

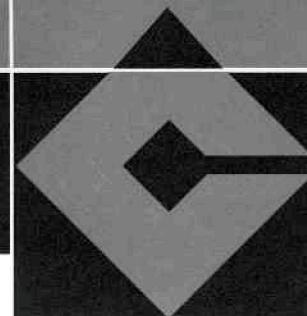
**Submission**

**No 16**

## **DRIVER AND ROAD USER DISTRACTION**

**Organisation:** NSW Taxi Council  
**Name:** Mr Peter Ramshaw  
**Position:** Chief Executive Officer  
**Date Received:** 24/04/2012

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NSW TAXI COUNCIL LTD

Ref: 038/2012 PR

24 April 2012

Mr Greg Alpin MP  
Chair  
Staysafe (Joint Standing Committee on Road Safety)  
Parliament House  
Macquarie Street  
Sydney NSW 2000

Dear Sir,

**Driver and Road User Distraction (Inquiry)**

Thank you for your letter of 6<sup>th</sup> March inviting the NSW Taxi Council to provide a submission addressing the terms of reference for the above inquiry.


The issue of driver and road user distraction is an important factor affecting safety. The regulated Taxi Industry in NSW treats the issue seriously in developing dispatch systems essential to the provision of taxi services and driver security, whilst minimising the risk posed by driver distraction.

The emergence of unregulated hand-held smartphone-based despatch devices that operate outside the regulated environment is a serious concern for our members in terms of safety for passengers, drivers and other road users.

Please find enclosed submission made on behalf of the NSW Taxi Council Limited.

Thank you for giving our submission your consideration.

Yours sincerely

  
Peter Ramshaw  
**Chief Executive Officer**

**Submission to NSW Parliamentary Joint  
Standing Committee on Road Safety  
(Staysafe)**

**Inquiry into Distracted Driving**

NSW Taxi Council

24 April 2012

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## 1. Executive Summary

The use of mobile phones, MP3 players, GPS and other electronic devices is an issue of increasing concern, with both national and international research concluding that such devices contribute to driver distraction and consequent road accidents. The current Inquiry by the Staysafe Committee aims to quantify the impact of electronic devices on motor accidents and to develop recommendations to improve road safety in this area.

The New South Wales Taxi Council has a particular interest in the subject matter of the current Inquiry. Generally the Council supports the prohibition of mobile phones and other mobile electronic devices in motor vehicles. However, the Council is keen to ensure that the Committee is aware of the particular in-vehicle electronic equipment required for the mandatory functions of taxi networks that are regulated under the Passenger Transport Act in NSW. It is critical that this specialized dispatch and communication equipment be distinguished from the scope of any recommendations made by the Committee.

One of the purposes of this submission is to outline the precise scope of electronic equipment used by the NSW taxi industry. Equally, the Council supports prohibiting the use by taxi drivers (and others) of unauthorized electronic equipment that falls outside this scope. The Council's submission describes the context in which unauthorized equipment is being increasingly used in NSW and makes a number of recommendations to that effect; namely:

- 1) Targeted enforcement campaigns to further discourage mobile phone and other electronic device use.
- 2) The exemption of dispatch, safety and communication devices that are part of the mandatory functions provided by authorized taxi networks under Passenger Transport legislation.
- 3) A prohibition on any software applications that allow taxi booking and dispatch communications provided to unauthorised electronic devices such as mobile phones or tablet computers and which by-pass the authorised taxi network dispatch equipment.

## 2. Terms of Reference

On 22 February 2012, the Staysafe (Road Safety) Committee of the NSW Parliament established a formal inquiry to review and report on the role of distraction, particularly in relation to electronic devices, in crash casualties affecting road users.

In line with the Terms of this Inquiry, the Taxi Council's submission describes:

- The legislative (**Section 3**) and operational context (**Section 4**) of electronic communication devices within the NSW taxi industry;
- The nature and extent of distraction as a contributor to crash casualties on NSW roads (**Section 5**);
- The current rates and future trends in the take up of electronic devices (**Section 6**);
- The dangers of emerging electronic device technology in the NSW taxi context (**Section 7**);
- Current regulatory measures aimed at reducing the impact of electronic devices on drivers (**Section 8**); and,
- Future national and international trends in the area (**Section 9**).

The submission's conclusions and recommendations are found at **Section 10**.

## 3. Regulation of Taxi Networks and Equipment

Taxi drivers and operators, like other road users in NSW, are subject to a number of safety and road rules under the Roads Transport Act and Regulations. However, given the critical nature of carrying public passengers, the NSW Government imposes additional conditions on taxi operators, taxi drivers and authorised taxi networks. These additional requirements are found in the Passenger Transport Act 1990 and Passenger Transport Regulation 2007.

The ability for a passenger to contact a taxi company and request a pick-up is fundamental to the nature of taxi services in NSW and in many places across the world. Indeed, this communication and dispatch function is written into the way taxis are regulated. One of the conditions to operating a taxi network in NSW is technical competence to maintain and operate an efficient dispatch communication system (clause 167, Passenger Transport Regulation 2007).

The Passenger Transport Act 1990 also requires a taxi operator to ensure that:

- (a) arrangements are in place for the provision of a taxi booking service, and that
- (b) each taxi is fitted with a receiver, appropriate for receipt of messages from the network (section 31G).

Further requirements for the particular electronic equipment found in taxi-cabs is administered under Part 8 of the Passenger Transport Regulation. They include the requirement for taxi operators to install and maintain:

- Taxi-meters (clause 111);
- A duress alarm system (clause 112);
- A vehicle tracking device (clause 113); and,
- Security cameras (clause 114).

This electronic equipment is essential to the efficient operation of taxi networks across NSW. In particular, electronic dispatch systems facilitate the efficient distribution of taxis, enabling the industry to service more passengers with fewer vehicles and kilometres travelled, thereby reducing passenger cost, traffic congestion and air pollution.

It is therefore critical that the Staysafe Committee be aware of this specialized equipment and that such equipment be quarantined from any recommendations arising from the current Inquiry.

#### **4. Taxi Dispatch Systems**

Approximately 7,000 taxi-cabs operate across NSW, the majority of these in the Sydney metropolitan and outer metropolitan area (Central Coast, Newcastle, Wollongong). Within Sydney, taxis operate within one of 11 networks (Taxis Combined, Premier, Legion, etc) most Sydney residents would be familiar with.

While there are slight differences in the way that these networks operate, the taxi dispatch and communications systems used by each are remarkably similar. All comprise of an in-built screen and microphone system allowing the network to alert the driver when a customer books a taxi in their area. This system is linked to a GPS unit within the vehicle allowing bookings to be allocated to the vehicles in closest proximity to the customer, and for vehicles to be tracked.

The hardware used in taxi dispatch systems is designed and mounted in accordance with Australian Design Rules. It has text-to-speech capabilities, allowing the driver to receive instructions from a call centre without looking at the screen; in other words the pick-up address is vocalized for the driver. While dispatch messages are also displayed on the vehicle's in-built screen, these messages are very short, require a minimal (two second) glance at the screen and no other action by the driver other than pushing a single button which

responds with a predetermined, pre-programmed message.

Taxi dispatch software is also designed in a way that provides drivers with ample time to respond to the dispatch call. The driver initially offered a job is given a window of opportunity in which to accept the fare. This means that drivers do not need to take their eyes off the road in order not to miss out on the job. In short, while they could be described as in-vehicle electronic devices, taxi dispatch systems have been specifically designed to reduce road and vehicle related hazards and minimize distraction for drivers.

Dispatch systems are essential to the efficient operation of taxi networks across NSW. Significantly, however, dispatch systems also serve a primary safety function. While the taxi-cab's alarm capability is not impacted by the dispatch system (the alarm is still monitored by the depot once activated), it is nevertheless linked to the dispatch system. This means that provided the dispatch system is on when the alarm is activated, the depot is able to directly communicate "one on one" with the driver. Moreover, with the dispatch system on, a small, unobtrusive icon appears on the dispatch screen when the alarm is activated, providing the driver with assurance that the depot has been notified of the alarm and is taking appropriate measures to monitor and respond to the emergency. Each of these dispatch system functions significantly improves the safety of taxi drivers.

Unlike most other drivers, taxi drivers face potentially significant risks other than those involving motor vehicle accidents. Taxi drivers must transport and interact with members of the public in a confined space. Passengers can be affected by alcohol, drugs, may be violent or have criminal intentions toward the driver. The dispatch system plays an important role in reducing risk for taxi drivers and enabling an effective response if a driver is exposed to harm.

In summary, while the Taxi Council supports the prohibition on the use of mobile phones, MP3 players and other hand held electronic devices, it is important that the Staysafe Committee recognize that the use of electronic dispatch systems and other communication equipment used by authorised taxi networks is essential to both the industry and the public and must continue to be permitted.

## **5. The Role of Electronic Equipment in Driver Distraction**

Driver distraction has been a topic of increasing interest among academics and Government road and traffic regulators, both in Australia and internationally. Driver distraction is defined as "*a visible outcome of some event, action or feature in the driving situation inside the car that impacts driving activities.*"<sup>1</sup> The use of mobile phones, satellite navigation, MP3 players and even on-board

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<sup>1</sup> Neville, et al, *In Car Distractions and their Impact on Driving Activities*, Department of Infrastructure and Transport, Canberra, December 2010, p v



television screens in vehicles in recent years has greatly increased the potential for driver distraction and related accidents.

In the United States it has been estimated that driver distraction is responsible for 81.5% of “safety-critical events”.<sup>2</sup> A “safety critical event” includes not only accidents but near crashes and unintentional lane deviations. The National Highway Traffic Safety Administration estimates that as many 3,000 people are killed on U.S roads each year as a result of driver-distracted crashes.<sup>3</sup>

Studies on distracted driving have found that a broad range of electronic equipment used in vehicles, such as hand-held mobile phone, hands free mobile phone and CB radios, have the potential to cause driver distraction. However, the risk is amplified with the time that the device requires the driver to take their eyes off the road. In that context, it is generally acknowledged that texting on a mobile phone is by far the most risky type of distracted behaviour. This is because texting combines manual manipulation (i.e. hand off wheel) with substantial visual attention to complete the task i.e. substantial amount of eye time off the road.<sup>4</sup>

The findings of these academic findings have been mirrored in epidemiological studies which suggest that mobile phone use produces a significant increase in casualty crash risk.<sup>5</sup>

## 6. The Scope of the Problem

It is clear that mobile electronic equipment, and particularly mobile phones, is a major contributor to driver distraction and related motor accidents in NSW. If the use of mobile phones in cars was an isolated event it would be of less concern. Unfortunately, quite the opposite seems to be the case.

A 2009 Australian survey found that 61 per cent of drivers used a mobile phone while driving, with 30 percent admitting to reading text messages and 16 per cent to writing and sending text messages.<sup>6</sup> A more recent study reveals that by 2012, these percentages had risen to 88 per cent of motorists using mobile phones for conversations, and 68 per cent using their phones to text whilst driving.<sup>7</sup>

With the increasing prevalence of mobile phones in the community, it would

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<sup>2</sup> Olsen, et al, *Driver Distraction in Commercial Vehicle Operations*, US Department of Transportation, September 2009

<sup>3</sup> *National Highway Traffic Safety Administration website*, April 2012

<sup>4</sup> Olsen, op.cit

<sup>5</sup> McEvoy et al, *Role of Mobile Phones in Motor Vehicle Crashes Resulting in Hospital Attendance*, British Medical Journal 331, 2005

<sup>6</sup> Petroulis, T. *Community Attitudes to Road Safety*, Department of Infrastructure, Transport, Regional Development and Local Government, Canberra, 2009

<sup>7</sup> Based on survey of 415 NSW drivers by Pure Profile Research, NRMA website, January 2012

appear that the problem is growing. In addition, the use of phones and other mobile electronic equipment (e.g. MP3 players) seems to be especially prevalent among younger drivers. Younger people are more likely to be familiar with mobile technology and feel more of a need to remain connected with their social networks while driving. The social norms governing behaviours and “acceptable” risk would appear to be a powerful influencer in the levels of driver distraction.<sup>8</sup> The combination of distracting behaviour with a lack of driving experience results in an even greater risk among this section of the Australian population.<sup>9</sup>

In short, the social need to remain “connected”, along with the increasing sources of potential in-car distraction means that the problem of distraction-related injuries and fatalities is only likely to increase over time.

## **7. Distracted Driving and Unauthorised Taxi Equipment**

The Taxi Council strongly supports a move to strengthen legislation and enforcement activity against drivers using mobile phones and other portable electronic equipment in motor vehicles.

In addition to the general use of mobile phones by motorists, there is a taxi-specific dimension to the problem. As outlined earlier in this paper, taxi dispatch and communication systems are critical to the efficient operation of the industry and are authorized by legislation. However, advances in technology and changing social behavior has created a new dimension to the use of smart phones and related behavior in taxis in NSW.

In recent years, a number of smart-phone applications have been developed which allow a customer to contact taxi drivers directly via their mobile phone. These systems work in much the same way as a mobile text message, allowing a driver with that phone application to receive a message from a potential customer and to respond to them directly, again via their mobile phone. These smart phone apps require the driver to take their eyes off the road for extended periods both to receive and to respond to the customer request. The Taxi Council considers that smart phone applications of this type, like other forms of mobile phone use, are highly dangerous in terms of distracted driving, with potential for injury, not only to drivers but to fare paying customers also.

Such unauthorised applications need to be distinguished from smartphone booking applications provided by authorised taxi networks that accept bookings from smartphones but which dispatch jobs to the taxi driver using the authorised dispatch equipment in the taxi.

Apart from the obvious dangers posed by these mobile phone systems, their use is dangerous for another reason. The rationale behind the strict regulation of taxi

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<sup>8</sup> Neville, op.cit

<sup>9</sup> Young, et al, Effects of Using a Portable Music Player on Simulated Driving Performance and Task-Sharing Strategies, *Applied Ergonomics*, Vol 20, 2011

dispatch and communications under the Passenger Transport Act, is to provide the travelling public with a level of assurance that the taxi dispatched to them is part of and monitored by an authorised taxi network. The mobile to mobile calls used in smart phone apps effectively by-pass the network, can be answered by anyone with the application on their phone and provide no assurance that the vehicle picking up the driver is being monitored or, indeed, is even part of a legitimate taxi service. The potential dangers associated with such an unregulated system are obvious.

Importantly, authorised taxi networks in NSW are providing customers with smartphone applications with similar features to the unregulated providers, which allow customers to book taxis using a smartphone, but which dispatch the booking via the authorised taxi network's dispatch equipment. This provides customers with the convenience and features afforded by smartphone applications, whilst also maintaining the accountability and integrity provided by the authorised taxi networks.

The Taxi Council considers that in addition to the general prohibition on mobile use while driving, the unregulated smart phone applications for taxi hire require particular attention. Given the dangers that such devices pose to both drivers and their public passengers, the Taxi Council would strongly recommend targeted legislation prohibiting their use.

## **8. Current Enforcement and Compliance in NSW**

NSW Police report that the use of a mobile phone ranks as the third most penalised offence behind speeding and not wearing a seatbelt. The current penalty for using a hand-held mobile phone in NSW is \$265 and three demerit points, with the penalty rising to \$353 and four points if the car is in a school zone. Both L and P platers are completely banned from using mobile phones, even via a hands-free system.

In addition to these general traffic offences, there are specific powers under the Passenger Transport Act 1990 that apply to drivers of a public passenger vehicle, including a taxi or bus. These provisions allow the Director-General of Transport in NSW to cancel or suspend the Driver Authority of anyone using a mobile phone or other unauthorised electronic devices while driving. Such an Authority is needed to operate a taxi or bus in NSW. Transport for NSW currently has such a policy in place for public transport drivers and an updated version has been released for comment.

The following extract from the Transport for NSW website outlines the current policy:

### ***Transport for NSW policy on hand-held mobile phones***

*Under the Passenger Transport Act 1990, the Director General of Transport for NSW may suspend the authorities of public passenger*

*drivers. Transport for NSW has a policy of suspension of driver authorities pending investigation of unacceptable conduct.*

*Transport for NSW considers use of a hand-held mobile phone by a driver of a public passenger vehicle as unacceptable conduct.*

***Disciplinary action for unacceptable conduct***

*Transport for NSW regards the use of a mobile phone while driving a public passenger vehicle as a serious breach of safety which may merit suspension or possible cancellation of a driver authority.*

The Passenger Transport Regulation 2007 also prohibits drivers from using a “prohibited communication device” for the purpose of assisting a person to hire a taxi-cab” (clause 141). This provision is designed to prevent drivers from using “trunk” dispatch systems (i.e. driver to driver) outside the taxi network. However, at the current time it appears that Transport for NSW has the view that mobile phones do not seem to fit within the definition of a prohibited device (clause 3), meaning that the smart-phone applications discussed earlier are currently regarded as legal; a clear example of legislation not keeping pace with technology.

## **9. Future Trends**

### **9.1 International**

Like Australia, road safety in the U.S. is generally a State responsibility. To date, the majority of States have banned the use of hand-held mobile phone calls and texting whilst driving. To further encourage action by the States, the National Transport Safety Board is proposing financial incentives to those States passing road laws that ban all mobile phone use, including hands free devices.

Significantly, the proposal put forward by the U.S. Government would ban the use of smart phones used for vehicle dispatch over a public communications system (e.g. via smart-phone applications) but would exempt mobile data terminals which operate over private communications systems. In NSW, authorised network dispatch systems can use a combination of public and private communications networks.

In addition to these compliance measures, in February 2012, the U.S. introduced voluntary guidelines to discourage the incorporation of distracting devices in motor vehicle manufacture. Under the Guidelines automakers are encouraged to disable applications that allow drivers to manually access social media, surf the Web or send text messages while on the road. The Guidelines also seek to prevent any in-car technologies that require drivers to use both hands or take their eyes off the road for more than two seconds. While the Guidelines are non-binding, the Alliance of Automobile Manufacturers, the industry body covering the

majority of car manufacturers in the U.S., has indicated its willingness to comply with the Guidelines.

The new Guidelines are the first in a series of initiatives designed to reduce the impact of electronic equipment-related distraction. The second set of Guidelines (yet to be developed) will address mobile devices brought in and used while driving. They would cover portable GPS, smart phones and other mobile communication devices.<sup>10</sup>

In the U.S. at least, it would appear that more action is on its way. President Obama's budget request in February 2012 included \$330 million over six years for distracted driving programs that increase awareness and encourage stakeholders to take action on the issue.

## **9.2 Local**

Unlike the U.S., no distracted driving initiative in Australia has been targeted at vehicle manufacturers. Rather, the measures being proposed in Australia generally focus on education and enforcement. In that context, the discouragement of electronic devices, particularly mobile phones, is a specific target of the Australian Government's ten year National Road Safety Strategy (2011 to 2020). Three broad policy objectives have been outlined for the first three years of the Strategy in relation to mobile phones:

- Strengthen education and enforcement measures;
- Promote phone-off policies with fleet operators
- Extending the coverage of novice driver prohibitions on mobile phone use including possibly to all young drivers under 26 years of age.<sup>11</sup>

The practical measures associated with these broad objectives are generally left to the States to design and implement. In view of this, the design of initiatives that give regulatory effect to these broad goals could be a positive outcome from the current NSW Parliamentary Inquiry.

## **10. Summary and Recommendations:**

It is clear from the data that the use of hand-held electronic devices whilst driving is dangerous, and results in a significant proportion of road accidents in NSW and elsewhere. Moreover, the use of such devices by drivers seems to be increasing with time. Of such devices, mobile phones are arguably the most dangerous due to the need for manual manipulation (particularly when texting) combined with the substantial visual attention needed to complete the task.

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<sup>10</sup> U.S. Department of Transportation, *Visual-Manual Driver Distraction Guidelines for In-Vehicle Electronic Devices*, February 2012

<sup>11</sup> Australian Transport Council, *National Road Safety Strategy 2011-2020*, Canberra, p.92

Such devices need to be contrasted with on board communication systems currently used in vehicles as part of authorised taxi networks. These systems comply with Australian Design Rules and have been specifically designed for in-vehicle communication. They have text-to-speech capabilities and require minimal manual manipulation and visual attention. Such devices are critical to the ongoing efficiency of the taxi industry and public transport, and need to be quarantined from the scope of the current Inquiry.

The NSW Taxi Council supports any further moves to prohibit the use of mobile phones and unauthorized electronic equipment in motor vehicles. Such activity would need to be facilitated as amendments to current Road and Traffic legislation.

Of equal concern to the industry, are specific uses being made of mobile phone technology in the taxi context. The use of mobile phone applications that allow passengers and taxi drivers to communicate directly as part of an unauthorized dispatch system, require close examination as part of the current Inquiry. The government has formed the view that these applications and their usage currently fall outside the scope of the Passenger Transport legislation. It is recommended that the Passenger Transport legislation be amended to keep pace with this emerging technology to discourage their use.

In summary, the Taxi Council would recommend:

- 1) Targeted enforcement campaigns to discourage mobile phone and other electronic device use in motor vehicles.
- 2) The exemption of dispatch and communication devices that are part of an authorized taxi network under Passenger Transport legislation, from any new compliance activity arising from the Committee's recommendations.
- 3) Amendment to Passenger Transport legislation to include software applications which allow booking and dispatch communications to be provided to taxi drivers via a mobile phone or similar device whilst driving, and which by-pass the authorised dispatch system.

The NSW Taxi Council would welcome the opportunity to present its findings to the Committee if so required.

Peter Ramshaw  
Chief Executive Officer  
NSW Taxi Council  
24 April 2012

## References

1. Australian Transport Council, *National Road Safety Strategy 2011-2020*, Canberra
2. McEvoy et al, *Role of Mobile Phones in Motor Vehicle Crashes Resulting in Hospital Attendance*, British Medical Journal 331, 2005
3. *National Highway Traffic Safety Administration* website, April 2012
4. Neville, et al, *In Car Distractions and their Impact on Driving Activities*, Department of Infrastructure and Transport, Canberra, December 2010
5. Olsen, et al, *Driver Distraction in Commercial Vehicle Operations*, US Department of Transportation, September 2009
6. Petroulis, T. *Community Attitudes to Road Safety*, Department of Infrastructure, Transport, Regional Development and Local Government, Canberra, 2009
7. Pure Profile Research into Mobile Phone Use, NRMA website, January 2012
8. U.S. Department of Transportation, *Visual-Manual Driver Distraction Guidelines for In-Vehicle Electronic Devices*, February 2012
9. Young, et al, Effects of Using a Portable Music Player on Simulated Driving Performance and Task-Sharing Strategies, *Applied Ergonomics*, Vol 20, 2011