Developing technology-neutral road rules for driver distraction
Consultation regulation impact statement (RIS)
Submission by Katasi Inc
21 August 2019

Source: National Transport Commission 2019*, Developing technology-neutral road rules for driver distraction: consultation regulation impact statement*, NTC, Melbourne.

Attention:
Luis Gutiérrez
National Transport Commission
Public submission – Developing technology-neutral road rules for driver distraction
Level 3, 600 Bourke Street Melbourne VIC 3000
Submitted to: **www.ntc.gov.au**

Katasi Inc (Katasi) applauds the National Transport Commission (NTC) review of the Australian Road Rules regulating driver distraction which determined that they do not sufficiently address the key factors that cause driver distraction.

We submit our comments to the **consultation regulation impact statement** which focus on answering the following questions posed by NTC:

Question 9: Can you propose an alternative approach for discouraging long eyeglances off the roadway that is enforceable in practice?

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

Question 11: Would a fully outcomes-based approach effectively mitigate the safety risks from diverse sources of distraction?

Quick Wins

There is broad consensus that:

- removing mobile phones from cars would have a significant impact on lessening distracted driving and ensuing accidents / near accidents;
- currently, it is not feasible to remove mobiles from cars;
- updated road rules legislation, education, fines and penalties alone are not sufficient or immediate deterrents (although these should be continued and strengthened); and
- we should work on other solutions in parallel as there is no silver bullet to ending distracted driving.

WHAT IF there existed a solution today that could block all or some calls, texts and data from a driver's mobile before they reached the phone, without the driver having to do anything (other than commence driving)? That distractions would simply not be available from the telco when the subscriber is driving.

Not only could this result in an immediate decrease in distracted driving, but also drivers could undergo behavioural change (ie get used to using mobiles less when driving). The best analogue is behaviour when flying, when it is simply not possible to get at mobile phone content; when the ability to remain connected is no longer possible, you relax and enjoy the journey.

We would like to introduce you to one such solution that exists now.

Groove (by Katasi - www.katasi.com) is an innovative software solution that prevents drivers from receiving/sending calls, texts and data (data includes email, social media, WhatsApp, SnapChat, Facebook, maps, music streaming etc).

Unlike an app that tries to hide distracting content on the phone (which can always be accessed by work-arounds), and which are often voluntary, allowing drivers to simply override by identifying as a passenger), Groove automatically blocks distractions at the telecommunications carrier's (telco's) network level as you commence driving – the only solution to block distractions at the source, widely considered to be the only truly effective technical solution to distracted driving.

When you stop driving, the calls, texts and data are downloaded to your mobile.

The solution knows when you're driving and when you stop driving – it accurately identifies the driver within 30 seconds, so nothing needs to be done by the driver to activate the solution.

The solution is **granular** in that the driver or 'administrator' (say, the fleet manager as part of an organisation's WH&S rules) can elect not to block certain items, such as allowing Bluetooth phone calls, music and maps – and block everything else.

For example, WH&S policy may be '*engine on, phone off*' for a certain fleet, so everything is blocked, or maybe certain numbers are whitelisted (your manager, partner, children etc).

For P and L platers, the law may require everything to be blocked.

NOTE: calls to 000 / emergency can always be made.

Technology solutions, such as Groove, will have an immediate impact on reducing driver distraction without compromising other initiatives (such as stronger road rules legislation, education, fines and penalties), nor costing the government anything as business will deploy these solutions.

Who are we?

Katasi Inc is a US company based in Boulder, Colorado (with a presence in Australia) **that was founded on a single premise**: distraction from mobile phone use was killing and injuring far too many people in addition to costing the economy billions of dollars.

While authorities have been '*constantly exploring opportunities to reduce distraction and improve road safety through implementation of evidence-based policy, education, technology and regulatory / enforcement initiatives*' (per Queensland's Department of Transport and Main Roads), **Katasi is 100% focused on an elegant, customer-friendly and proven technology solution to reduce driver distraction from mobile phone use while driving.**

Katasi's distracted driving solution is called **Groove** which is purely a software solution piggybacking off a vehicle's incumbent telematics solution from which we take a data feed identifying when/where the vehicle is moving. We then compare that to the driver's mobile phone, and our software algorithms know who's driving etc.

The improved driver behaviour can also lead to reduced insurance costs via User Based Insurance, which savings can be shared with the fleet owner/consumer.

In essence, Groove operates as follows:

1) Phones of possible drivers of a vehicle (family members who share a car, or a fleet driver who might drive a particular vehicle, are registered as "potential drivers" of that vehicle).
2) Driver with a mobile phone associated with the vehicle, enters the vehicle and starts to drive.
3) Within ~30 seconds, Groove identifies the driver and notifies the driver's telco network.
4) Distractions are blocked by the telco's network before those distractions reach the mobile.
5) Any received messages are sent an auto-response (eg. '*I am driving and will respond shortly*').
6) Blocked messages are forwarded once the journey is completed.
7) *The technology cannot be thwarted. It just works, every drive.*

Katasi has run successful pilots in Australia and the USA, and will be launching in the USA before the end of 2019 with one of the big four USA telcos as part of its Connected Car offering.

Katasi has TWO VERSIONS of its solution:

1. **Groove** - this works on <u>any handset</u> (Windows, iOS, Android etc) – but requires some level of telco network configuration to enable the blocking of some/all data. As telcos enable mobile usage while driving via their technology (their networks), they should be 'encouraged' (or, if that fails, 'mandated') by Federal/State legislatures to configure their networks to enable the blocking of mobile use whilst driving.

AND

2. **GrooveX** - this is an <u>Android-only</u> version of the solution which does <u>not</u> require telco involvement and relies only on the vehicle having a telematics connection (such as an OBDii) – this can be demonstrated today. GrooveX can transition to Groove (available on all handsets) once the telcos reconfigure their networks. Katasi is deploying GrooveX with one of the USA's largest fleet managers.

Groove is <u>solely</u> aimed at preventing driver distraction caused by mobile phone use. It is a software solution delivered via a SaaS commercial model, is available on all mobile devices, and is easily downloaded. Settings can be adjusted by an 'administrator' (eg fleet manager, parent etc) via any Internet-connected device (mobile, computer, tablet etc).

To enable the solution to work:

- the telco, which is used by the driver for mobile connectivity, configures its network to enable integration to the **granular blocking** of data and messaging already available in the network (for instance, discontinuing texting capability if chosen by a parent, or filtering unacceptable content to phones); AND
- the vehicle needs to be connected to the Cloud via **any telematics solution** – either a third party's telematics offering, telematics now provided in most new cars, or via an OBDii device provided by any number of telematics device providers available in Australia.

The COMPONENTS of Groove are as follows:

- We register the driver's mobile in our system so when a vehicle begins to move, we can query the phone for its motion, its speed and its location.
- We register the driver's vehicle in our system and know when the vehicle is in motion, its speed and its location via a telematics device installed in the vehicle.
- When the driver commences driving, we match the movement of his/her mobile to the vehicle and, via our algorithms, confirm that the driver is indeed driving that vehicle.
- We then request the driver's telco to block the selected distractions (voice, text and/or some/all data) and, when the vehicle stops, we request the telco to unblock the distractions.
- The blocking/unblocking takes a few seconds and is done automatically.
- **NOTE**: calls to 000 / emergency can always be made.
- We have a number of patented algorithms and solutions for various scenarios. For example, where a husband and wife are registered to the same vehicle and both are in it, whose mobile do we block? Or, what if there is a pool of drivers registered to a fleet of vehicles, how do we know who's driving?

Distracted Driving Types

There are three types of distraction caused by mobile phone use: phone calls; texting; and, data (a bucket that includes applications such as email, social media, WhatsApp, music streaming, maps, SnapChat, Instagram, games, Facebook, Google/Internet searches etc).

Our solution can block ALL or SOME of these (at the administrator's or customer's discretion) when a driver commences driving – and unblock these when the driver stops driving.

The driver does not need to activate anything, merely commence driving and the software does the rest.

Our solution is very different to other distracted driving apps, such as Apple iPhone's *Do Not Disturb While Driving* app, which can be easily **turned off** by the driver thereby re-enabling distraction. A number of telcos have abandoned their distracted driving apps as they are too easily thwarted by the driver and prove ineffective.

A Secondary Benefit

In addition to blocking distractions caused by mobile phone use when driving, enabling Groove requires the vehicle to be fitted with **telematics**. Once connected, there are many other applications that can be implemented, such as determining **driver behaviour**, including speeding, sudden braking, swerving, drifting caused by inattention or micro sleeps, driving outside of a permitted location (eg geofencing so that a driver may not drive on a beach, or a student can only drive from school to home)…

The telematics provider or fleet manager can offer these other applications as Groove focuses entirely on distracted driving caused by mobile phone use.

Improved driver behaviour reduces accidents.

Similarly, telematics can make a vehicle safer by monitoring tyre pressure, engine performance, kilometres travelled for servicing….

This is especially useful in older vehicles that do not have the latest inbuilt / OEM safety measures.

There are a variety of commercial models to fund the deployment of Groove ensuring that everyone in the ecosystem will have a positive ROI.

Role of Government

It is preferable that the telcos willingly configure their networks to enable the deployment of distracted driving solutions, such as Groove. Not only is this the **right thing to do** for the public good and their customers, but also they will be able to develop **profitable business cases** from their connected vehicle initiatives, which includes Groove as one of the offerings.

However, if the telcos need 'encouragement' from government, there are overseas examples of this occurring.

Summary

We believe that **in parallel to** other initiatives to reduce distracted driving caused by mobile phone usage, and in order to get quick and sustainable wins to save lives as soon as possible, technology solutions, like Groove, should be considered and encouraged as part of a multi-pronged approach.

Deploying Groove will provide solutions to some of NTC's questions, such as:

Question 9: Can you propose an alternative approach for discouraging long eyeglances off the roadway that is enforceable in practice? **YES: if calls, texts and data (including emails, WhatsApp, music streaming, maps and other social media apps) are blocked, the driver will no longer remove eyes from the road for these purposes. If Groove is installed voluntarily or mandated (by government/fleet managers/parents), it will be enforceable.**

Question 10: Can you propose an alternative approach for discouraging high-risk voice-based interactions that is enforceable in practice? **YES: by installing Groove, calls and commands can be blocked.**

Question 11: Would a fully outcomes-based approach effectively mitigate the safety risks from diverse sources of distraction? **YES: installing Groove would deliver the outcome of reducing distracted driving behaviour from a diverse source of distractions (calls, texts and data).**

We look forward to answering any queries and to providing further information.

Sincerely,

Anthony Hollis
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cc. Scott Tibbitts, Chairman

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