require flexible and tolerant policy responses, particularly in the Queensland context.

In considering policy responses to the expected changes it is worth remembering that Australia is a relatively small market and by no means the driver of change in this technology. Indeed, we are historically a rapid adopter of technologies and change, which sometimes runs ahead of government policy responses. Consequently, we commend the Queensland Parliament for their timely consideration of this topic.

Finally, we would note the role that Australian governments have in leading change, unlike other countries, our history is one where governments commonly led development and adaption to change in areas as diverse as smoking prevention and the use of seatbelts. Consequently, we encourage the Commonwealth and State Governments to remain 'on the front foot' on this topic and support the transport and automotive industries to remain relevant and profitable in this forthcoming brave new world.

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Here, we would like to commend the Queensland Government on the development of the Electric Vehicle Strategy, and of the Queensland Electric Vehicle Council as a way of bringing together the various stakeholders in this complex policy area. We look forward to the opportunity to participate in this Council as representatives of the new car Dealer networks that would sell, deliver and maintain electric cars for the Queensland public.

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RESPONSES TO THE SPECIFIC TERMS OF REFERENCE

1. Identifying trends and changes in fuel type usage in the sectors of personal transport, freight transport and public transport, such as the increasing uptake of hybrid and electric vehicles.

Overwhelmingly, global trends over the past few decades have been towards more fuel-efficient motor vehicles. This has been accompanied by a simultaneous trend towards the use of cleaner fuels. Drivers for both trends relate to the economic cost of fossil fuel wastefulness, as well as the impact of fossil fuels on climate change and the effect of noxious emissions on public health[1]. The broader availability of cost effective battery systems has coupled them with highly efficient petrol engines to bring about new ranges of petrol-electric hybrids, some of which are also able to replenish their batteries from the electricity grid (plug-in hybrids). New technology is also making available motor vehicles that are fuelled by hydrogen (fuel cell electric vehicles). While these are increasingly available in places such as Japan and Korea, the lack of a distribution and fuelling infrastructure in Australia is currently a barrier to their availability to Australian consumers. This may change in coming years as innovative Australian-developed solutions for the transport and storage of hydrogen come on line[2].

One emerging trend visible in the range of vehicles produced, particularly by European manufacturers, is the move away from diesel as a fuel for passenger vehicles. This is likely driven by the more exacting requirements for vehicle emissions under the most recent European emission standards (Euro 6) and recent scandals relating to falsified emission testing results. These new emission standards particularly affect the nitrogen oxide (NOx) levels which are substantially reduced from previous requirements (0.230 to 0.170 g/km). The introduction of these standards has seen European manufacturers such as Porsche switch from diesel engines to petrol hybrid engines.

One fuel trend that is specifically affecting Australia is the rapid shift away from LPG as a fuel for large Australian cars. Figures suggest that following drops in demand for the fuel, service stations across Australia are no longer offering LPG. Some estimates indicate this decline to be about 20 percent annually, with fewer than 2,900 service stations offering the fuel, down from 3,500 a few years back, out of a total 6,400 service stations nationwide. Similarly, following the demise of the LPG Ford Falcon in 2016, the number of LPG conversions continues to drop to barely more than 1,000 per year nationwide.

As electric vehicles (EVs) and other low emissions passenger vehicles become more prevalent, new car Dealers will play an important role in supplying these vehicles to the market as we sell almost every new car in Australia.

There are a range of projections which show that the sales of EVs are set to dramatically increase in the coming years. One figure often cited is that by 2030 there will be more than one million EVs on our roads. If this level of uptake eventuates, new car

[1] Akumu, J. "Global Trends toward Cleaner Fuels and Fuel Efficient Vehicles", Global Fuel Economy Initiative, UN Environment, 11 Dec 2017
[2] http://www.abc.net.au/news/2018-08-08/hydrogen-fuel-breakthrough-csiro-game-changer-export-potential/10082514, accessed 8 Aug 2018

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Dealers are well placed to respond to the logistical challenge of supplying and servicing these vehicles safely.

In the lively debate which is occurring globally around EVs, new car Dealers have been accused in some instances of not promoting EVs. The reasons provided by conspiracy theorists is lower profit margins on the cars and, because EVs require less servicing and maintenance, their emergence will erode profits in Dealer servicing departments. This is a fundamental misunderstanding of the nature of new car Dealers and the very competitive Australian new car market.

The automotive retail sector in Australia is one of the most competitive in the world. Currently, some 72 brands compete and offer more than 400 models for sale in a relatively small market of about 1.2 million units annually (less than 1.5 per cent of global demand). New Car Dealers work closely with their Manufacturers in developing inventory which reflects market preferences, but frankly our members can only sell what is on the showroom floor.

New car Dealers are primarily concerned with selling products and services to consumers and are technology agnostic in terms of how new cars are powered. Suggestions that Dealers would be discouraging consumers from purchasing an EV due to concerns over profit margins is nonsensical.

We have a history of selling a range of vehicles powered by a various fuel sources, including petrol, diesel, electricity, LPG and hybrids. The key consideration for new car Dealers is consumer demand and our members are constantly trying to respond to the market.

There is no doubt that EVs require less servicing and maintenance as they have fewer moving parts than internal combustion engine (ICE) vehicles. However, they will still require trained maintenance technicians to do battery checks, monitor brakes, check tires, replace fluids, change cabin air filters, etc.

Furthermore EVs, like traditional vehicles, are subject to safety recalls and similar to traditional vehicles they have been subject to mass safety recalls in recent times for issues such as faulty steering components and defective parking brakes. The current and compulsory vehicle recall associated with the Takata airbag highlights the importance of the new car Dealer network in Australia as the interface between OEMs and the Australian public.

It is also important to note that when these vehicles do need repairs, they will require appropriately trained technicians as EVs pose an increased risk of electrocution and fire. In fact, the emergence of EVs will necessitate significant changes in skills and training requirements which will be needed to service and maintain an increasingly electrified fleet.

This is particularly concerning when you consider that the licensing/accreditation requirement for mechanics is not consistent across states and territories. Only two states, NSW and WA, require mechanics to be

qualified. This means 57 per cent of registered mechanics are currently operating in jurisdictions which do not require licences or trade qualifications. New car Dealers are contractually obliged to have appropriately trained workshop staff working on state-of-the-art vehicles. They commit significant investment to training of their staff and are a major employer of apprentices. This will continue as the passenger vehicles our staff work on shift away from traditional internal combustion engines, to battery storage or hydrogen-powered fuel cells.

New car Dealers will also play an important role in educating customers who are considering the purchase of a new EV. Over the coming years the overwhelming majority of EV buyers will be purchasing their first EV and will have a host of questions in relation to such issues as charging, range, battery life, servicing and life-cycle costs. New car Dealers and their OEM partners will be on hand to answer all such queries.

One final concern relating to the introduction of EVs into wide use within Australia relates to the training and equipping of first responders (Fire, Ambulance, Police). EVs, by their very nature include significant high-voltage components that could energise the whole vehicle in the event of an accident. This puts bystanders and especially first responders at considerable risk should they not have both the training and equipment to manage such circumstances. Current EVs, such as the TESLA range, include clearly identified “first responder loops” which, when cut disables electric components throughout the vehicle. Thus, dealing safely with a TESLA vehicle incident requires the first responder to have specific knowledge (where to find the loop), and specific equipment (heavy duty insulated shears). It may be that mandated common approaches through the Australian Design Rules (ADRs) may be the most cost-effective means of ensuring the safety of first responders attending to incidents involving EVs.

2. Examining the readiness of the transport network for increasing electrification of vehicles in coming years.

When considering the readiness of the transport network for electrification in the coming years, we consider that it is vital to look at the transport network in its full scope, particularly the power networks and charging infrastructure that would support such electrification.

The recent and significant growth in the production of renewable energy from widely distributed sources such as domestic rooftops and the resulting changes to traditional patterns of generation and consumption have placed significant stresses on the power distribution networks throughout the country. Such stresses are likely to become more significant as the demand for charging electric vehicles (both cars and trucks) grows, particularly in rural and remote regions.

Our members will be happy to sell electric vehicles to their customers, but those customers need to know that they are well served by a charging infrastructure that allows them to travel where they wish to go. In our view, such infrastructure needs to be, as far as possible, in place before electric vehicles gain broad mass appeal. “Range Anxiety” is the very real fear that an electric vehicle will be left stranded in the absence of available charging stations. We believe that governments have a role in facilitating the faster and wider deployment of a charging infrastructure.

While electric vehicles by themselves are revolutionary challenges to the existing transport networks, in their current form they should be seen as intermediary steps on the way to full automation of motor vehicles both for passenger transport and for freight.

The effect on the transportation network of the electrification and automation of freight vehicles is the subject of the Commonwealth Government’s Freight and Supply Chain Strategy, which we understand is due for consideration by COAG early in 2019.

We believe that in Australia the economic drivers pushing for the electrification and automation of freight vehicles are likely more powerful than those affecting passenger vehicles. In other words, infrastructure and regulation put in place for freight, whether long-distance or the ‘last mile’ distributor, will then be taken up by passenger vehicles.

The implications of a ‘freight-led’ transformation of the Queensland transportation networks are significant. First, the electrification and automation of the transport networks will likely proceed at a faster rate than otherwise expected, driven by the search for business efficiencies and lowering input costs. Second, and maybe consequently, any effect on employment as the community adopts electric vehicles and automated driving systems is likely to become apparent faster than otherwise expected.

For our members, the electrification and likely automation of the transport network will require careful and proactive

transformation to ensure that they remain relevant and profitable businesses and continue to employ the thousands of Queenslanders that they employ today.

Finally, we would note the special case of rural and remote Australia in any consideration of the electrification and possible automation of the transport network. While those parts of rural and remote Australia that straddle significant freight transport corridors will be early participants in the electrification of the transport network, such as 'Queensland's Electric Super Highway', this is unlikely to be common across the regions. Areas that are 'left behind' will likely feature older fleets of traditional vehicles, potentially fewer resources to maintain them, or even fuel to run them. The example of the LPG fuel industry discussed above, shows the likely trajectory of availability for fuel types where demand reduces or disappears.

3. Identifying other emerging technological factors which will impact on transport networks into the future, such as driver aid technology and 'driverless car' technologies.

It's easy to think of 'driverless cars' as a wholly new phenomenon, yet the slow and ongoing introduction of safety features such electronic stability control, lane change protection, adaptive cruise control, and even the humble automatic windscreen wipers, have all been steps on the path to full automation. The final transition to fully autonomous 'driverless-cars' (and trucks, buses, and vans) will however be a step-change in our thinking about transport. It is also likely to be more transformational for our society and economy than the introduction of the motor vehicle at the start of the Twentieth Century. This is because autonomous vehicles enable consumers to shift away from personally-owned modes of transport and toward mobility solutions that are used as a service.

While the full argument for the transformative effect of autonomous vehicles is outside the scope of this submission, their success, much like the successful introduction of electric vehicles will depend on regulatory changes, such as the possible adoption of Road User Charging to both provide financial resources to pay for the transport infrastructure and shape the use of that infrastructure for maximum efficiency.

Whether passenger vehicles are merely electric, or autonomous, they will generate vast amounts of data. This includes not just the telematics used in the management and maintenance of the vehicles themselves, but also the data on who drives the vehicle, how they drive it and where to. Other data collected could be on the drivers (and their passengers) themselves, such as where they shop, where they eat, etc. All this data is immensely valuable to advertisers and others, and its availability and use raises thorny questions about privacy and consent. Manufacturers are aware of the value of this data and want control of it.

Much like other data used in the maintenance and repair work that our members conduct for their customers, we believe that it is not so much a question of who owns the data, but that it be made accessible to our members at reasonable costs so that both we and the independent repair industry can support all our customers effectively.

4. Examining how technology is affecting employment arrangements in the transport industry, particularly in the food delivery area.

The transformation of the transport industry through the widespread adoption of electric vehicles, and then the automation of both passenger and freight vehicles will result in two very sharp effects.

An evolution in the maintenance workforce.

Electric cars have order of magnitude fewer moving parts than cars powered by internal combustion engines. This means that maintenance staff require a completely different set of skills. Further, their very simplicity means that they are much less likely to break down. Maintenance and support will still be required but is likely to be rare and largely confined to replacing unserviceable components. In this regard new car Dealers will remain the first port of call for consumers, and their interface with the manufacturers.

Automation will likely result in large job losses among a large range of occupations.

It will most directly affect truck and taxi drivers, couriers and all other similar occupations that depend on the physical driving of motor vehicles. Further, the likely broad adoption of MAAS as the underlying principle for passenger and freight transport will result in much lower accident rates. This will impact trades and occupations that exist to keep motor vehicles on the road, such as panel beaters, and will relegate those occupations to niche roles, or make them completely obsolete.

The consequences of MAAS for many motor trades will likely begin to manifest itself even before full automation arrives, as freight vehicles adopt ‘platooning’ strategies to reduce staffing imposts. In this context, the term ‘platooning’ refers to multiple trucks that follow one another automatically, with only the lead truck being crewed by a human driver. In the Australian context, this approach could see ‘virtual road trains’ where the lead truck has two drivers, thus enabling them to swap driving every few hours without delays due to mandatory rest stops.

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CONCLUSION

We would be happy to meet with you to discuss our submission and participate in the committee's hearings.

If you require further information or clarification in respect of any matters raised, please do not hesitate to contact a member of the AADA team.

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