



Transport  
for NSW

# Transport for NSW Submission

National Transport Commission

*Consultation Regulation Impact Statement –  
Developing technology-neutral road rules for driver  
distraction*

August 2019

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# 1. Introduction

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## 1.1 Overview

In May 2018 the Transport and Infrastructure Council (TIC) directed the National Transport Commission (NTC) to:

- review the Australian Road Rules (ARR) that regulate driver distraction to determine whether they sufficiently address the key factors that cause driver distraction
- consider developing a technology-neutral approach for regulating driver distraction.

The Consultation Regulation Impact Statement (RIS) is the second stage of the project which includes the following milestones:

- May 2020 Decision RIS - TIC to decide on major policy positions
- mid 2020 - drafting amendments to the ARR based on agreed policy positions
- November 2020 - TIC to agree on recommended changes to the ARR.

## 1.2 Purpose of this submission

The Consultation RIS *Developing technology-neutral road rules for driver distraction (June 2019)* (the Consultation RIS) provides an assessment of four policy options for regulating driver distraction and seeks feedback on the extent to which these options address the problem, the impacts of options on industry, governments and the community, the methodology used for measuring these impacts and conclusions on the preferred solution to the problem.

This submission outlines the Transport for NSW (TfNSW) response to key aspects of the Consultation RIS. The responses in the submission were developed in consultation with the NSW Police Force.

## 2. Summary comments

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TfNSW supports the need to improve the ARR that regulate driver distraction to ensure a technology-neutral approach that provides for the safe and legal use of current technology devices, and future advances in technology (so far as possible).

However clear and enforceable road rules are essential. Any proposed changes to the rules need to:

- improve and strengthen the current position
- be clear
- be enforceable.

TfNSW also acknowledges that regulation is an element of the Safe System approach to reducing distraction and the use of technology devices which includes:

- road safety treatments to mitigate distracted driving

- strong penalties
- effective enforcement
- clear community education and communications
- vehicle standards to influence design features that mitigate distraction.

The proposed hybrid approach, which is similar to the way that the current rules 299 and 300 operate, appears to be the most feasible of the four options in the Consultation RIS. However, the proposed offences that are outlined in this option are unclear, confusing and complex. Without further refinement and detailed analysis of enforcement impacts it is unlikely that the proposed offences would be enforceable and clearly understood by the community, particularly in terms of what is and is not allowed.

TfNSW recommends further consultation is required with relevant transport and enforcement agencies from across the jurisdictions to further refine and develop an approach that is clear and enforceable.

For this reason TfNSW is unable to indicate its support for a particular option until further detail is provided, including the draft regulation. TfNSW notes that the timeline in the Consultation RIS suggests the drafting of amendments will not occur until after the Decision RIS. TfNSW strongly recommends that the Decision RIS, scheduled for November 2020, is accompanied by draft regulation for the preferred option.

### **3. Responses to the questions in the Consultation RIS**

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TfNSW responses to questions included in the Consultation RIS are outlined below.

#### ***3.1 Problem statement and the need for government intervention***

TfNSW has concerns that the problem statement references research that is not robust or consistently supported in the literature. For example, the Consultation RIS cites a 2008 study from the US which suggests that distracted drivers have been found to be at least as dangerous as drunk drivers (Strayer et al., 2008). This study is significantly limited by its small sample size (only 40 participants) and use of a simulator.

Overall, this study does not provide a strong basis to equate levels of risk for mobile phone use with drink driving risk. The findings show that the pattern of impairment associated with the mobile phone and alcohol conditions is qualitatively different. This supports other conclusions in the study that the driving profiles of intoxicated drivers and mobile phone drivers differed (e.g. harsher braking for phone use, more aggression for alcohol). Without appropriate qualifications, there is a risk that statements like this may confuse the community about the nature of the risk, or affect perceptions about the contribution of mobile phone related distraction to trauma outcomes on Australian roads, particularly compared to the robustly researched risk associated with drink driving.

## **1. What other factors should be considered in the problem statement?**

### **TfNSW response:**

The following additional information should be considered in finalising the problem statement:

- The problem statement lacks adequate discussion of the extent to which the current rules are not addressing distraction and the safe and legal use of technological devices. It is recommended that specific issues with the current rules are more clearly defined and discussed to support the rationale for any proposed changes. This should include discussion about the definitions of 'use' and 'parked'. Discussion and analysis of the issues, reflecting challenges reported by enforcement agencies and prosecutors from across Australia, will help to ensure that similar issues are not retained in any new or amended rules.
- Page 25 notes that 'Results of naturalistic driving studies indicate that distraction is not only a problem for regular drivers. Driver distraction is also prevalent in light vehicle and commercial vehicle operations (Olson et al., 2009).' It is unclear what 'regular drivers' refers to (noting that light vehicles are mentioned in the following sentence). This statement would also benefit from additional detail about whether the types and amount of distraction experienced, and engagement in risky behaviours, differ between groups.
- The problem statement notes that the current rules 299 and 300 have not kept up with the growing number of functions available to drivers in the evolving range of technology devices. However there is insufficient discussion of the importance of future-proofing to ensure road rules are fit for purpose and designed with enough agility and flexibility to manage potential safety risks and remain clear and enforceable while ensuring the regulatory burden of repeatedly updating the road rules is addressed.
- The problem statement currently outlines a number of research findings without a clear structure. It is suggested that it is restructured and subheadings are included, to provide a more logical narrative when incorporated into the Decision RIS.

## **2. Has the Consultation RIS provided enough evidence to support the case for government intervention? What else should be considered and why?**

### **TfNSW response:**

TfNSW agrees there is a need to review and amend the ARR to strengthen the current policy position, increase their clarity and enforceability.

While the Consultation RIS suggests the current rules make it difficult for the public and enforcement agencies to identify the behaviours that could result in distraction, there is insufficient detail to comment on this. Stronger evidence is needed that demonstrates how and when this is occurring. This could include examples of where the current rules fall short and where the public and enforcement agencies are experiencing confusion. Additionally, as mentioned above, the implications of rapidly changing technology should be further emphasised.

The Consultation RIS should acknowledge that developing clear and enforceable road rules is part of the Safe System approach to reducing distraction and the use of technology devices. There are a range of non-regulatory strategies to reduce distracted driving behaviour which could be considered as part of a multi-faceted Safe System approach. This could include engagement with the motor vehicle, technology and telecommunications industries; and non-regulatory approaches to encourage drivers to self-regulate their behaviour including education, enforcement and both after-market and in-built technological solutions. However, these approaches need to reflect and be supported by strong and clear regulation.

### **3.2 Process for addressing the problem**

#### **3. Are there issues relevant to developing technology-neutral road rules for driver distraction not covered by the process for addressing the problem?**

##### **TfNSW response:**

The Consultation RIS outlines the principles that have guided the approach adopted by the NTC in the development of the options.

TfNSW suggests that simplicity should be a guiding principle for the development of options to regulate distraction. Options which are too complex and complicated will be difficult to communicate to the public and to enforce.

TfNSW also suggests that enforceability be an overarching principle because the strength of regulation relies on deterrence from enforcement.

The process would benefit from greater consideration of how to ensure the rules will continue to be relevant with future technological advancements. This could include research into potential future technological innovations in areas such as vehicle technology, hand-held devices (and associated applications) and wearables and could include testing of hypothetical technological advances against the proposed rules.

There is evidence that young and less experienced drivers are more impaired by secondary activities when driving as their hazard perception and vehicle control skills are still developing (page 25 of the Consultation RIS). Numerous studies have also found increased crash risk for novice drivers for various tasks such as reaching for a phone and dialling a hand-held phone. Reflecting this evidence, most jurisdictions, including NSW, currently have additional rules that prohibit novice drivers from using a mobile phone at all.

Despite this, the Consultation RIS notes that new or amended rules would apply to all drivers regardless of the driver's age or experience, although this would not 'impede states and territories from imposing restrictions or prohibitions on specific licence classes.' TfNSW recognises that this reflects the current approach to additional rules, restrictions or conditions placed on novice drivers for safety purposes. TfNSW therefore supports this statement and recommends that it be retained and made clear in the Decision RIS.

**4. Can you provide evidence that would support a different treatment for cyclist distraction?**

**TfNSW response:**

TfNSW supports a simple, holistic and enforceable approach to distraction that applies to all drivers and riders of vehicles and does not support different rules to regulate bicycle rider distraction.

Currently rules 297, 299 and 300 apply to drivers (not drivers of motor vehicles) and given references to 'driver' in the rules also include a reference to a 'rider', the rules also apply to bicycle riders (and animals and animal-drawn vehicles).

In 2016, the ARR were amended to remove the reference to motor vehicle from rule 299, to align with rule 300, so that all distraction rules apply to drivers and riders (including bicycle riders).

Not including bicycle riders in the amended road rules would not align with the Safe System approach which involves a holistic view of the road transport system and the interactions between roads and roadsides, travel speeds, vehicles and all road users.

On a practical level, with the increasing use of electronic devices by bicycle riders engaged in courier or food delivery services it is essential that they are considered when making any changes to the road rules.

It is important that any new rule which covers a range of vehicle controllers is drafted in a way that can logically apply to all. For example, currently rules 299 and 300 limit the use of technology while the vehicle is moving or stationary but not parked. However the rules do not provide clarity for enforcement agencies or bicycle riders about what a bicycle rider needs to do in order to be parked. These issues should be considered and addressed in drafting the new regulation.

**5. Do the proposed examples for proper control reduce the uncertainty about compliance with the offence in road rule 297(1)? What other elements do you think could be incorporated?**

**TfNSW response:**

TfNSW considers that the low number of infringements issued for proper control offences compared to mobile phone use offences is not sufficient evidence to suggest that the current rule regarding proper control is inadequate. For example, a driver who fails to maintain 'directional control' of a vehicle may, depending on the circumstances, be treated by an enforcing officer as an offence under rule 146 (driving within a marked lane), or a range of other offences.

It is advised that more information is sought from enforcement agencies about the enforceability of this rule, to justify a change as well as to inform the specifics of any proposed change.

While distraction may result in a driver losing directional control or acceleration and speed control, the inclusion of these examples may only aid enforcement after a driver has been

distracted (and may be breaking another road rule). The inclusion of these examples may not provide any clarity to drivers about what they must or must not do to ensure they retain proper control of the vehicle at all times. Further, as more autonomous features become standard in the fleet, such as autonomous emergency braking and adaptive cruise control, these examples may not always be relevant to all vehicles.

TfNSW suggests that the 'ability to appropriately and safely respond to objects, events and other road users', which is included in the Consultation RIS, is highlighted as a key component of having proper control. This means that dangerous behaviours which pose a risk can be targeted before an incident occurs, whereas elements such as having directional control may not be detected until after an unsafe vehicle movement or crash has occurred. Focusing on this 'preventive' aspect would also assist in ensuring the offence is applicable for drivers in automated vehicles, as they would still be required to pay attention to the road, albeit by taking different actions compared to the driver of a non-automated vehicle.

Consideration should also be given to more practical examples that would deter behaviours that could result in a driver losing control of the vehicle, rather than focusing on the results of loss of control. Examples that could be considered include having at least one hand on the wheel, noting that exemptions would be required for utilising vehicle-assist features (such as autonomous parking) and drivers with a disability driving modified vehicles.

The inclusion of examples of proper control may provide more clarity and guidance to drivers and enforcement officers. However it must be made clear in the rule that the examples provided are not exhaustive and other behaviours/situations could and should be considered offences, depending on the circumstances. It is recommended that further work is undertaken on the proposed examples to achieve clarity.

### **3.3 Options**

**6. Are the four options clearly described? If not, please describe the areas that may be missing.**

**TfNSW response:**

The four options are only briefly described in this section of the Consultation RIS. For readers who have not been involved in the earlier stages of this project, this section does not provide enough information to understand the options. Although each option is described in greater detail later in the document, a more informative summary of the options should be provided in this section to introduce readers to the main concepts before proceeding further into the document.

### **3.4 Status quo**

**7. Is the status quo option an accurate representation of the current state of the Australian Road Rules in relation to driver distraction? If not, please describe further.**

**TfNSW response:**

The Consultation RIS states that the status quo option represents a predominantly technology-based approach. However the status quo already utilises a hybrid approach which



incorporates two prescriptive technology-based rules that are supported by a broader performance based rule requiring the driver to have proper control.

Further, the current ARR are not accurately described in the Consultation RIS, especially the requirements for using a mobile phone as a driver's aid. The Consultation RIS suggests that rule 300 permits a driver to use a mobile phone as a driver's aid if the phone complies with *one* of the following two conditions:

- the phone is secured in a commercially designed mount fixed to the vehicle, *or*
- the phone can be operated by the driver without touching any part of the phone.

However, rule 300 provides that a driver may only use a mobile phone as a driver's aid if the phone is secured in a mounting *and* use of the phone does not require the driver to touch or press any part of the phone. This is an important distinction because it prohibits:

- an unmounted phone from being used as a driver's aid
- the driver from touching a mounted phone when it is being used as a driver's aid.

Based on the above inaccuracies, some of the permitted and prohibited interactions outlined in Table 1 are also incorrect. For example the following actions are currently not allowed but marked as allowed in Table 1:

- typing address or tapping on screen on mounted mobile phone and tablet - currently drivers are not permitted to do this as per rule 300
- using voice for navigation if the phone is not mounted - drivers are prohibited from using an unmounted phone as a driver's aid (even if the phone is not being touched by the driver).

This error also impacts on Tables 3 and 6 in the Consultation RIS. Permitting drivers to tap on the screen for navigation purposes when a phone/tablet is mounted should be coloured green as it represents a relaxation to the status quo. Typing an address should not be coloured as it is prohibited under the prescriptive and hybrid options. This prohibition reflects the status quo.

Further, Table 1 suggests that reading a newspaper/book/magazine, handwriting, eating, drinking and undertaking personal hygiene are explicitly permitted under the current ARR. However while these behaviours are not explicitly permitted or prohibited, they are addressed by the requirement for a driver to have proper control of the vehicle.

Visual display units that are not a DVD player and do not involve watching a video, such as central console in-vehicle, Heads Up Displays and Google Glasses are not reflected in Table 1. These may display driving related information (e.g. speed, temperature, controls) and non-driving related information (e.g. social media). It is recommended that further work is undertaken to more accurately and clearly outline what is currently permitted with these devices, where the ambiguities lie and how the proposed options allow/disallow these interactions.

Finally, interactions with portable computers, smartwatches (on wrist) and integrated infotainment systems which are outlined in Tables 3, 6 and Appendix C are not captured in Table 1 – these should be included.

### **3.5 Prescriptive option**

Overall, the prescriptive offences outlined in this option are not clear or uniform and do not represent certainty for enforcement purposes or community understanding. TfNSW does not agree that this option concurs with the statement in the Consultation RIS that it would provide ‘a high degree of certainty, clarity and uniformity to regulating driver distraction’.

Rather than prohibiting technology use with exceptions (as per the status quo), this approach appears to permit technology use with exceptions (e.g. entering text, reading long-form text, watching videos etc.). It is unclear how this would be simpler to define and communicate to drivers than the status quo. Unless more analysis and justification is provided in the Decision RIS, TfNSW supports maintaining an approach which prohibits interactions with technological devices unless otherwise stated.

While the Consultation RIS acknowledges that there is ambiguity with the current rules regarding the definition of ‘parked’, amendments to provide clarity are not proposed in this option. Any new rules that apply while the vehicle is ‘moving or stationary (but not parked)’ must include a definition of what ‘parked’ means, and should be able to be applied to cyclists as well as drivers of motor vehicles (i.e. cannot only be defined based on whether the engine is running).

TfNSW’s comments on each of the prescriptive offences are provided below.

#### Text-based interactions – entering text

The proposed new offence prohibits a driver from typing or handwriting any text or symbol on a portable, mounted or integrated electronic device.

Acknowledging that this offence will be supported by an offence which prohibits manual interactions with portable devices, it appears this offence effectively permits any manual interaction that is not entering or writing text (such as touching and tapping) for mounted and portable devices. TfNSW is concerned that this will significantly increase the opportunities for drivers to manually interact with technology, which is consistently identified by the research as a safety risk. Under the current rules, drivers are only permitted to touch a phone (when mounted) for the purposes of making or receiving an audio phone call.

While the Consultation RIS references research detailing the risks associated with entering and writing text while driving as a rationale for including the offence, it does not cite research or include a rationale for permitting other manual interactions. For example, while the table suggests that scrolling through contacts should be permitted, it is likely that scrolling through hundreds of contacts would require a driver to take their eyes off the road and hand off the wheel for a longer period than entering the first few characters of the person they are trying to call and then choosing from a much smaller list of contacts.

Prohibiting a driver from ‘entering text’ but permitting drivers to touch an integrated, portable or mounted electronic device would also lead to enforcement challenges. From outside the

vehicle, it would be difficult for police to prove that the driver was entering text as opposed to tapping or touching the screen.

#### Text-based interactions – reading long-form text

The proposed new offence prohibits a driver from 'reading long-form text'. It is unclear what is meant by long-form text. The Consultation RIS suggests that a long-form text is any text 'longer than what is displayed in an option menu'. There are no definitions included in the Consultation RIS explaining either 'long form text' or an 'options menu', the difference between the two and why one is prohibited and the other allowed.

The explanation of the offence suggests it would prohibit drivers from using text-based communication applications (such as SMS and WhatsApp). This does not seem to reflect the fact that only long-form text is prohibited and it is not clear whether a driver would be prohibited from reading a short text from a text-based communication application.

There would also be significant enforcement challenges as a police officer would have to prove that the driver was actually 'reading' the text.

#### Image-based interactions – static and moving visual images

According to the Consultation RIS, the proposed new offence prohibits a driver from 'watching and recording videos'. Linking the offence to the driver actively watching or looking at the moving images raises significant enforcement challenges as police would need to prove that the driver was actively 'watching' or 'looking' rather than as per the current rule 299, where the image simply needs to be visible to the driver from the normal driving position.

Permitting moving images to be displayed on the screen of an electronic device which is visible to the driver from the normal driving position as long as the driver does not 'watch' or 'look' at the moving image does not reflect a risk-based approach and is not supported by TfNSW. It is recommended that an offence which prohibits any moving image being visible to the driver from the normal driving position is retained.

The proposed offence also prohibits 'using application aimed at displaying photos and complex images (for example photo libraries, image processing apps and digital image libraries)'. It is unclear whether this offence is just prohibiting the use of applications where the main purpose or aim is to display photos or 'complex images' or whether it is to prohibit a driver from looking at any 'complex image', regardless of the purpose of the application. It is also not clear what 'use' means in this context or what a 'complex image' is.

For example, many music applications such as Spotify display static album art when a song is being played. If a driver looked at the electronic device to change the song, they would also involuntarily view this image.

#### Visual and visual manual interactions – conventional mediums

The proposed new offence prohibits reading/looking at and writing on printed materials and other non-electronic devices. However there is no explanation of what 'other non-electronic devices' means. Further work is required to explain what is meant by 'non-electronic devices' and what devices would be included in this category.

### Manual interactions – portables

According to the Consultation RIS, this offence prohibits 'turning a device on or off and operating any other function'. Given the other proposed offences don't specifically permit the use of certain functions, it is unclear what is meant by 'any other function'. Further, this offence suggests that portable devices 'can be on any part of the driver's body (hand-held, on the driver's lap, worn on the wrist) or not' as long as they are not being 'interacted' with.

TfNSW does not support permitting a driver to hold a portable electronic device in their hand and views this proposal as a retrograde step given the evidence about the risks associated with manual interactions and the move towards automated enforcement. On a practical level, hand-holding a portable electronic device while driving can impact a driver's control of their vehicle by taking their hand off the wheel. Allowing a driver to hold a portable electronic device may also encourage unsafe and prohibited interactions. Permitting a driver to hold an electronic device in their hand would likely result in significant enforcement challenges for both police as well as any future automated camera enforcement program, and would create difficulties in clearly communicating the road rules to the community.

### Visual interaction – eyes off road

The inclusion of an offence for a driver looking away from the road for more than two seconds is unlikely to be practical, meaningful to the public or enforceable.

#### ***8. Are there any high-risk distracting behaviours and interactions that have not been addressed by the proposed new offences?***

##### **TfNSW response:**

It is recommended that the following high-risk distracting behaviours should be prohibited:

- holding a portable electronic device
- having moving visual images (such as playing a video) in view of the driver.

Given the potential for portable, mounted and integrated electronic devices to distract the driver, TfNSW supports prohibiting all behaviours and interactions unless specifically exempt. There is a risk that this reverse approach which effectively permits interactions unless specifically prohibited may result in emerging distracting behaviours being permitted.

#### ***9. Can you propose an alternative approach for discouraging long eye glances off the roadway that is enforceable in practice?***

##### **TfNSW response:**

It is recommended that further analysis is undertaken of the current offence of failing to exercise proper control of a vehicle to determine what shortcomings there may or may not be with the rule to warrant any further alternative approaches.

#### ***10. Can you propose an alternative approach for discouraging high-risk voice-based interactions that is enforceable in practice?***

##### **TfNSW response:**

Prohibiting particular high-risk voice-based interactions (and allowing others) would be fundamentally challenging to enforce. TfNSW recommends that further analysis is undertaken to assess the risk associated with intensive voice activated tasks and the impact on cognitive load.

### **3.6 Performance-based option**

#### **11. Would a fully outcomes-based approach effectively mitigate the safety risks from diverse sources of distraction?**

##### **TfNSW response:**

TfNSW does not support this option.

Given that research evidence suggests that a large portion of drivers believe that diverting their attention to a secondary task does not impair their driving performance, it is unlikely that an outcomes-based approach would deter drivers from engaging in risky distracting behaviours.

An outcomes-based approach would not make clear to drivers what they can and cannot do, resulting in many drivers engaging in risky, distracting behaviours because they are unsure about what is and is not distracting (and against the law), or because they overestimate their own ability to control the vehicle.

Significantly, a number of dangerous behaviours which are not allowed under the current road rules would be allowed under this option, as per Appendix C in the Consultation RIS. Many of these, such as texting on a hand-held mobile phone, have been clearly shown to be distracting (as noted in the NTC Issues Paper in December 2018). Accordingly, there is a clear need to regulate specifically against these activities that are known to increase crash risk.

### **3.7 Hybrid option**

As noted previously, the current ARR already apply a hybrid approach to distraction – there are both prescriptive rules prohibiting the use and operation of certain technological devices (rules 299 and 300) and a broader performance-based rule requiring the driver to have proper control of the vehicle (rule 297(1)). TfNSW supports the continuation of a combined approach moving forward.

However, the proposed offences in the hybrid option require significant review. They are confusing, complex and unclear. It will be difficult to communicate clearly to drivers what behaviours are and are not allowed. Further consideration must be given regarding how to simplify the rules (please also see TfNSW comments on each individual offence in the section on the prescriptive option (Section 3.5) for further information).

Finally, the Consultation RIS does not sufficiently describe the specific rules that would apply therefore making it difficult to properly consider the offences outlined in the options. It is recommended that jurisdictions are provided with further detail, including draft regulation, in conjunction with the Decision RIS.

#### **12. Does the proposed combination of prescriptive and performance-based components in the hybrid option sufficiently address all the sources of distraction that can significantly reduce driver performance? If not, please elaborate.**

## **TfNSW response:**

TfNSW suggests that it is not possible for regulation alone, even when well designed, to address 'all the sources of distraction'. It is not practicable and, in some instances under the Safe System approach, it may not be the most appropriate option to manage safety risks effectively. Further the question as it is posed deflects from the primary focus which should be 'safety' rather than 'driver performance'.

Earlier feedback reflects TfNSW view that further work needs to be undertaken to understand the limitations of the current rules in order to understand and design the regulatory improvements that are required to address current and future safety risks associated with distracted driving. It is emphasised that these improvements must further develop and strengthen the current position, be clear and enforceable.

Detailed comments on each of the specific offences included in the hybrid option are included in the response to the 'prescriptive option' (section 3.5).

### **3.8 Impact assessment**

Overall, TfNSW considers that the impact assessment does not sufficiently demonstrate a rigorous methodology making it difficult to have confidence that the proposed solutions will deliver any additional, quantifiable safety benefit. Further detail about the methods used to calculate these impacts, and the evidence base (published research) underpinning the assumptions made, is required.

It is suggested that a further impact assessment will be required as part of the Decision RIS, once there is greater clarity and definition of the offences and how they will result in a clearer and more holistic regulatory framework for drivers.

The Consultation RIS notes that 'for establishing an indicative baseline the impact assessment assumes 9 per cent of the existing accidents are caused by driver distraction, in line with both the National Highway Traffic Safety Administration (NHTSA) study and the Australian National Crash In-Depth Study. Of these, it is assumed that 20 per cent are related to technology use (6 per cent higher than the NHTSA study's estimate of accidents related to mobile phone use).'

TfNSW notes the following issues with this statement:

- The NHTSA study found that distraction was a factor in nine per cent of fatal crashes and the Australian National Crash In-Depth Study (ANCIS) study found it was a factor in 16 per cent of crashes involving hospitalisation for at least 24 hours. A rationale is required for why nine per cent was selected and not 16 per cent.
- Additionally, these percentages apply to different trauma severity levels, so it is not accurate to apply this factor across crashes of different trauma severity levels. While the Consultation RIS acknowledges that the percentages assume even distribution across fatal and serious injury crashes, this will incorrectly assess the total safety benefits, and should be addressed in an amended approach.
- Findings from two small studies across different trauma severity levels, one from the USA, do not provide a particularly rigorous basis for undertaking an economic assessment relevant to Australia. While it is recognised that research in the area is not

yet fully developed, any assumptions and caveats on estimates should be clearly stated.

- It is unclear why the Consultation RIS assumes that 20 per cent of distraction-affected crashes are related to technology use, when the NHTSA paper found that 14 per cent of distraction-affected crashes were reported to have involved mobile phone use. While the Consultation RIS notes that mobile phone use is underreported, a rationale is required for selecting one research finding over another.

In the various tables of analysis, the fatal, injury and property damage only (PDO) crash costs are sourced from different base estimates. A justification or rationale is required for this approach.

Finally, it is not stated in the Consultation RIS who developed the approach and the related assumptions. TfNSW suggests that a more rigorous impact assessment is conducted by a qualified researcher or research organisation to support the Decision RIS.

***13. Do you agree with the impact categories and assessment criteria? If not, what additional impact categories or assessment criteria should be included?***

**TfNSW response:**

TfNSW agrees that effectiveness, efficiency and coherence with the Transport and Infrastructure Council Strategic Work Programme are relevant impact categories.

TfNSW suggests the cost of communicating any proposed changes to the rules could be considered as part of the efficiency measure. It is anticipated that more complicated and complex rules would require more costly communications for both governments and organisations which have road safety policies in place.

***14. Does our analysis accurately assess the road safety benefits for each reform option? Please provide any further information or data that may help to clearly describe or quantify the road safety benefits.***

**TfNSW response:**

TfNSW is not confident that the analysis accurately assesses the road safety benefits for each reform option. It is suggested that appropriate economic expertise is engaged to undertake the cost-benefit analysis.

The quantified benefits of each approach appear to be based on a series of logical theoretical assumptions rather than scientific evidence and there are a number of figures used to quantify the impacts which appear to have little justification or rationale for their use. For example:

- Table 9 assumes that one per cent of conventional distraction-related crashes have been mitigated by the presence and enforcement of rule 297(1). No rationale or justification has been provided to support this.
- For the prescriptive option, the Consultation RIS assumes the reduction in technology-based distraction crashes is between 2.4 and 12 per cent, based on achieving a further 10 to 50 per cent off the effectiveness of the existing laws (which is an estimated

24 per cent reduction). It is unclear how or why the values of 10 per cent and 50 per cent were chosen.

A number of figures in the analysis tables are incorrect. For example, in Table 10 the indicative total cost for row one should be \$2.5 million (not \$2.4 million).

TfNSW suggests considering using the Population Attributable Fraction (PAF), which can estimate the proportion of crashes within a population that could be prevented by preventing exposure to a risk factor (e.g. distraction).

TfNSW notes that useful data is available in various research reports from the Strategic Highway Research Program 2 (SHRP 2). This includes the prevalence of mobile phone use amongst drivers involved in a crash; and the odds ratio for risk of crash associated with performing visual-manual tasks on a mobile phone (although it should be noted that this odds ratio is specific to visual-manual interaction with a mobile phone and does not capture other sources of distraction). This study appears to be the only naturalistic driving study which has a large enough sample size to be able to use crashes as the sole outcome (rather than including near-crashes and sometimes other safety-related events). This is believed to be a more robust approach as the relationship between mobile phone use and other non-crash outcomes may not be the same.

***15. Is the assumption that technology related distraction crashes would be 24 per cent higher in the absence of existing laws plausible? If not, can you provide any evidence that supports a different estimate?***

**TfNSW response:**

For the purposes of establishing an indicative estimate of the reduction of technology-based distraction incidents, the Consultation RIS assumes that technological related crashes would be 24 per cent higher in the absence of the existing laws.

The Consultation RIS does not offer a rationale or justification for choosing 24 per cent, only noting that studies of similar laws from the US show mixed results. The Consultation RIS also notes that the 24 per cent estimation is considerably lower than the higher estimates from American studies of similar laws (by Ferdinand et al, 2014; Kwon et al, 2014; Ferdinand et al, 2015).

However, the 2014 Ferdinand study found that primarily enforced laws banning all drivers from texting (i.e. laws stipulating that an officer need not have another reason for stopping a vehicle) were associated with a three per cent reduction in traffic fatalities and the 2015 Ferdinand study indicated that texting bans were associated with a seven per cent reduction in crash-related hospitalisations. This is significantly lower than the 24 per cent reduction put forward in the Consultation RIS.

The 2015 Kwon study is the only study cited which found a significant reduction in crashes after the introduction of laws in California in July 2008. The study found the monthly crash rate decreased by 46 per cent for hand-held mobile phone use and by 34 per cent for overall use. However it stated that mobile phone law should be considered as one of the *primary factors* in decreasing trend of mobile phone related collisions, but could not account for all other influencing factors.



TfNSW supports further research and analysis of a range of robust studies to determine an appropriate indicative estimate of the impact of distraction laws on crash reductions, which is supported and justified by a rigorous analysis of the findings, noting any limitations in the studies and adjusting the estimate accordingly.

Given the profiles of fatality, serious injury and property damage crashes are quite distinct and prevalence figures can vary substantially, TfNSW also suggests that one indicative estimate is not applied to the total pool of crashes, rather appropriate estimates are applied for each of the crash severity categories.

**16. Has the consultation RIS captured the relevant individuals or groups that may be significantly affected by each of the options? Who else would you include and why?**

**TfNSW response:**

The Consultation RIS notes that the impact assessment has not sought to measure the impact of the options on police and judicial resources, despite acknowledging there may be some variation in the impact of the different options on these groups. It is suggested that greater consideration of this group is included, as the differences between options may be significant. Additionally, if new regulation results in resourcing issues for police and the judicial system, the accuracy and frequency with which the rules are applied could be reduced, resulting in a reduced safety effect.

There is no discussion of the effect of each option on bicycle riders within the impact assessment. As they will be covered by the new rules they should also be acknowledged in this section.

**17. Has the consultation RIS used an appropriate analytical method for assessing the benefits and costs of the options? What else should be considered?**

**TfNSW response:**

As previously noted, the impact assessment appears to be based on a series of logical theoretical assumptions, rather than robust and scientific evidence. More rigour is recommended in the Decision RIS.

It is important there is confidence that the approach is sound from an economic analysis perspective. As written, it is difficult to have confidence in what is presented and any further impact assessment should be conducted by professionals with appropriate economic expertise.

### **3.9 Conclusion and next steps**

**18. On balance, do you agree that the preferred option best addresses the identified problem? If not, which option do you support?**

**TfNSW response:**

TfNSW is unable to indicate its support for a particular option until further work as indicated in the responses above is undertaken.

In principle, the hybrid approach offers the most feasible solution. However in its current form as described in the Consultation RIS the hybrid option has not adequately addressed the issues of ambiguity, complexity and enforceability.

Additionally, based on the current description of the offences in this option, it is unclear how the hybrid approach will be drafted into succinct clear rules. TfNSW looks forward to receiving the draft regulation and road rules to accompany the upcoming Decision RIS.

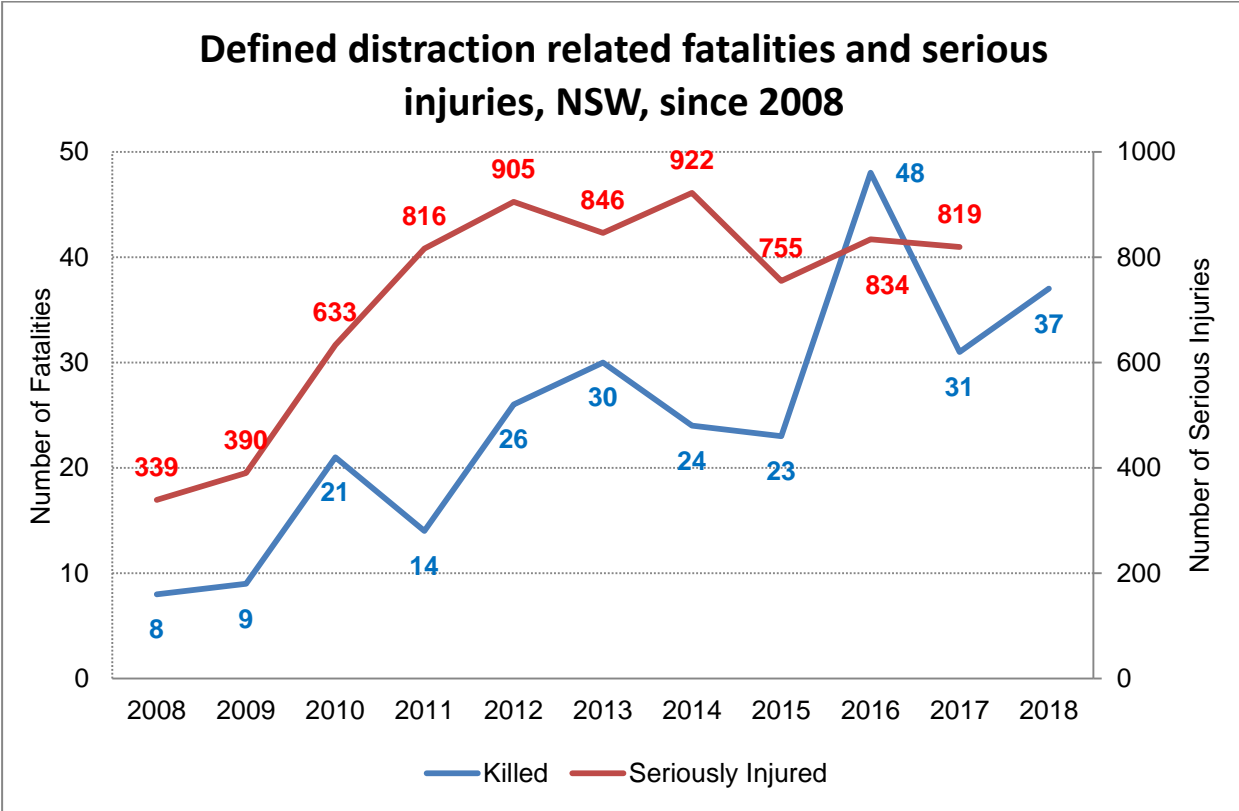
# 4. Appendix A – Statistics

## 4.1 Distraction related trauma on NSW roads

### Distraction in fatal and serious injury crashes

An analysis of crash data matched to police crash reports in NSW shows that in the 10 year period between 2008 and 2018p<sup>1</sup>, shows there were 265 fatalities and 7,083 serious injuries from defined distraction crashes<sup>2</sup>.

Between 2008 and 2018p, 10 per cent of all driver involvements in fatal crashes involved an identified distraction factor<sup>3</sup>. Distraction was a factor in 13 per cent of all driver involvements in serious injury crashes between 2008 and 2017.



### Distraction factors

A breakdown of distraction factors shows that the largest distraction factor in both fatal and serious injury crashes is ‘distracted by something outside the vehicle’ with 40 per cent and 53 per cent respectively.

Significantly, distraction arising from using a hand held phone accounts for only three per cent of drivers involved in a fatal crash with some form of distraction coded for the driver.

<sup>1</sup> 2018 fatality data are preliminary and subject to change. Serious injury data not yet available for 2018

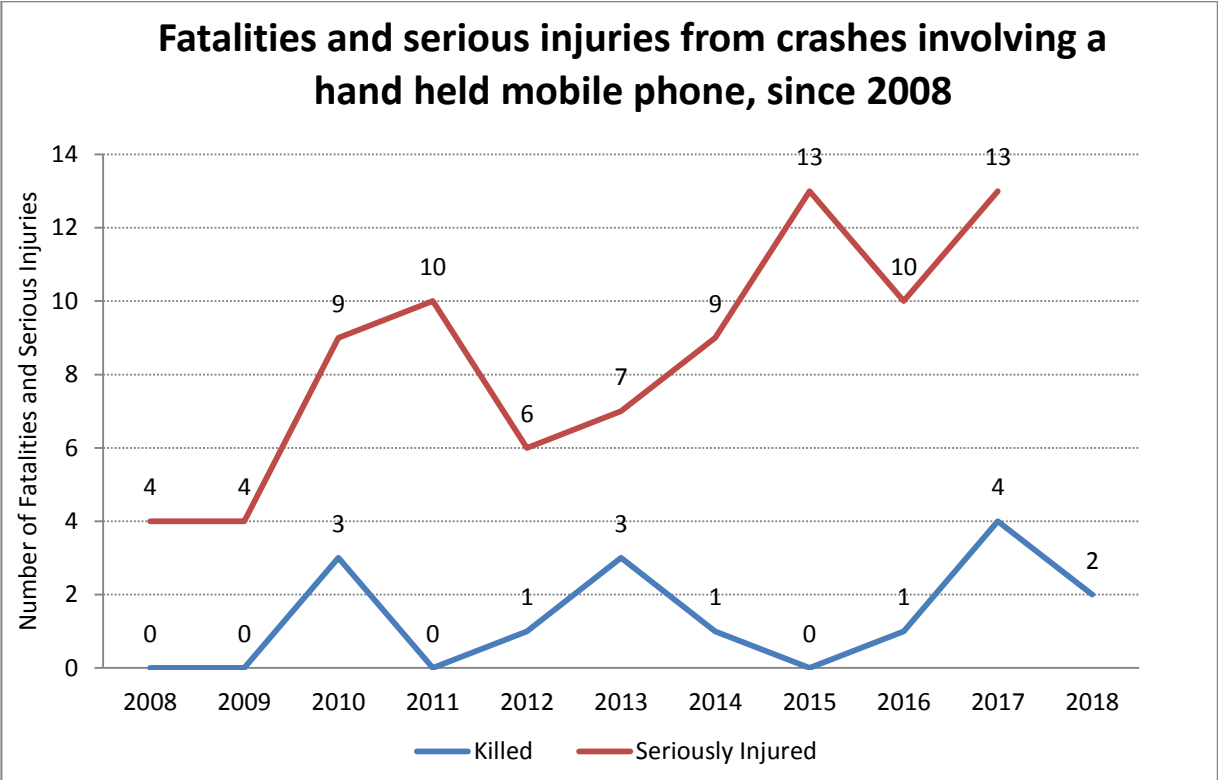
<sup>2</sup> Defined distraction includes distractions from mobile phones, electronic devices, using headphones, passenger, inside vehicles, outside vehicles and other distraction factors.

<sup>3</sup> Identified distraction factors include distracted outside, distracted inside, distracted by passenger, asleep or drowsy, sudden illness, chronic illness, pursued by police, emergency vehicle warning, hand-held phone and other distraction factor.

It is worth noting that mobile phone usage is considered to be underreported in crash data. It is often difficult for police to identify whether mobile phone use is a contributing factor in a crash because they require admission from the driver or a witness or other evidence such as mobile phone records.

**Hand held mobile phone involvements in fatal and serious injury crashes**

From 2008 to 2017 there were 83 serious casualty crashes which involved at least one driver or rider coded with hand held mobile phone usage. These 83 serious casualty crashes resulted in 13 fatalities and 85 serious injuries. Preliminary data for 2018 indicate that there were two fatal crashes where hand held mobile phone use was a factor, resulting in two fatalities.



**Mobile phone infringements in NSW**

Over the past five financial years there has been a steady growth in the number of mobile phone offences, from 32,657 in 2013/14 to 39,809 in 2017/18, an increase of 22 per cent.

As part of the Road Safety Plan 2021, the NSW Government outlined plans to investigate camera based technology to enforce mobile phone use offences.

From July 2018, legislation has been in place to enable the use of evidence from camera-based technology to enforce mobile phone offences.