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National Transport Commission
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Via NTC portal

GAS ENERGY AUSTRALIA RESPONSE: A NATIONAL IN-SERVICE SAFETY LAW FOR AUTOMATED VEHICLES OCTOBER 2020 DISCUSSION PAPER

Dear Dr Miles

Gas Energy Australia (GEA) appreciates the opportunity to respond to the National Transport Commission's (NTC's) A National In-service Safety Law for Automated Vehicles October 2020 Discussion Paper (the Discussion Paper). GEA has made previous submissions regarding automated vehicles highlighting the need to consider the load that is being carried (in our case dangerous goods) and the dangers of "grabbing" for data that has the potential to be misused and would like to highlight these concern as they relate to sections of the proposed Automated Vehicles Safety Law (AVSL).

In-service modifications to an ADS (chapter 5)

GEA notes there are some key issues outlined for in-service modifications to an Automated Driving System (ADS) such as a vehicle manufacturer installing an ADS into a conventional vehicle and an Automated Driving System Entity (ADSE) altering its ADS's functionality while in-service eg, software updates that expand the ADS's level of automation or Operational Design Domain (ODD). GEA is interpreting this to mean that once the vehicle leaves the factory with its Original Equipment Manufacturer (OEM) software (ie OEM ADS), any work on a vehicle's ADS other than servicing and software updates by an approved vehicle manufacturers representative will need to be undertaken by an ADSE. Further, GEA suggests that an ADS capable of safely carrying dangerous goods may be over and above the requirements of an OEM ADS and as such carrying dangerous goods in an autonomous vehicle would force the vehicle operator to engage a ADSE or potentially multiple ADSEs if they operate vehicles from multiple manufacturers.

To carry dangerous goods, a conventional vehicle's ADS may need to be interfaced with sensors that replicate the duties of the dangerous goods licensed driver. These could be sensors that monitor leaks, tank levels or other aspects critical to the safe transport of the load. These sensors would have to tell the ADS to respond as a driver would eg, find a safe place to park and then assess the problem and notify appropriate persons. For our industry, the safe place to park is further constrained by the load being carried, given that dangerous goods vehicles are prohibited from certain areas and constrained where they can park by the Australian Dangerous Goods (ADG) Code.

Because such alterations would most likely force the dangerous goods industry to be a heavy user of ADSEs, GEA considers it critical that the regulation of ADSEs under the AVSL seeks to avoid the sort of issues identified in the ACCC Agricultural machinery: After-sales markets discussion paper - February 2020¹. These include limited access to independent machinery repairs, owners' lack of recourse in the event of a problem with their machinery, agreements between manufacturers and dealers that limit access to repairers and data ownership, and privacy and competition issues.

¹ <https://www.accc.gov.au/focus-areas/agriculture/agricultural-machinery-after-sales-markets/discussion-paper-consultation>

Indeed, the ACCC discussion paper includes a quote from an earlier *ACCC New car retailing industry market study* which notes *the markets for the supply of aftermarket services in the car industry are less competitive as a result of factors including:*

- *the ability and incentives of car manufacturers and their dealers to impede competition in profitable aftermarkets by controlling access to necessary inputs such as the technical information needed to repair and service a new car*
- *high switching costs once consumers purchase a particular brand or make of car.*

GEA is concerned that if our industry became a heavy user of ADSEs, this could also create an opportunity for OEMs to distance themselves from obligations to back OEM ADSs. Further, this could place our industry at a disadvantage cost wise and potentially limit our ability to switch brand or make of vehicles.

GEA wants to see clarity around the responsibilities of the OEM ADS and the aftermarket ADSE to ensure the dangerous goods industry is not automatically disadvantaged particularly with warranties, limitations on repairs and unnecessary additional costs.

A model for roadside enforcement (chapter 8)

Section 8.3.1 *Identifying and communicating with automated vehicles* of the Discussion Paper notes that there is a need for greater clarification about enforcement agencies' ability to remedy or neutralise an unsafe situation by accessing a vehicle, disabling the ADS and taking control of the vehicle. GEA would like the AVSL to consider whether when an enforcement agency takes control of a vehicle, is it also taking control of the freight. This is best explored using an example such as a fully loaded autonomous vehicle transporting LPG from a terminal in Port Botany to a LPG leisure cylinder filling plant in western Sydney. The vehicle is observed failing to indicate to make a right-hand turn by an enforcement agency which makes an on the spot decision that the vehicle is a hazard and needs to be stopped. The enforcement agency issues a command to stop the vehicle. Does the enforcement agency by taking control of the autonomous vehicle, also accept control of the load of LPG? Clarity is required around roadside enforcements "control" as this example could equally apply to an autonomous school bus.

Further to this issue of enforcement agencies taking control of a vehicle, GEA is concerned about who would have access to the capability to disable an ADS and take control of 20t of LPG. Given there are over 63,000 police and law enforcement officers in Australia² and Dangerous Goods also come under many other state and territory regulators, there are a significant number of people who could take control of a vehicle. This is an issue of significant concern to GEA and one that we wish to see thoroughly examined. In particular, GEA wants to see clarity around the concept of "control" when commands are issued to an autonomous vehicle by enforcement agencies which includes consideration of the load that is being carried.

Information access and use (powers and privacy protections) to support in-service safety compliance and enforcement (chapter 10)

This section is complex as it explores supporting in-service safety compliance as well as enforcement which have two different drivers and highlights a dichotomy between enforcement which focuses on penalties and businesses which are working to ensure employees follow the laws, regulations, standards, and ethical practices that apply to their businesses.

What is also concerning is the information flow beyond the in-service regulator and the fact that "The information requirements of other regulators are not discussed in this paper except to the extent of the relationship between regulators (chapter 9) and possible information flows between agencies in section"³ is not explored further in the Discussion Paper. GEA considers that without a clear understanding of the information flows up front this will

² <https://pfa.org.au/>

³ Page 99 NTC - A national in-service safety law for automated vehicles: Discussion paper October 2020

exacerbate a risk of an incident similar to the Facebook–Cambridge Analytica data scandal where what was actually captured went beyond the scope of the original data requirement and was used for purposes it was never intended for.

GEA also contends that “information” provided by systems should not be confused with evidentiary data that can be used as evidence and the accuracy and the suitability of the data extracted must be suitable for its intended use. As an example of evidentiary data used for enforcement, for a speed camera infringement to be issued in NSW the speed must be accurately captured on a calibrated camera. “Cameras in NSW are subject to calibration and accuracy certification procedures for the approved traffic enforcement device, at least every 12 months, in accordance with Section 137 of the Road Transport Act 2013 and Clause 35 of the Road Transport (General) Regulation 2013”.⁴ If “information” provided by the ADS is used for enforcement, will it be required to have the same regulatory calibration of its system and input sensors as an enforcement device which would place undue costs and burden on ADS for no benefit to the user.

If a key objective of data collection is overall industry safety improvement, then a trusted model for statistical data collection and sharing in Australia worth considering is the Australian Bureau of Statistics (ABS) framework. The ABS operates under the *Census and Statistics Act 1905* (the CSA) which provides the Australian Statistician with the authority to conduct statistical collections. Importantly, the CSA requires the ABS to publish and disseminate compilations and analyses of statistical information and to maintain the confidentiality of information collected under the Act.

GEA recommends more work engaging with all regulators that have an interest in vehicle transport to understand which entities want evidentiary data and which want de-identified statistical data so that businesses don't bear an unnecessary cost and data burden that slows the uptake of this technology.

In conclusion and so that industries such as ours are not automatically forced to take on unnecessary additional costs and risks, GEA asks that the NTC provide more clarity on:

- the responsibilities of the OEM ADS and the aftermarket ADSE;
- the concept of “control” when commands are issued to an autonomous vehicle by enforcement agencies that includes consideration of the load that is being carried; and
- what data regulatory entities want to what standard and for what purpose.

Yours sincerely



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⁴ https://roadsafety.transport.nsw.gov.au/speeding/speedcameras/calibration_certification.html