

Submission to the National Transport Commission

Developing technology-neutral road rules for driver distraction – Issues Paper

14 February 2019

Introduction

- 1. The National Road Transport Association (NatRoad) is pleased to make comments on the Issues Paper entitled *Developing technology-neutral road rules for driver distraction*¹ released by the National Transport Commission (NTC) in December 2018.
- 2. NatRoad is Australia's largest national representative road freight transport operators' association. NatRoad represents road freight operators, from owner-drivers to large fleet operators, general freight, road trains, livestock, tippers, car carriers, as well as tankers and refrigerated freight operators.
- **3.** This submission follows the structure of the Issues Paper, indicating in bold where the submission addresses the questions posed by the NTC in the Issues Paper.

The Problem

- 4. The Issues Paper concludes that "driver distraction as a safety issue is not as well understood as other road safety risk factors such as drink driving and speeding."²
- 5. Clearly, there is a need for much better research on the underlying causes of heavy vehicle crashes and the key factors involved with identifying trends and patterns.
- 6. A Bureau of Infrastructure, Transport and Regional Economics (BITRE) study undertaken in 2018³ found that the major influences lowering the road toll have been seat belt fitting and wearing, random breath testing, speed cameras, mobile drug testing and, in Queensland, a graduated licencing system. Other influences at play are rising deaths as a result of mobile phone use, balanced by the spread of vehicle safety technology and infrastructure improvements and by downward social trends in drinking and driving.
- 7. However, both fatality and injury rates are forecast to only slowly decline to 2030, in the absence of further policy measures. Given expected increases in vehicle kilometres travelled, this results in BITRE forecasting increases in annual deaths (plus 14 per cent) and hospitalised injuries (plus 25 per cent) from 2018 to 2030. NatRoad notes that these forecasts provide added impetus to measures which ameliorate the effects of driver distraction, particularly mobile phone use.

The driving task and driver distraction

8. The Issues Paper seeks to establish a definition of the driving task as a crucial first step in better understanding the activities and behaviours that could cause distraction and therefore affect driving performance. The Issues Paper proposes a definition of the driving task as follows:

A complex, multi-task activity that involves the following functions: *** route finding *** route following *** lateral motion control *** longitudinal motion control *** monitoring the driving environment *** manoeuvre planning *** responding to objects or events *** making other road users aware of the driver's presence; and *** complying with road rules.⁴

¹ https://www.ntc.gov.au/Media/Reports/(E3823D53-A6E8-C4B0-4C48-B557ABAD995A).pdf

² Id at p11

³ BITRE Modelling road safety in Australian states and territories 2018

https://bitre.gov.au/publications/2018/files/is 94.pdf

⁴ Id at 12-13

- 9. The Issues Paper asks as question 1 whether the proposed definition includes all key functions required to safely perform the driving task. This is not the case in relation to heavy vehicles. The heavy vehicle driving task is broad. It involves checking and monitoring the vehicle including maintaining the vehicle in good condition, load restraint, loading and unloading goods, delivering materials, reporting mechanical problems, maintaining a record of fatigue through a work diary, ensuring that certain access and dimension consents or notices are carried and undertaking delivery paperwork.
- 10. There is obviously a distinction between the active or dynamic driving task and the broader activity of operating a heavy vehicle, which form part of driver responsibilities. Given that consideration, at the least in answering question 1, the NTC definition needs to include 'vehicle monitoring.'
- 11. Many of the distracting matters that a light driver might undertake have a different function in the heavy vehicle driving task. NatRoad would add to the functions listed in the NTC definition, re-framing it as being associated only with the **active** driving task in a light vehicle.
- **12.** The Issues Paper then proposes a definition of driver distraction as follows:

Driver distraction is the voluntary or involuntary diverting of attention, in a visual, manual, auditory or cognitive sense, away from the driving task to focus on a competing secondary activity.⁵

13. The second question asked by the NTC is whether this definition captures all the behaviours that lead to driver distraction and a reduction in driving performance.

14. The definition is an expansive definition that would not, however, be suitable for use in a regulatory context. As indicated in the Issues Paper, secondary activities that place little demand on drivers may be successfully shared with the driving task with little or no reduction in driving performance. Indeed, it is part of the heavy vehicle drivers' task to be aware of a number of matters at the same time (e.g. when going over a rough surface, maintaining control of the vehicle and assessing the damage that might be caused to the vehicle). It is necessary to link a reduction in driving performance with the particular activity that is the key.

15. Question 3 seeks feedback on how a distinction between manageable and unmanageable levels of driver distraction could be used to inform the way distraction is regulated. What evidence based distinctions could be considered?

- 16. The question asked would be governed by a number of subjective factors, for example the issue of age mentioned in the Issues Paper.⁶ One driver could cope with multi-tasking and react well to a number of demands whereas another less experienced or less competent driver could be distracted easily or not be able to cope with tasks that others could easily undertake. Because of this variation in drivers' abilities, NatRoad supports the proscription of specific behaviours for the general public, rather than the regulation of a generic notion of "distraction." But in the context of regulating professional drivers a performance based approach is preferred.
- **17.** The Issues Paper acknowledges that there should be a distinction drawn for professional and non-professional drivers:

⁵ Id at 13

⁶ Id at p15-16

Commercial freight and passenger vehicle drivers are sometimes required to use several devices as part of their usual work. Future legislation seeking to regulate driver distraction from the use of technology devices may need to consider these drivers separately to accommodate their needs and strike a balance between minimising their distraction and allowing them to perform their job.⁷

- **18.** One of the solutions would be to specify the driver distraction rules for heavy vehicles in the Heavy Vehicle National Law (HVNL) and for light drivers in the Road Rules.
- **19.** We agree with the comment in the Issues Paper that "while all these devices support drivers in performing their typical tasks, it is necessary to ensure they don't have a negative impact on driving performance."⁸ That is the essential linkage.

Current legislation to address driver distraction

- **20.** The Issues Paper then sets out and discusses the Australian Road Rules that are relevant to the issue of distraction those that regulate proper control of a vehicle (rule 297), the use of television receivers and visual display units (rule 299) and the use of mobile phones (rule 300).
- 21. Appendix A in the Issues Paper highlights a major problem with the rules the number of changes that the jurisdictions make to the nationally-harmonised template. Uniformity in the road rules should be something which is high on the agenda for all States and Territories, particularly as road safety must be given a greater priority and lack of consistency in the rules that apply is confusing for road users and inefficient. The weight of regulation for heavy vehicle operators is large and lack of uniformity is one of the burdens.
- **22.** Following an analysis of the Australian and international law relating to the issue of distraction, the Issues Paper concludes that technology innovation has made it difficult to differentiate between functions that could distract drivers and functions that may improve safety outcomes (such as intelligent speed assist). The road rules do not distinguish between functions likely to cause distraction and those needed for the driving task (or where they can improve driving performance).⁹
- 23. Question 4 asks whether conventional and technology-based causes of distraction should be treated equally in the Australian Road Rules and why. NatRoad notes that technology can assist the driving task whilst distracting from some elements of that task. There is also a recognition in some of the relevant road rules as shown in Appendix A of the Issues Paper that driver competence/inexperience should preclude the operation of some technologies.

Responsibility for Distraction

24. Question 5 seeks examples of effective non-regulatory approaches to driver distraction that assist drivers to self-regulate their behaviour in a dynamic driving environment.

25. It seems that there is again a divide between the approach in relation to professional drivers and others. There is a great deal of research underway, for example, to assist professional drivers to stay alert and to use technology to self-regulate their behaviour. Deployment and accelerated uptake of proven vehicle safety technologies and innovation is an industry

⁷ Id at p18

⁸ Id at 19

⁹ Id at 24

priority.¹⁰ For example, NatRoad is supportive of work underway using different fatigue metrics and other body responses, like breath rate, posture as well as eye movement, to warn the driver well before the onset of behaviour that could lead to an incident.¹¹ This technology can also be applied where driver distraction is at issue.

- 26. In addition, driver distraction is one risk that is likely to be addressed in a safety management system. The safety of transport activities relating to a heavy vehicle is the shared responsibility of each party in the Chain of Responsibility (COR). Each party in the chain must ensure, so far as is reasonably practicable, that transport activities relating to the vehicle are conducted safely.
- **27.** Implementing an effective Safety Management System (SMS) is a means by which many heavy vehicle operators are complying with their safety duty obligations under the HVNL.
- 28. In the context of the discussion on SMS and COR, NTC poses 2 questions.

Can you provide examples of strategies successfully implemented by other international jurisdictions and industries (for example, aviation) that could be applicable to driver distraction?

Are there other parties besides the vehicle driver who can influence the risk of driver distraction? If so, are there mechanisms to ensure those parties are doing all that is reasonably practicable to ensure safety?

- **29.** Although NatRoad has welcomed the changes that have expanded the COR from 1 October 2018, they are limited to specific parties and only to the extent each party has the capacity to "influence **and** control" the safety of the transport activity. Implementing the broader test of who is a party in the chain to those who influence **or** exercise control would make all parties in the supply chain more responsible for what happens on-road, including in respect of driver distraction.
- **30.** Consistent with the concept that the most effective way of managing risks is to design out the hazard at the source, developers of vehicles and technologies must have a legal duty to eliminate or minimise the risk of distraction in the design of the devices.
- **31.** In-vehicle devices must have limited functionality and simplified interfaces when they are used by drivers while driving. Some of these devices are intended to be used while driving and others have applications that are clearly meant to be used by drivers to complete the driving task. In this context guidelines such as those referred to at page 28 of the Issues Paper published by the National Highway Traffic Safety Administration¹² should be considered as a good starting point to be adapted for Australian conditions.
- 32. In response to question 8 strategies (other than those set out in these guidelines) for ensuring that new in-vehicle technology and mobile apps minimise driver distraction are not known to NatRoad.
- **33.** However, the developers of the relevant technology have the ability to influence the transport activity and under the NatRoad recommendation to expand COR, they would be

¹⁰ <u>https://www.natroad.com.au/news/technology-and-fatigue-incident-reduction-advanced-safe-truck-concept</u>

¹¹ Ibid

¹² <u>https://www.federalregister.gov/documents/2014/09/16/2014-21991/visual-manual-nhtsa-driver-distraction-guidelines-for-in-vehicle-electronic-devices</u>

required to take into account the risk of driver distraction in the design of the relevant technology.

Automation and Driver Distraction

- 34. At pages 28-30 of the Issues Paper matters related to driver distraction in the transition to automated vehicles are raised. NatRoad has dealt with these issues in the 24 November 2017 submission to the NTC on *Changing Driving Laws to Support Automation*. The **response to question 9 in the Issues Paper is covered in that submission**.
- **35.** In essence, legislation to support the roll-out of partially and then fully automated vehicles should reflect that each duty holder (in this case the driver/operator and the automated driving system entity (ADSE)) must comply with their obligations to the extent of their capacity to influence or control the dynamic driving task and the associated risks. Any new or modified laws should recognise a shared responsibility between the driver (or the 'operator' of the vehicle) and the ADSE for ensuring the dynamic driving task is undertaken safely.
- **36.** Readiness to take over the dynamic driving task in partially automated vehicles must be considered, as inattentive drivers may pose a safety risk.

Prescription or Performance Based Regulation?

37. Question 10 asks what evidence is available in support of a performance-based approach or a prescriptive approach for managing the risks of driver distraction. NatRoad supports the HVNL and the road rules for heavy vehicles becoming more performance based, especially to align with the concepts of safe management systems and risk based regulation as reflected in COR laws. There may be some utility, however, in a more prescriptive and detailed approach for the general public where the road rules recognise that distraction is more likely to have a detrimental effect amongst certain cohorts e.g. inexperienced drivers.

Non-regulatory Measures

38. NatRoad supports resources being applied to road safety education, including about driver distraction. Education before extensive re-writing of the law is essential.

Conclusion

- **39.** NatRoad supports the development of different approaches to regulation for light vehicles when compared with heavy vehicles with the latter's regulation potentially better off under the HVNL.
- **40.** We look forward to further contributing to the NTC process when the Discussion Paper on this subject is published.