Delays to initial timeline O Details being scoped

## Annual Review as at December 2021 – National Land Transport Technology Action Plan 2020-23



	ltem/ sub			Anticipated End Date, as stated in		
Theme	item	Action Item	Lead	Action Plan	Status	Comments
	1.1	<b>End-to-end regulation for the commercial deployment of</b> <b>automated vehicles</b> The National Transport Commission (NTC) is working with the Commonwealth, states and territories to develop a regulatory system that supports the safe deployment and operation of automated vehicles in Australia, covering first supply, in-service and decommissioning. Key actions 1.1A, 1.1B and 1.1C relate to this work.			Changes in the projected availability of highly automated vehicles in Australia have extended the timelines for actions under 1.1.	This item captures 1.1A, 1.1B and 1.1C
acy	1.1A	Implementing regulatory arrangements so automated vehicles are safe at the point of first supply in Australia.	Commonwealth, NTC, states and territories			The Commonwealth is working to introduc mechanisms under the <i>Road Vehicle Stand</i> systems when they are first supplied to Au completed in June 2021, and the Common with the NTC and states and territories.
y and Priv	1.1B	Reviewing the approach to in-service safety for automated vehicles, including consideration of institutional arrangements and road traffic and driving laws.		Mid 2020		In May 2021, Infrastructure and Transport national safety framework for automated w regulatory arrangements in place by 2026. governments and the National Transport C nationally consistent regulatory approach f in-service safety regulator, to support Infra in February 2022 <sup>1</sup> of <u>a preferred legislative</u>
Safety, Securit	1.1C		States and territories, Commonwealth, NTC	Mid 2021		The Heads of Motor Accident and Injury Sc compulsory third party insurance schemes recommendations around what changes ne costs of accidents from automated driving The Board of Treasurers is expected to con insurance at its February 2022 meeting.
	1.2	Cooperative Intelligent Transport Systems (C-ITS) Security Credential Management System (SCMS) Pilot Project The Queensland Department of Transport and Main Roads is conducting on- road operational testing of an SCMS. The SCMS approach secures communication between C-ITS applications. The iMOVE Cooperative Research Centre will study the use of SCMS and its future role in C-ITS applications for transport authorities, including vehicle safety and security, privacy issues and system performance and governance. This pilot will inform government decision-making on a potential national deployment plan.	Commonwealth, QLD	End 2021		The testing phases of the project were carr conducted during 2021. A report on the teo October 2021 and the final project report w informs decision-making on forward nation particularly towards an options analysis to pilot. This activity continues Action 6 of the Action Plan.
	1.3	Guiding principles and approaches to facilitate safe and legal larger-scale trials of automated vehicles Building on the establishment of the Guidelines for Trials of Automated Vehicles in Australia in 2017, this key priority will develop guidance on conducting larger- scale trials with a view to commercial deployments.	Commonwealth, NTC, states and territories	End 2021		Following on from its review of the guidelin applicants, developed a new online informa- is examining the process for potential cross jurisdictional workshops on automated veh applications in the first half of 2021. An up Transport Ministers at their February 2022 opportunities for larger scale trials.

Related actions are projects being progressed outside of the direct responsibility of the National Land Transport Technology Action Plan Working Group. Their reporting in this document summarises their progress. They are reflected in the Action Plan and this report to improve visibility of work underway in Australia and encourage collaboration, shared learnings and joint efforts.

> e an Australian Design Rule (ADR) and other ards Act 2018 to regulate automated driving stralia. Public consultation on ADR 90/01 was wealth is progressing next steps in consultation

Ministers agreed a roadmap for implementing a vehicles, with the aim of having national The Commonwealth, state and territory ommission (NTC) have developed advice on a for an automated vehicle safety law and national structure and Transport Ministers' consideration approach.

hemes commissioned a report that examines the in each state and territory. The report makes eed to be made to enable insurers to recover the system entities.

sider issues related to motor accident injury

ied out in 2020 and 2021, with the pilot formally chnical elements of the project was delivered in was delivered in December 2021. The final report al policy for vehicle communications security, consider the feasibility of a larger-scale SCMS 2016-2019 National Land Transport Technology

nes, the NTC has consolidated information for trial ation hub, established best practice for trials, and -border trials. The NTC also held two intericle trials best practices and cross border date will be provided to Infrastructure and meeting. Jurisdictions are continuing to scope

Theme	ltem/ sub item	Action Item	Lead	Anticipated End Date, as stated in Action Plan	Status	Comments
	1.4 Related action	Accelerate the deployment of road safety technologies and innovation There is a strong commitment across all levels of government to improve safety outcomes on our roads. Governments are committed to implementing the National Road Safety Strategy 2011-2020 and the associated National Road Safety Action Plan 2018–2020, including priority actions for the deployment and uptake of vehicle safety technologies. The Commonwealth will streamline the process for legislative and regulatory changes to vehicle safety standards to improve the uptake of new safety technology in the Australian new vehicle fleet, and consider aligning Australian regulations with the proposed European regulatory package to commence within a similar timeframe.	Commonwealth, states and territories	Ongoing		The National Road Safety Strategy 2021-30 A priority area of the NRSS is to pursue tech vehicles. This includes a commitment to im through the Australian Design Rules (ADRs) uptake of new vehicle safety features and to implementation of new regulatory required to facilitate their safe deployment. The National Road Safety Action Plan 2021 state, territory, local governments and key The Road Safety Innovation Fund, running to projects designed to reduce the number of and to help create a safe and sustainable ro The Commonwealth is also working to facil innovations in the deployment of new vehi engagement in the United Nations World F Regulations (WP29).
Digital and Physical Infrastructure	2.1	Develop guidance on how infrastructure can be future ready for CAV technology within an integrated transport and land use planning framework The Commonwealth will develop guidance to support policy and investment decisions on technology in the road transport sector. The guidance will consider strategic priorities for governments to harness the safety, productivity, sustainability and accessibility benefits of transport technology.	Commonwealth, Austroads	Mid 2020	This action was delayed due to the COVID-19 pandemic, but work has since resumed.	Work under key priority 4.1 (a study of C-IT benefits) will assist with progressing key pr Austroads has several projects which are al road agencies on supporting cloud connect agency data exchange (FCA6314), Understa minimum physical infrastructure standard and joint foundational research into the po connectivity in collaboration with iMOVE C Infrastructure, Regional Development, and Guidance will also need to consider the imp use of transport.
	2.2 Related action	Program of work to address the barriers and challenges impeding the uptake of Low and Zero Emissions Vehicles (LZEVs) Developed through the LZEV Working Group, this action will support the improvement of environmental performance of infrastructure and transport systems, remove barriers to innovation and capitalise on new and emerging technologies. This work will also consider the development of a National Hydrogen Strategy and the future development of a National Strategy for Electric Vehicles.	LZEV Working Group	Mid 2022		The LZEV Working Group comprises Comm members, who each lead actions under the uptake of LZEVs. The program of work was developed throu in June 2020. It includes actions to: suppor costs, increase model availability, and educ benefits of shifting to low emission vehicles based response. Progress has been made by the working gro encourage the uptake of LZEVs in governm LZEV infrastructure installation and signage sharing scenarios, and the roll out of amen <i>Rules 2018</i> requiring LZEVs to be identified The LZEV Working Group continues to prov

(NRSS) was released in December 2021.

hnological improvements and uptake of safer plementing priority vehicle safety standards ) as soon as possible, and to promote market technologies. The NRSS also prioritises the ments for vehicles with automated driving systems

-25 is under development in consultation with stakeholders.

for 4 years from 2019-20, targets innovative deaths and serious injuries on Australian roads oad transport system.

litate consideration of relevant technologies and icle safety regulations, including through Forum for the Harmonization of Vehicle

S deployment models and their costs and iority 2.1.

Iso expected to feed into this item: Guidance for ted users (FDI6304), Connected vehicle and road anding the benefits and costs of providing a for the operation of automated driving (FPI6258), otential role of 5G in vehicle and infrastructure CRC and the Commonwealth Department of Communications (DITRDC) (FCA6339).

pacts of COVID-19 on infrastructure provision and

onwealth and state and territory government work program to address the barriers to the

gh the LZEV Working Group and agreed by ITMM t infrastructure development, reduce upfront cate and improve awareness of consumers of the s, while acknowledging the need for a market-

oup to implement several initiatives, including to ent fleets, development of national guidance on e, investigation of LZEV interoperability and dataidments to the *Australian Light Vehicle Standards* by markings on a number plate.

vide updates at ITMM meetings.

Thomas	ltem/		Lood	Anticipated End Date, as stated in		Commonte
Data	3.1 Related action	Explore uses of C-ITS and AV data to improve network efficiency and investment CAV data has the potential to support governments in improving network efficiency and safety, and be used as an input to inform investment decision making. Developing learnings, potentially drawing from trials, to inform the approach to data would help guide governments and the community in effective uses of this data. The NTC will undertake a project scoping the potential uses of C-ITS and AV data by governments. There are likely to be other CAV data projects needed to align with past and planned data projects. Austroads will undertake a project looking at the data needs for connected and automated vehicles from road agencies; for example, the location and effect of road works. This project will include national and international data consistency issues.	Commonwealth, NTC, Austroads, states and territories	Mid 2021		<ul> <li>A variety of steps and initiatives are support</li> <li>The NTC has established the National government working group on vehicle chairs have been appointed, and the working group will have an initial two held quarterly. A range of use cases</li> <li>In May 2021 the Commonwealth an Hub. The Hub is intended to provide the freight sector is as efficient, safe</li> <li>Austroads is carrying out projects or automated vehicles (FDI6216), Guid connected road users (FDI6304), Un minimum physical infrastructure stat (FPI6258), as well as a new project of exchange (FCA6314).</li> <li>NSW is testing a data exchange platt collect telematics data. It is also finat vehicle as a sensor concept.</li> <li>WA is commencing trials on C-ITS appressing and provision of emerger improve road safety.</li> </ul>
Standards and Interoperability	4.1	<b>Evaluate deployment models and associated costs and benefits of C-ITS vehicle technologies</b> Many automotive and transport sector leaders have indicated that connectivity in vehicles will help solve complex problems in emerging technology. National and international work is underway on connectivity solutions including short-range communications and cellular technologies. A greater understanding of business and assurance models for deployment in Australia and their costbenefit for industry and government will support effective regulatory and investment decision-making.	Commonwealth	Early 2021	This action was delayed due to the COVID-19 pandemic, but work has since resumed.	The Commonwealth Department of Infrastru Communications (DITRDC), the Queensland Transport for NSW and Austroads are workin examining the costs and benefits of C-ITS de and investment decision making by Australia Consultants WSP were engaged for the proje provide advice on the current and future cap for Australians and relevant considerations of for deployment. The project will be completed in the first hal 2.1, as well as ongoing Action Items 2, 4 and Technology Action Plan.
Disruption and Change	5.1 Related action	Identify and facilitate emerging technologies that improve freight outcomes         International and Australian trials and research have shown that new technologies can increase freight network efficiency, decrease risk to transport users, reduce fuel usage and emissions, and enhance traceability of supply chains.         Through the National Action Plan of the National Freight and Supply Chain Strategy, jurisdictions will: <ul> <li>facilitate research and trials of transport technology in the Australian freight sector;</li> <li>develop an evidence base to inform next steps on improving freight outcomes, skills, workforce and industry impacts, and future infrastructure needs; and</li> </ul>	Commonwealth, states and territories	Ongoing		<ul> <li>The National Freight and Supply Chain Strate planned government and industry action act Relevant initiatives under the National Freig</li> <li>1.3 - Identify and support digital infrastr for improved and innovative supply chait</li> <li>2.1 - Adopt and implement national and platforms, to reduce transaction costs a</li> <li>2.3 - Facilitate new and innovative techr understand the deployment, skills and winfrastructure</li> <li>4.1 - Develop an evidence-based view of comparative performance to drive improved</li> </ul>

• promote national consistency to support interoperability.

investment and operations.

## rting this action:

hal Vehicle Data Working Group, a joint industryicle-generated data. Industry and government cone first meeting was held in October 2021. The wo-year term to late 2023, with meetings to be s will be developed.

nnounced funding for the National Freight Data e high quality, easily accessible data to make sure e, productive and resilient as possible.

on Road authority data for connected and dance for road agencies supporting cloud nderstanding the benefits and costs of providing a andard for the operation of automated driving on Connected vehicle and road agency data

tform to exchange data with freight operators and alising industry partnerships aiming to explore the

pplications and data exchange for virtual variable ency information to reduce congestion and

2019 National Land Transport Technology Action

ructure, Transport, Regional Development and I Department of Transport and Main Roads, ing together on a joint consultancy project eployment models with a view to informing policy ian governments.

ject in early 2021. They are producing a report to apability of C-ITS to deliver beneficial outcomes for governments regarding the various models

alf of 2022. Outcomes will feed into Action Item d 5 under the 2016-2019 National Land Transport

tegy sets an agenda for coordinated and wellcross all freight modes to 2040 and beyond.

ght and Supply Chain Strategy include:

ructure and communication services necessary ains

d global standards, and support common

and support interoperability along supply chains

nologies that improve freight outcomes and workforce requirements for operators and

of key freight flows and supply chains and their roved government and industry decision-making,

Theme	Item/ sub item	Action Item	Lead	Anticipated End Date, as stated in Action Plan	Status	Comments
						The Commonwealth and states and territo As part of this, a new <u>Supply Chain Benchm</u> Deputy Prime Minister on 15 October 2021 Australian supply chains and provides a comperformance evaluation and comparison. To find out more about other progress bein <u>https://www.freightaustralia.gov.au/</u>
	5.2	Investigate the role of governments in Mobility as a Service (MaaS) and identify priorities and enablers to support its effective development and deployment MaaS combines public and private transport options in a single app, providing an integrated origin to destination journey, handling payment and bookings through the same platform and providing dynamic route-planning information to users. This provides a model to improve mobility and accessibility in cities, towns and regions. The specific business models of MaaS are being explored and tested around the world, including Australia. This action will define the opportunities and challenges in an Australian context of integrating various forms of transport into a single, optimised on-demand mobility service. This includes describing the enabling roles of governments in guiding the deployment of MaaS.	Commonwealth, states and territories	End 2020	Investigation work under this action remains ongoing but formal conclusions have not yet been prepared.	Queensland is taking steps to develop Maa Queensland government become a MaaS of into the market. A real world trial of MaaS has been launched the Queensland Department of Transport a Queensland as part of an iMOVE Cooperation commenced a MaaS and mobility program NSW is also considering MaaS as it looks to and further develop its Cudal testing facilit WA is in the early stages of preparations for participation in research (e.g. journey plan Research Centre) and delivery of multi-moor research into transport disadvantage. Industry is also actively involved in conside Reference Committee is led by ITS Australia territory governments, as well as industry a for workshops, fostering collaboration and development of MaaS in Australia.
	5.3	<b>Research into the competition impacts of automated vehicles</b> Potential deployment scenarios for automated vehicles may influence commercial issues such as repairer access, e-commerce platforms and access to data. Research into this aspect of the technology will guide future regulatory decisions making and identify future analysis needed.	Commonwealth, NTC	Not yet decided	0	Forecasting of automated vehicles (AV) up Austroads and the Bureau of Infrastructure Commonwealth Department of Infrastructure Communications (DITRDC). Austroads released its Future Vehicles 203 reaching to 2031 in September 2021. The u first availability and adoption of AVs, with vehicles showing 2023 to 2025, and slow u BITRE published its forecast in December 2 automated vehicles will be commercially a light vehicle fleet will reach around 30 per There will be opportunities to carry out mo future, once uptake of AVs increases in Aust

ries each lead initiatives under the Strategy. <u>narking Dashboard</u> was publicly launched by the L. Developed by the CSIRO, the Dashboard models mprehensive set of benchmarks to assist

ng made, visit the Freight Australia website at:

aS, endorsing a business model that would see the operator and encourage private MaaS operators

ed in South East Queensland. The trial is co-led by and Main Roads (TMR) and the University of ive Research Centre program. In July 2021 TMR

establish the next generation of its CAV program y.

or MaaS, focusing on public transport optimisation, oner research via the Planning and Transport odal transport trials. WA is also commissioning

eration of MaaS issues. The MaaS National a and comprises members from most state and and the research community. It meets twice-yearly furthering the equitable and effective

take in Australia has been undertaken by and Transport Research Economics (BITRE) in the ure, Transport, Regional Development and

0 forecast in 2020, and an updated addendum updated forecast indicates a delay in the expected rapid uptake scenarios for highly automated uptake scenarios now beyond 2031.

2021, revealing its best case scenario that fully vailable from 2031 and the share of AVs in the cent by 2050 and 80 per cent by 2070.

ore detailed work on competition impacts in the stralia.

## Ongoing actions from 2016-19 Action Plan

Action Plan 2016-19	#	Action Item	Lead (as indicated in 2016-19 Action Plan)	Original 2016 Timing	Status	Comments
	2	Develop national operational guidelines to support the on-road use of automated vehicles Austroads has completed projects in support of this action, including key road agency actions to support automated vehicles, registration and licensing issues and automated heavy vehicles in remote and regional areas. Further work is underway on complex issues such as road operations, pavement markings for machine vision and driver education.	Austroads	Late 2017	Ongoing	Austroads' project investigating a minimum physical infrastructure stand (FPI6258) is due to be completed in March 2022, and is intended to supp
	3	Undertake priority trials and research of Intelligent Transport Systems Research and trials of emerging transport technology remains a priority for all jurisdictions. A Connected and Automated Vehicle Trials and Technology working group was established across jurisdictions to monitor future trials, avoid duplication and optimise information sharing. Austroads continues to publish information about ongoing trials on its website. This research and trialling is a key exercise to inform further analysis sought through key priority 2.1.	ITSOC	2016-19	Ongoing	Austroads' project on Consistent evaluation and reporting of automated evaluation and reporting, knowledge sharing and comparison. Trials and research also continue to progress, including in the cross-bord Queensland's Cooperative and Automated Vehicle Initiative (CAVI) trial in Integrated Multimodal EcoSystem (AIMES) testbed in Melbourne (Victor Initiative (CITI) trial in Wollongong (NSW). In late 2020, Transport for NSW launched the Cudal future mobility testi simulated, open road and junctions for technicians to test technologies of Keep Assist and Speed Assist Systems. The "Strategies to support C-ITS deployment models" consultancy being support this item.
	4	Develop a connected vehicle (Cooperative ITS) infrastructure road map A nationally coordinated road map will provide greater certainty to industry on potential deployment methods and timeframes, with work underway to position Australia to take advantage of opportunities in connected infrastructure. Austroads has undertaken a range of research and assessments on C-ITS through its Connected and Automated Vehicle program with <b>key priority</b> <b>4.1</b> a key step to progress this work.	ITSOC	Mid 2017	Ongoing	Technological developments in C-ITS have evolved rapidly since the public coordinated approach will help provide greater certainty to industry on as will work underway to position Australia to take advantage of opport has undertaken a range of research and assessments on C-ITS through it program with outputs from <b>key priority 4.1</b> of the National Land Transport contribution to informing this work.
	5	Publish a connected vehicle (Cooperative ITS) statement of intent on standards and deployment models Creating a technologically neutral statement of intent for Australia will help give guidance to industry on likely deployment models. In January 2018, the Australian Communications and Media Authority made the Radiocommunications (Intelligent Transport Systems) Class Licence 2017, providing certainty that C-ITS applications can be used in the 5.9 MHz spectrum. C-ITS technologies and standards development continue to evolve in what is a highly complex environment, with governments and stakeholders progressing work to evaluate their adoption including through <b>key priority 4.1</b> of the National Land Transport Technology Action Plan 2020-23.	ITSOC / Commonwealth	Early 2017	Ongoing	C-ITS technologies and standards development continue to evolve in wh governments and stakeholders progressing work to evaluate their adopt In the meantime, radiofrequency spectrum in the 5.9 GHz band (a freque community as a suitable option for future ITS applications), has been ma the Australian Communications and Media Authority's issuing of the <i>Rad</i> <i>Systems) Class Licence 2017</i> .
	6	Develop a nationally agreed deployment plan for the security management of connected and automated vehicles The Commonwealth and state and territory governments are conducting research on and piloting systems for managing cyber security in CAVs and connected infrastructure, using international best-practice approaches. Work on this action is continuing	ITSOC/ Austroads	Mid 2018	Ongoing	Work on this action is continuing through <b>key priority 1.2</b> of the Nationa 2020-23. Building on this, initial work is being undertaken by the Commo Australia-wide security solution for vehicle-to-everything (V2X) commun

dard for the operation of automated driving port future deployment decisions.

vehicle trials (FCA6347) will support consistent

der context. For example, technology from is being included in elements of the Australian ria) and in the Cooperative Intelligent Transport

ing facility in regional NSW. The facility provides such as Autonomous Emergency Braking, Lane

g carried out under key priority 4.1 will also

plication of the 2016 Action Plan. A nationally potential deployment methods and timeframes, tunities in connected infrastructure. Austroads ts Future Vehicles and Technology (FVaT) port Technology Action Plan 2020-23 being a key

hat is a highly complex environment, with tion including through **key priority 4.1.** Hency range which has been identified by the ITS ade available for use by ITS in Australia through *diocommunications (Intelligent Transport* 

al Land Transport Technology Action Plan onwealth on the best and most appropriate nications.

## Ongoing actions from 2016-19 Action Plan

through **key priorities 1.2 and 4.1** of the National Land Transport Technology Action Plan 2020-23.

7	Investigation of options to provide enhanced geo-positioning information to the land transport sector Australian and New Zealand governments developed a test-bed for enhanced positioning techniques, including connected and automated vehicle projects. In 2018 the Australian Government funded the development of a Satellite-Based Augmentation System and a national ground station network to enhance Australian geo-positioning.	Commonwealth		Action complete, with further work ongoing	Geoscience's Satellite Based Augmentation System (SBAS) has been offic Augmentation Network (SouthPAN). SouthPAN will be the first SBAS in th standard positioning capability provided by GPS and Galileo across all of accuracy of positioning from 5-10 metres to 10 centimetres without the The procurement phase for SouthPAN is currently underway, with initial operational and certified system in place by 2025.
8	Improve the availability of open data in the transport sector Austroads published the Connected and Automated Vehicles (CAV) Open Data Recommendations report in 2018. The next stage of this project is to investigate best practices for the supply of road authority data for CAVs through <b>key priority 3.1</b> of the National Land Transport Technology Action Plan 2020-23.	All jurisdictions	2016-19	Ongoing	In addition to ongoing work through <b>key priority 3.1</b> , a variety of initiative this objective. Whole of Government initiatives include data champions, under the intergovernmental agreement on data sharing between jurisdie NSW is reviewing current pilots and the ability to publicly release data from expected to provide opportunities to release testing data. The ACT Digital Strategy (2020) sets out how the ACT will harness digital a connected Canberra. The ACT Government Open Data Portal supports ac ACT also has ACTmapi, a geospatial platform that houses open data such and transport to support spatial analysis and infrastructure investment d The NTC's newly established National Vehicle Data Working Group will al development of the vision and principles for the future exchange of vehice data has the potential to enhance network operations, investment, main
9	Explore options to increase the takeup of telematics and other technologies for regulatory and revenue collection purposes This work examined strategies for government and the private sector to accelerate deployment of telematics, and was incorporated into a review of the regulatory telematics regime. The National Transport Commission released the Review of Regulatory Telematics report in March 2018, and continues to work with key stakeholders on implementing the report's recommendations.	ITSOC		Action complete, with further work ongoing	Technologies (including telematics) for regulatory and safety purposes is Vehicle National Law. The Commonwealth National Heavy Vehicle Charging Pilot is an industry charging options for heavy vehicles. Phase 3 of the next on-road trial will heavy vehicle data to support a more efficient and direct way of collectin commence in 2022.
13	Investigate the costs, benefits and possible deployment models for automatic crash notifications This project, led by the Commonwealth, analysed a range of potential deployment models for automatic crash notification systems. These systems are designed to provide emergency services with timely and accurate location data of a vehicle in a serious crash situation. This work will inform possible future deployment arrangements.	ITSOC/ Austroads/ Commonwealth		Action complete, with further work ongoing	Australia's Triple Zero systems are not currently able to receive the data to flag eCall in the future upgrades pathway of the Triple Zero Technolog immediate priorities such as enabling SMS to Triple Zero. Several states, including NSW and VIC, have indicated support for the int technology.

Complete actions: 1, 7, 9, 10, 11, 13, 14

Revised action: 12

cially named the Southern Positioning he Southern Hemisphere, and will augment Australia and New Zealand, improving the need for mobile or internet coverage. signals to be provided progressively and a fullyves are supporting an enabling environment for the Australian data strategy, and initiatives ictions. om pilots. The new Cudal testing facility is also and technology opportunities to support a more ccessible and shareable data from the ACT. The as cadastral, asset, infrastructure environment lecisions. lso support this action by leading the cle and road operator data. Vehicle generated tenance, planning and road safety. a key stream of the NTC's review of the Heavy partnership testing potential direct road user I test the feasibility of telematics in collecting ng road user charges. Phase 3 is looking to

from an eCall alert. There may be opportunities gy Roadmap, subject to completion of other

roduction of automatic crash notification