National Roadmap on Driver Distraction
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Executive summary
Executive summary
The national 'driver distraction ecosystem' was engaged through a collaborative design process, with a focus on reducing driver distraction due to mobile devices

Our approach...
The challenge of driver distraction was explored through four inter-related streams of work:

Stream 1 – Stakeholder engagement
The primary stream of work which connected and engaged with the driver distraction ecosystem through interviews, workshops and a National Summit to inform policy positions and action plans.

Stream 2 – Penalty regime
A Queensland-focused review of the current policy approach to driver distraction, which engaged road safety, regulatory and enforcement experts for input into potential regulatory approaches.

Stream 3 – Technology solutions
A market sounding exercise to determine the current and emerging technology-based solutions and inform potential future technology trials.

Stream 4 – Chain of Responsibility
Evaluation of the applicability of Chain of Responsibility principles established under the Heavy Vehicle National Law (HVNL) to light vehicles and Original Equipment Manufacturers (OEMs) of vehicles and mobile devices.

Our solutions...
Five overarching strategies were developed to address the challenge of driver distraction:

Designing for a safer interaction: focuses on the Human Machine Interface (HMI) and designing safer interactions with devices while driving.

Mapping out the adoption of in-vehicle distraction mitigation technology: focuses on increasing the availability and implementation of distraction mitigation technology through Australian Design Rules (ADRs) and Australasian New Car Assessment Program (ANCAP) safety ratings.

Recognising the vehicle as a workplace: focuses on working with employers and workplace health and safety regulators to improve employer approaches to driver distraction.

Encouraging greater compliance through enforcement: focuses on strengthening enforcement mechanisms.

Changing driver behaviour: focuses on innovative campaign and educational strategies to influence driver behaviour.

Next steps...
A high level roadmap has been developed to guide progression of initiatives.

National Program
August
Update Transport and Infrastructure Council (TIC) on National Summit on Driver Distraction.

September
Finalise the roadmap through consultation.

November
Update TIC further on finalisation of roadmap.

May
Seek TIC approval of Driver Distraction governance framework.

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Executive summary – Forward program overview

A proposed forward program of work has been developed with projects aligned in support of the five strategies:

- **Designing for a safer interaction**
  - Develop vehicle and device standards in addition to design principles to facilitate safer interactions between drivers and devices.

- **Mapping out the adoption of in-vehicle distraction mitigation technology**
  - Increase the availability and implementation of distraction mitigation technology, through shaping ADRs, working with technology vendors, using ANCAP as a lever, and working with OEMs on product roadmaps.

- **Recognising the vehicle as a workplace**
  - Apply ‘Workplace Health and Safety Regulation’ to incorporate vehicles to ensure work-related road incidents are treated the same as workplace incidents, use insurance as a lever to implement safer technologies and policies, employer led communities of practice, and industry-developed and shared good practice guidelines.

- **Encouraging greater compliance through enforcement**
  - Encourage greater compliance to road rules through three levers, namely, a redesign of current rules, enhance detection initiatives and the ability to access and share crash and infringement data.

- **Changing driver behaviour**
  - Shift distracted driver behaviour through education and campaigns, implementing ‘smart’ infrastructure to guide road users to stay focused, and use open data and the ability to share data as a nudge tool.

Projects which will help us implement the strategies:

- **Evaluate Human Machine Interfaces**
- **Develop a safer device design**
- **Department of Infrastructure, Transport, Regional Development and Communications (DITRDC) to shape vehicle design rules**
- **Work with technology vendors to highlight the availability of after-market technology**
- **ANCAP to refine protocols**
- **Work with OEMs on product roadmaps**
- **Application of Workplace Health and Safety Regulation**
- **Insurance as a lever for corporate fleets**
- **Develop and disseminate industry guidelines for workplaces**
- **The National Transport Commission (NTC) and jurisdictions to evolve the Australian Road Rules**
- **Enhance detection, deterrence and offender management**
- **Expand data access and sharing**
- **Education and campaigns**
- **Infrastructure as a nudge tool**
- **Open data as a nudge tool**
Laying the groundwork
The challenge of driver distraction
Queensland’s Department of Transport and Main Roads (TMR) has identified that, of the ‘fatal five’, driver distraction is the least understood, least enforceable, and has a far greater impact than current data suggests.

Why does driver distraction continue to be a challenge?
- Driver distraction is increasingly contributing to road fatalities
- There is no reliable way of collecting data around driver distraction
- No current framework or policy exists for establishing accountability and ownership for stakeholders within the ecosystem
- Driver behaviour is difficult to change
- There are significant challenges with enforcement

What is the perceived reward and risk of driver distraction?
From an individual’s perspective, actions within a vehicle carry varying levels of risk, and also varying levels of reward. Acceptable threshold for drivers exists where the level of reward outweighs the risk.

- Staying in contact
- Timely responses
- Satisfying a habit
- Relieving boredom
- Not missing out
- Risk of being caught
- Risk of collision
- Risk of harm

What is the magnitude of the problem?

Fatalities and hospitalisations involving driver distraction in QLD 2012–2018

<table>
<thead>
<tr>
<th>Year</th>
<th>Fatalities</th>
<th>Hospitalisations</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012</td>
<td>984</td>
<td>1,000</td>
</tr>
<tr>
<td>2013</td>
<td>1,343</td>
<td>1,300</td>
</tr>
<tr>
<td>2014</td>
<td>1,269</td>
<td>1,269</td>
</tr>
<tr>
<td>2015</td>
<td>1,173</td>
<td>1,173</td>
</tr>
<tr>
<td>2016</td>
<td>1,277</td>
<td>1,277</td>
</tr>
<tr>
<td>2017</td>
<td>1,120</td>
<td>1,120</td>
</tr>
<tr>
<td>2018</td>
<td>1,358</td>
<td>1,358</td>
</tr>
</tbody>
</table>

Why this project?
TMR identified that engaging the distracted driving ecosystem is critical for the development of innovative solutions to reduce distraction related accidents and casualties on Australian roads.

To tackle the problem, a project with four separate yet inter-related streams of work was conducted:

- **Stream 1: Stakeholder Engagement** – connect and engage with the ecosystem
- **Stream 2: Penalty Regime** – develop a new penalty regime for illegal mobile phone use
- **Stream 3: Technology Solutions** – feasibility assessment of in-vehicle technology solutions
- **Stream 4: Chain of Responsibility** – Investigate Chain of Responsibility principles
## The distracted driver’s ecosystem

While the decision to engage with a mobile device ultimately lies with the driver, there is an influential ecosystem surrounding the driver.

<table>
<thead>
<tr>
<th>ECOSYSTEM ELEMENT</th>
<th>ROLE</th>
<th>POTENTIAL TO INFLUENCE SAFER BEHAVIOR THROUGH</th>
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</thead>
<tbody>
<tr>
<td>Drivers</td>
<td>Ultimately responsible for making the decision to engage</td>
<td>Choosing not to engage in distracting behaviour</td>
</tr>
<tr>
<td></td>
<td>in the distracting behaviour</td>
<td></td>
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<tr>
<td>Regulators and enforcement bodies</td>
<td>Define what is and is not lawful regarding the use of mobile devices</td>
<td>Penalties and enforcement which may deter the behaviour</td>
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<tr>
<td></td>
<td>while driving</td>
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<tr>
<td>Infrastructure planners</td>
<td>Build and maintain the surrounding physical infrastructure, on and</td>
<td>Infrastructure which enables a safer driving experience</td>
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<tr>
<td></td>
<td>through, which vehicles are used</td>
<td></td>
</tr>
<tr>
<td>Insurance industry</td>
<td>Part of the periphery environment – provide products and services</td>
<td>Discounts and incentives for safe driving</td>
</tr>
<tr>
<td></td>
<td>to drivers</td>
<td></td>
</tr>
<tr>
<td>Mobile connectivity industry</td>
<td>Manufacture the enabling technology that facilitates the distracting</td>
<td>Options for safer interaction with devices</td>
</tr>
<tr>
<td></td>
<td>behaviour</td>
<td></td>
</tr>
<tr>
<td>Road users and their associations</td>
<td>Represent the interests of drivers and promote road safety</td>
<td>Awareness and education of the risks of driver distraction</td>
</tr>
<tr>
<td>Automotive industry</td>
<td>Provide the immediate environment in which the driver makes the</td>
<td>Vehicle design which discourages / mitigates distraction</td>
</tr>
<tr>
<td></td>
<td>decision to engage in the distracting behaviour</td>
<td></td>
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<tr>
<td>Solution providers</td>
<td>Develop solutions to prevent, discourage and mitigate driver</td>
<td>Technology which complements distraction prevention and mitigation efforts</td>
</tr>
<tr>
<td></td>
<td>distraction</td>
<td></td>
</tr>
<tr>
<td>Telecommunications industry</td>
<td>Provide the mobile phone network on which the driver’s device</td>
<td>Network technology which prevents driver distraction</td>
</tr>
<tr>
<td></td>
<td>operates</td>
<td></td>
</tr>
<tr>
<td>Employers</td>
<td>Employ members of the workforce who need to drive in their roles</td>
<td>Workplace practices which enable safe driving</td>
</tr>
<tr>
<td>Educators and researchers</td>
<td>Actively educate and provide research on road safety issues</td>
<td>Direct engagement with drivers (educators) and their influence on policy makers (researchers)</td>
</tr>
</tbody>
</table>
Project approach (Stage 2)
The challenge of driver distraction was explored through four separate, yet inter-related streams of work

Stream 1 - Stakeholder Engagement
Connect and engage with the Driver Distraction Ecosystem to inform policy position and Roadmap

Engage
Engage with the distracted driver ecosystem to generate buy-in from core stakeholder groups

Facilitate
Facilitate a discussion to develop a shared understanding of the problems

Ideate
Ideate potential solutions in a collaborative manner, working towards a common goal

Plan
Plan for the future by developing a roadmap

Stream 2 - Penalty Regime
Develop new penalty regime for technology distractions

- How would we enforce the proposed solution(s)?
- What impacts could technology have on enforcement?
- What challenges will we face in enforcing the correct behaviours?

Stream 3 - Technology Solutions
Feasibility assessment of in-vehicle technology solutions

- What would a technology trial look like?
- What technological developments have there been in your ecosystem?
- What solutions are available?

Stream 4 - Chain of Responsibility
Investigate Chain of Responsibility principles

- What principles have you employed in your workplace?
- What do you believe your role is in being responsible for distracted drivers?

1. This was the only stream of work with a specific focus on Queensland

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Industry Engagement
TMR took a systems approach and engaged the national driver distraction ecosystem through a collaborative design process

<table>
<thead>
<tr>
<th>Snapshot of industry engagement</th>
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<tbody>
<tr>
<td><strong>Interviewees</strong></td>
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<tr>
<td><strong>80+</strong></td>
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<tr>
<td>TMR brought stakeholders together and has conducted 80+ stakeholder interviews, 5 workshops and a national two-day summit in July 2019.</td>
</tr>
<tr>
<td><strong>National Summit participants</strong></td>
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<tr>
<td><strong>100+</strong></td>
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<tr>
<td>TMR has also played a custodial role throughout the program, providing continuity of the ecosystem’s collective thinking about how to reduce driver distraction due to mobile devices.</td>
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<tr>
<td><strong>Workshops</strong></td>
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<tr>
<td><strong>5</strong></td>
</tr>
<tr>
<td>Engaging such a broad ecosystem in this way, although a challenge, has enabled several critical outcomes for the program:</td>
</tr>
<tr>
<td><strong>Initiatives identified</strong></td>
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<tr>
<td><strong>50+</strong></td>
</tr>
<tr>
<td>• A shared understanding and ownership of the problem across the ecosystem</td>
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<tr>
<td>• Development of new relationships and buy-in from key stakeholders</td>
</tr>
<tr>
<td>• Uncovered unique insights and perspectives</td>
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<tr>
<td>• Collaborative design of new strategies and solutions</td>
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</table>
Technology solutions
As part of a market sounding exercise, TMR issued a Request for Information (RFI) and conducted Technology Discovery Days to shortlist technology solutions with potential to address driver distraction.

17 vendors responded to the RFI, and all 17 submissions were qualitatively assessed against four major evaluation criteria. Eleven vendors (including one vendor which did not make an RFI submission) were shortlisted to participate in Technology Discovery Days. Eleven vendor demonstration sessions were conducted. All 11 vendors were scored against four categories of assessment criteria. A moderation session was conducted to calibrate scores for all vendors to ensure consistency. Vendors meeting TMR’s requirements were shortlisted for further exploration.
Chain of Responsibility

TMR explored the applicability of the Chain of Responsibility (CoR) principles established under the Heavy Vehicle National Law to light vehicles and Original Equipment Manufacturers of vehicles and mobile devices

Investigation of applicability of CoR principles to driver distraction

- **Shared Responsibility**
  The safety of transport activities relating to the use of mobile devices is the shared responsibility of each party in the CoR

- **Function-dependent responsibility**
  The level of responsibility depends on the function the party in the CoR performs, the nature of the risk and the person’s capacity to control, eliminate or minimise the risk

- **Primary duties**
  Each party must eliminate or minimise risk of distraction and not cause or encourage driver distraction

- **Executive duties**
  Executives must gain knowledge about how to enable safer behaviour and put appropriate measures in place to eliminate risks

- **Safe contracts**
  Contracts or arrangements must not encourage, reward or give incentives to the driver or other parties in the supply chain to breach the law

Recommendations on how principles can be applied by Employers and OEMs

- **Employers**
  - Cultural change and employee learning and development
  - Intra-organisational collaboration
  - Follow WHS guidelines on the creation of effective organisational practices
  - Collect and use fleet data
  - Collaborate with other parts of the driver distraction ecosystem

- **Vehicle manufacturers**
  - Partner with transport agencies and standards bodies to influence international vehicle standards
  - Improve Human Machine Interface (HMI) design
  - Continue to promote safe driving behaviour

- **Mobile device manufacturers**
  - Auto-enable mobile device functionality that addresses distraction
  - Raise awareness among customers on how devices can be used more safely within a vehicle
  - Work with app developers to enable “vehicle safe” apps in the app store
  - Work with vehicle manufacturers to improve HMI and compatibility with different vehicle-device combinations
Part 2

The Roadmap
Driver distraction is a complex problem and a strategic response is required

Driver distraction is a complex problem, which traditional solutions will not adequately address. Success requires ongoing consultation and co-design with a broad ecosystem.

What did we learn about the problem?

- Complex, multifaceted problem
- Traditional, penalty-focused approach will fall short of success
- Approach with a single strategy will have little impact on driver behaviour
- Success is only possible by targeting multiple parts of the ecosystem
- Ongoing consultation and co-design with the ecosystem is essential
- A coordinated national approach will have the greatest impact

What strategies have emerged?

- **Designing for a safer interaction**
  Focuses on the Human Machine Interface and designing safer interactions with devices while driving

- **Mapping out the adoption of in-vehicle distraction mitigation technology**
  Focuses on increasing the availability and implementation of distraction mitigation technology through Australian Design Rules and ANCAP safety ratings

- **Recognising the vehicle as a workplace**
  Focuses on working with employers and workplace health and safety regulators to improve employer approaches to driver distraction

- **Encouraging greater compliance through enforcement**
  Focuses on strengthening existing enforcement mechanisms through three levers; a redesign of current rules; enhancing detection initiatives and, the ability to access and share crash and infringement data

- **Changing driver behaviour**
  Focuses on innovative campaign and educational strategies to influence driver behaviour
Strategy 1: Designing for a safer interaction

Develop vehicle design principles and device standards to facilitate safer interactions between drivers and devices

Why this strategy was developed?

- Focus on the driving task is limited and diminishes with time, however, technology and infrastructure can be designed to reorientate attention back to the road.

- Through co-design with the ecosystem in a workshop, the design of device and vehicle interactions in a way that minimises distraction while driving emerged as an opportunity. This workshop brought together stakeholders from the Federal Chamber of Automotive Industries, DITRDC, Microsoft, UNSW, as well as several vehicle companies, including Volvo, Hyundai, Holden and Mercedes-Benz.

- Consultation with the broader ecosystem identified two projects to prioritise in launching this strategy and tackling the problem of distracted drivers.

- This includes the evaluation of Human Machine Interfaces, an initiative that stands to benefit from considerable work already undertaken by Transport for Victoria.

What are the key projects?

- **Evaluate Human Machine Interfaces**
  Evaluate and develop design standards and technologies that reduce the complexity of Human-Machine Interfaces to reduce distraction

- **Develop a safer device design**
  Develop and implement mobile and wearable device standards and design features that can restrict operability while driving to facilitate safer interactions
Strategy 2: Mapping out the adoption of in-vehicle distraction mitigation technology

Increase the availability and implementation of distraction mitigation technology through Australian Design Rules and ANCAP safety ratings

Why this strategy was developed?

- A key challenge for solving driver distraction is ensuring that distraction mitigation technology, which currently exists, is adopted given its opt-in basis.
- The ecosystem recognised that increasing the availability and implementation of driver distraction mitigation technology must be prioritised, believing that the harmonisation of international regulatory standards taking a stricter position on the issue is pivotal to overcome driver distraction.
- This strategy evolved to encompass the shaping of ADRs by DITRDC, working with technology vendors to highlight the availability of after-market distraction mitigation technology, using ANCAP to facilitate and prioritise distraction mitigating technology into safety ratings (subject to evaluation), and working with vehicle manufacturers on product roadmaps.
- This strategy aligns with ANCAPs future roadmap which includes introducing an assessment of driver monitoring systems as part of the Safety Assist assessment to incentivise vehicle manufacturers to provide monitoring systems to detect impaired and fatigued drivers with an appropriate warning.

What are the key projects?

- Work with DITRDC to shape vehicle design rules
  DITCRD to work with UNECE World Forum for Harmonization of Vehicle Regulations (WP.29), to more proactively co-design vehicle standards and the Australian Design Rules
- Work with technology vendors to highlight availability of after-market technology
  Identify potential vendors and suppliers to support the development and implementation of after-market distraction mitigating technologies which can be retrofitted into existing vehicles, taking into account price and effectiveness
- ANCAP to refine incoming protocols
  ANCAP to facilitate and prioritise the inclusion of distraction mitigating technology into safety ratings
- Work with OEMs on product roadmaps
  Establishing active and ongoing communication with vehicle manufacturers to understand their product roadmaps, and support the consideration and implementation of distraction mitigating technologies within new products and services
Strategy 3: Recognising the vehicle as a workplace

Work with employers and workplace health and safety regulators to improve employer approaches to driver distraction

Why this strategy was developed?

- Despite a significant percentage of new vehicles being sold to businesses, the current legislative requirement for ensuring worker safety in vehicles is not always subject to the same approach applied to more traditional workplace settings, such as the office, factory floor or worksite.

- Engagement with the driver distraction ecosystem quickly confirmed a need to address the absence of awareness, policy, regulation and enforcement of driver distraction for the vehicle as a workplace, which commences the moment the employee enters the vehicle.

- Based on this, TMR brought together key vehicle as a workplace stakeholders, such as Taxi Council Queensland, Uniting Care, Queensland Ambulance Service, National Heavy Vehicle Regulator, Uber and Workplace Health and Safety QLD to a workshop to share their views on distraction challenges.

- The group leveraged solutions which had been identified initially to build on and generate a number of new solutions to tackle the problem of driver distraction in the workplace, which were refined and summarised into four key projects.

What are the key projects?

Application of Workplace Health and Safety Regulation

Workplace Health and Safety authorities apply existing legislation, or develop appropriate new legislation, to treat work-related road traffic incidents the same as workplace incidents.

Insurance as a lever for corporate fleets

Investigate the impact of financial and non-financial penalties and benefits on corporate fleet insurance policies, through incentivising the implementation of safer driving technologies and policies.

Develop and disseminate industry guidelines for workplaces

Industry developed and shared good practice guidelines to support organisations introduce driver distraction mitigation policies and practices.
Strategy 4: Encouraging greater compliance through enforcement

Strengthen existing enforcement mechanisms through three levers; a redesign of current rules; enhancing detection initiatives and, the ability to access and share crash and infringement data

Why this strategy was developed?

• To address and eliminate the illegal use of mobile devices by drivers, jurisdictions in Australia, including Queensland, have taken a ‘regulate and educate’ approach, which has been largely unsuccessful because of continually advancing mobile device technology; the lack of an automated enforcement mechanism; community expectations of being able to use their devices in their vehicles; and difficulties in enforcing sanctions.

• Given the significant challenges with enforcement, in a workshop format, TMR connected enforcement agencies such as Queensland Police Service and West Australian Police, road safety authorities including Road Safety Commission (WA), National Transport Commission (NTC), as well as engineers Safe Systems Solutions and IPWEA, to collaborate and devise solutions to the problem of driver distraction.

• The group highlighted the urgent need to encourage greater compliance through a redesign of current rules, enhanced detection and offender management initiatives and expansion of data access and sharing.

• The group noted the significant work already undertaken by the NTC in developing technology-neutral road rules catering for current and emerging technology.

• World-first use of camera detection technology by the New South Wales Government was also noted for potential application in other jurisdictions.

What are the key projects?

Evolve Australian Road Rules and corresponding penalties
Redesign the Australian Road Rules to regulate the safe use of technology devices through technology-neutral rules.

Enhance detection, deterrence and offender management
Develop and implement initiatives that have the ability to enhance detection and management of offenders, including early intervention

Expand data access and sharing
Develop a data platform to enable the investigation, tracking, and sharing of crash and infringement data resulting from driver distraction.
Strategy 5: Changing driver behaviour
Shift driver behaviour through innovative campaigns and educational strategies

Why this strategy was developed?

- Through collaboration with the ecosystem, namely QFleet and insurance providers, including National Transport Insurance, RACQ, Suncorp and JLT Australia, we recognised that solutions to driver distraction cannot rely on only the device and vehicle; it must also target the driver and their behaviour.
- It is difficult to change driver behaviour due to a perceived need to keep in touch with certain people at all times, while others simply use their devices out of boredom of the driving task.
- Stakeholders ideated that in order to successfully change behaviours, there must be programs involving education and campaigns to drive cultural change and awareness of the problem, implementation of ‘smart’ infrastructure to guide road users to stay focused, and the use of open data and the ability to share data as a nudge tool.

What are the key projects?

Drive change through education and campaigns
Develop a shared national narrative for driver distraction and align industry and manufacturer led educational campaigns to drive cultural change and awareness of distracted driving

Explore the use of infrastructure as a nudge tool
Identify and evaluate key risk areas within the road network, and develop ‘smart’ infrastructure to guide and nudge road users to keep focus on the driving task

Leverage open data as a nudge tool
Investigate the viability of personalised insurance pricing for individuals that exhibit safe driving habits, weighting the pricing with an emphasis on distraction mitigation
Part 3

Making the Roadmap happen
Policy considerations for implementation

Stakeholders across industry, government and academia support a system-based approach while maintaining a focus on particular opportunities and constraints

Designing for a safer interaction
HMIs design principles are ‘front and centre’ in the vehicle design process, particularly when it comes to the driver’s interaction with in-vehicle display systems. However, the popularity among drivers of nomadic devices, such as mobile phones, suggests there is benefit in software designers and mobile device manufacturers developing similar industry-led HMI standards to ensure a safe interaction with these devices while driving.

Mapping out the adoption of in-vehicle distraction mitigation technology
The relatively small size of the Australian market means any divergence from overseas regulations, design standards and safety ratings will result in higher costs for vehicle owners. Instead, Australian alignment with overseas regulations and New Car Assessment Programs ensures Australia would be on a global platform to influence and incentivise vehicle manufacturers and owners to make safer design and purchasing decisions, respectively. Discussions between vehicle manufacturers and transport agencies on future product roadmaps would provide a policy makers a strategic understanding of what the future holds without revealing commercial-in-confidence plans.

Recognising the vehicle as a workplace
Existing rules and regulations, along with growing community sentiment, already consider the vehicle a workplace when driving for the purpose of work. It is acknowledged that workplace health and safety regulators and police face challenges treating work-related traffic incidents the same as workplace incidents. This not only includes the availability of finite investigative resources, but also the barriers for data collection and sharing between hospitals, investigators and police. The regulatory and educational approach adopted by regulators and industry in the heavy vehicle sector presents lessons which could be applied to influence positive change for organisations with vehicle fleets, regardless of the size of the organisation or the type of vehicle being driven.

Encouraging greater compliance through enforcement
It is recognised that traditional enforcement approaches, in isolation of other measures, face challenges in changing driver behaviour. This is particularly true given drivers’ attempts to obscure their illegal mobile phone use by holding their devices out of sight from police. New South Wales has tested and rolled out world-first cameras which promise to increase drivers’ perceived likelihood of getting caught. Victoria and Queensland – which has already increased penalties – are seeking to test similar enforcement approaches in the near future.

Changing driver behaviour
To determine the opportunities presented by big data, it would be beneficial to conduct a gap analysis of datasets to confirm which sets are relevant or currently unavailable. It is important to ensure data should be subject to tight controls and managed in line with relevant information privacy rules and regulation.
Planning for delivery
For successful delivery of the identified strategies, a clear approach for implementation is required.
Stakeholders at the Summit discussed the tasks necessary to develop solutions, their logical sequence as well as realistic timeframes, where known. The near, medium and long term timeframes outlined in the proposed way forward reflects expected steps and milestones within initiative/s once they have commenced, not when initiative/s are expected to commence.

<table>
<thead>
<tr>
<th>Implementation phase</th>
<th>What is required for success</th>
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<tbody>
<tr>
<td>Governance</td>
<td>• A governance structure for implementation</td>
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<tr>
<td></td>
<td>• Buy-in from the ecosystem</td>
</tr>
<tr>
<td></td>
<td>• Adequate funding and resourcing for projects and initiatives</td>
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<td></td>
<td>• Clarification of roles, responsibilities and accountabilities</td>
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<td></td>
<td>• Sharing of information on state and federal efforts</td>
</tr>
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<td></td>
<td>• Commitment to continuous collaboration by the ecosystem</td>
</tr>
<tr>
<td>Planning and Delivery</td>
<td>• Clear implementation plans which highlights key activities and milestones</td>
</tr>
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<td></td>
<td>• Project scope and initiatives driven by individual project teams</td>
</tr>
<tr>
<td></td>
<td>• Regular project reporting on progress against milestones</td>
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<tr>
<td></td>
<td>• Regular review of the program of work, considering priorities, availability of resources, emerging evidence and technology</td>
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<td></td>
<td>• Incorporation of new legislation and technology which becomes available into project plans</td>
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## Proposed way forward – Overview

<table>
<thead>
<tr>
<th>Program Management</th>
<th><strong>Near term</strong></th>
<th><strong>Medium term</strong></th>
<th><strong>Long term</strong></th>
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<tbody>
<tr>
<td><strong>Evaluate Human Machine Interfaces</strong></td>
<td>- Finalise the roadmap through consultation, develop governance, work structure and program of initiative</td>
<td>- Seek TIC approval to include Driver Distraction Roadmap on national forward work program and work with State/Territories</td>
<td>- Seek TIC approval of governance framework to ensure delivery of work program</td>
</tr>
<tr>
<td><strong>1. Designing for safer interaction</strong></td>
<td>- Government/large-employer fleets can adopt purchasing policies to require minimum design standards</td>
<td>- Pilot design/technology to stress test effectiveness. Regulation can be avoided if there is sufficient market demand</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>- Adopt a safer device design</td>
<td>- Develop design principles for device/app; protocols for testing; assess legislative options for manufacturer, and user education</td>
<td>- Test pilot new safety features</td>
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<tr>
<td></td>
<td>- Launch of indirect technology e.g. AKB</td>
<td>-</td>
<td></td>
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<td></td>
<td>- Work with DITRDC to shape vehicle design policies</td>
<td>-</td>
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<td>- Work with tech vendors to highlight availability of after-market tech</td>
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<td>- ANCAP to refine incoming protocols</td>
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<td>- Work with OEMs on product roadmaps</td>
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<td>- Maturity assessed and improvements recommended</td>
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<tr>
<td><strong>Application of Workplace Health and Safety Regulation</strong></td>
<td>- Stepped approach clarified</td>
<td>- Determine incentive (private)</td>
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<td>- Plan and timeline confirmed</td>
<td>- Dynamic risk rating considered</td>
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<td>- Industry groups and organisations with large fleets already have good practices in place and codified</td>
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<td>- Communications and media strategy for dissemination</td>
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<td>- Determine feasibility of publishing fleet data</td>
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<td><strong>Evolve Australian Road Rules and corresponding penalties</strong></td>
<td>- Consult with stakeholders on road rules</td>
<td>- Seek TIC endorsement of amendments</td>
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<td>- Seek TIC endorsement of major policy decisions</td>
<td>- Commerce road rules maintenance process</td>
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<td><strong>Enhance detection, deterrence and offender management</strong></td>
<td>- Market testing and discovery completed</td>
<td>- Technology to place, officers trained and communications and media strategy developed</td>
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<td>- Specifications and procurement process complete</td>
<td>- Delivery and commencement of enforcement</td>
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<td><strong>Expand data access and sharing</strong></td>
<td>- Set-up agreements with and incentivise organisations with data sets</td>
<td>- National agreement on program and sharing of findings from current work</td>
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<td>- Establish national framework; data sets and key parties identified</td>
<td>- Systems architecture in place and testing a proof of concept</td>
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<td>- Develop data protocols; and ethics comm in place</td>
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<td>- Supportive legislative framework established</td>
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<tr>
<td><strong>Drive change through education and campaigns</strong></td>
<td>- Establish key whole of life ‘touch points’ for education</td>
<td>- Evaluation, review and reassessment</td>
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<td>- 2-5 year commens plan established</td>
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<td><strong>5. Changing driver behaviour</strong></td>
<td>- Project and research scoped; data governance and safe collection built and research complete</td>
<td>- Implementation plan developed</td>
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<td>- Extract data and proof of concepts</td>
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<td>- Share outcomes among stakeholders</td>
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<td>- Engagement of telco, government and insurers</td>
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<td>- Identify providers, sponsors and partners</td>
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<td>- Scope, develop and test</td>
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<td><strong>Leverage open data as a nudge tool</strong></td>
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Strategy 1: Designing for a safer interaction

Proposed way forward

Key

- Evaluate HMI Interfaces
- Develop a safer device design

Government / large employer fleets can adapt purchasing policies to require minimum design standards.

Global market scan for emerging technologies and design features with shown safety benefits.

Manufacturers analyse available crash, incident, and safety data for network risks.

Identify and prioritise areas of opportunity to further research and pilot potential mitigates and designs.

Assess suitability of identified opportunity for local market & track market demand/uptake.

Pilot design/technology to stress test effectiveness. Regulation can be avoided if there is sufficient market demand.

Near term

- Establish device and software developer working group to build design principles; and create open communication channels between device manufacturers.

Medium term

- Develop design principles for device/apps; protocols for testing; assess legislative options for manufacturers; and user education.

Long term

- Test/pilot new safety features.
Strategy 2: Mapping out the adoption of in-vehicle distraction mitigation technology

Proposed way forward

Near term
- Manufacturers and start-ups are already in the process of developing driving monitoring technology
- Technology trials, safety assurance and road rules
- Level 3 automation; safety assurance defined; and regulatory framework for automated vehicles established

Medium term
- Emerging technology is identified by ANCAP, and research/evidence-based effectiveness is performed by the developer
- Technology and design features are showcased to ANCAP, who begin to promote and advocate further implementation
- Commercial availability; products with UN assured systems; and supportive infrastructure developed
- Safety feature is incorporated into ratings system, to incentivise manufacturer adoption and improvement
- Tech maturation; model built for safety; and geo-fenced arterials

Rollout of indirect technology e.g. AEB

Key
- Work with DITRDC to shape ADRs
- Work with OEMs on product roadmaps
- ANCAP to refine incoming protocols
- Highlight the availability of after-market technology
- Vehicles on road
- 50% penetration by 2040

What can be done now?
- Focus on heavy vehicles
- Rollout to light vehicles
- Harmonious zone in vehicle

These events are placed in a logical sequence however, no timeframes were clearly identified
Strategy 3: Recognising the vehicle as a workplace

Proposed way forward

**Confirmed plan and timeline**
- Stepped approach clarified

**Sources of truth vs end user journey identified**
- Plan and timeline confirmed

**Agreed measures and data**
- Sources of truth vs end user journey identified

**Agreed guidelines and information to share**
- Determine feasibility of publishing fleet data

**Information sharing platform, comms campaign and nudges**
- Dynamic risk rating considered

**Maturity assessed and improvements recommended**

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**Key**

- Application of Workplace Health and Safety Regulation
- Insurance as a lever for corporate fleets
- Develop and disseminate industry guidelines for workplaces

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Industry groups and organisations with large fleets already have good practices in place and codified

Confirm roles and channels for dissemination

Determine incentives (private)
Strategy 4: Encouraging greater compliance through enforcement

Proposed way forward

Near term
- Consult with stakeholders on road rules
- Draft amendments
- Seek TIC endorsement of major policy decisions
- Seek TIC endorsement of amendments

Medium term
- Market testing of potential solutions; and consideration for comms strategy
- Specification and procurement process complete
- National agreement on program and sharing of findings from current work
- Technology in place; officers trained; and communications and media strategy developed
- Delivery and commencement of enforcement
- Develop data protocols; and ethics committed in place
- Systems architecture in place and testing a proof of concept

Long term
- Legal system in place and completed research
- Set up agreements with and incentivise organisations
- Agreement around national definitions; research bodies on board and supporting process
- Establish national taskforce; data sets and key parties identified
- Communications strategy developed to gain public support
- Supportive legislative framework established
- Set up agreements with and incentivise organisations with data sets
- Establish national taskforce; data sets and key parties identified

Key
- Evolve Australian Road Rules
- Enhance detection, deterrence and offender management
- Expand data access and sharing
Strategy 5: Changing driver behaviour

Proposed way forward

Key

- Drive change through education and campaigns
- Explore the use of infrastructure as a nudge tool
- Leverage open data as a nudge tool

Ecosystem engagement

Project and research scoped; data governance and safe collection built; and research complete and decision made

Assessment

Map legislative requirements

Product development

Identify providers, sponsors and partners

Engagement of telcos, government and insurers

Scope, develop and test

Near term

National working committee established

Define ownership; align holders; develop content

National Driver Distraction forum established

Implementation and rollout

2-5 year comms plan established

Assess success of camera trials and continue development

Medium term

Establish key whole of life ‘touch points’ for education

National Driver Distraction forum established

Implementation and rollout

2-5 year comms plan established

Assess success of camera trials and continue development

Evaluation, review and reassessment

Share outcomes among jurisdictions

Conduct trials and proofs of concepts

Go / no go decision

Pilot and evaluation

Product tested and refined

Key

- Drive change through education and campaigns
- Explore the use of infrastructure as a nudge tool
- Leverage open data as a nudge tool

Medium term
Focusing on Driver Distraction

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